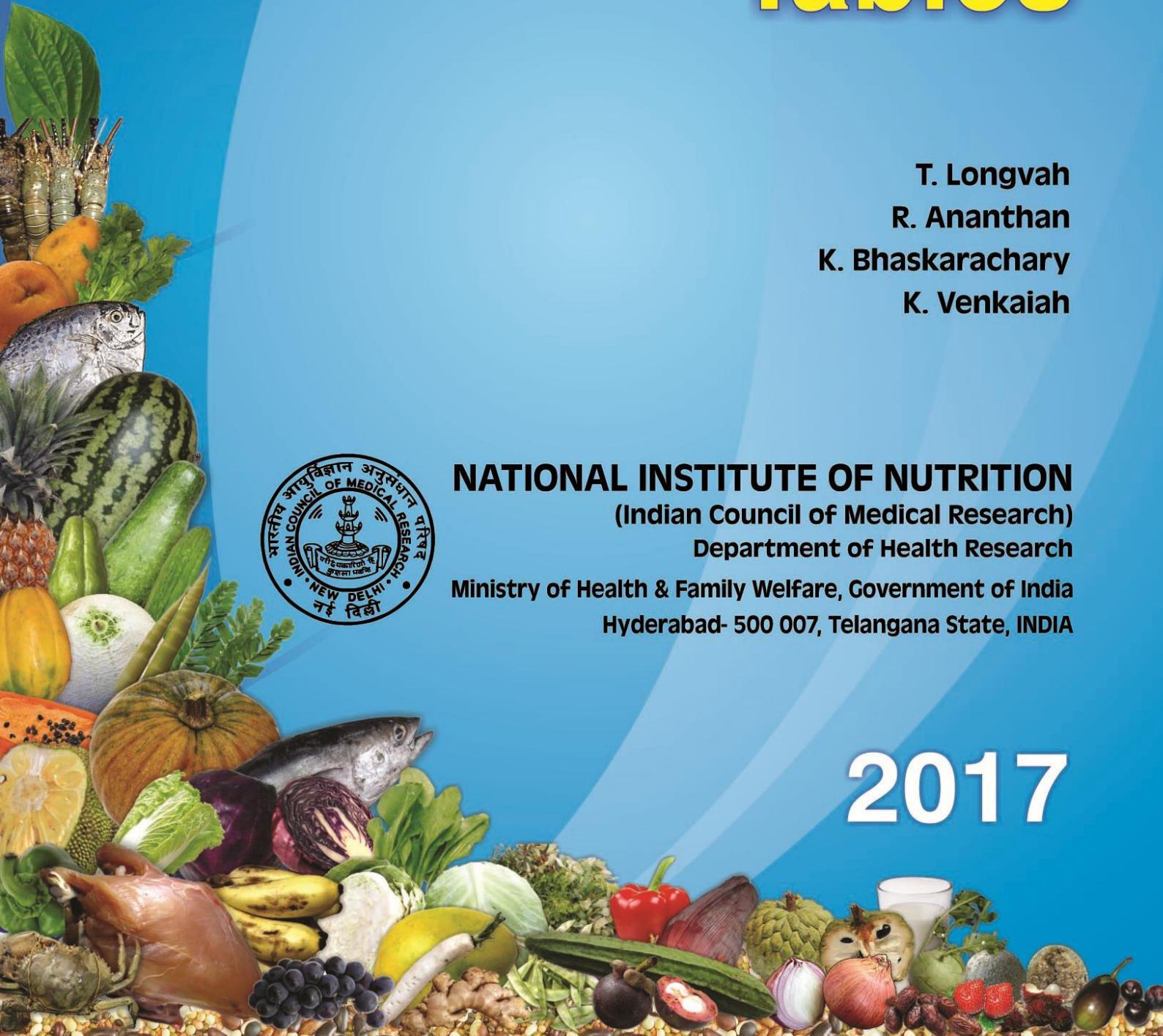




Indian Food Composition Tables



T. Longvah

R. Ananthan

K. Bhaskarachary

K. Venkaiah



NATIONAL INSTITUTE OF NUTRITION

(Indian Council of Medical Research)

Department of Health Research

Ministry of Health & Family Welfare, Government of India

Hyderabad- 500 007, Telangana State, INDIA

2017

Indian Food Composition Tables

T. Longvah

R. Ananthan

K. Bhaskarachary

K. Venkaiah



NATIONAL INSTITUTE OF NUTRITION

(Indian Council of Medical Research)

Department of Health Research

Ministry of Health and Family Welfare, Government of India

Hyderabad- 500 007, Telangana State, INDIA

2017

Citation of this book should be given as-

Longvah, T., Ananthan, R., Bhaskarachary, K. and Venkaiah, K. (2017). Indian Food Composition Tables 2017, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad, Telangana, India.

Copyright © 2017 by National Institute of Nutrition

Indian Council of Medical Research
Department of Health Research
Ministry of Health and Family Welfare, Government of India
Jamai Osmania (PO), Hyderabad – 500 007
Telangana State, INDIA
Telephone: +91 40 27197334, Telefax: +91 40 27000339
Website: www.ninindia.org; www.ifct2017.com
Email: nin@ap.nic.in; ifct2017@gmail.com

The use and dissemination of the data in this book is encouraged. This publication can be reproduced for personal use with full acknowledgment of the source. However, no part of this publication can be stored or reproduced in any electronic format for creating a product without the prior written permission of the National Institute of Nutrition, Hyderabad.

Editor: T. Longvah

Page and picture layout: R. Ananthan, S. Devendran, L. Bidyalakshmi & S. Jawahar

Cover design: S. Devendran

Printer and Publisher: National Institute of Nutrition

Indian Council of Medical Research
Department of Health Research
Ministry of Health and Family Welfare, Government of India
Jamai Osmania (PO), Hyderabad – 500 007
Telangana State, INDIA
Telephone: +91 40 27197334, Telefax: +91 40 27000339
Website: www.ninindia.org; www.ifct2017.com
Email: nin@ap.nic.in; ifct2017@gmail.com

Disclaimer

The National Institute of Nutrition (NIN) has exercised great care and diligence to ensure that the data provided in the food composition tables is as correct and accurate as possible. NIN makes no warranty of the data and in no event shall be held liable for any incidental or consequential event arising from the use of the data.



Dedicated to



C. Gopalan

MD., Ph.D., D.Sc. (London), D.Sc. (Hon.), F.R.S., F.R.C.P. (Edin.),
F.R.C.P. (London)

The Father of Nutrition in India



PREFACE

Ever since the pioneering Indian FCT was brought out in the year 1937, the National Institute of Nutrition (ICMR), Hyderabad, has been constantly updating the compositional database of Indian foods. The new ‘Indian Food Composition Tables, 2017’, provides nutritional information on 151 discrete food components for 528 key foods. All data presented in this book originate from regional composite samples averaged for six geographical regions of the country. The voluminous food composition data of unprecedented analytical quality is statistically representative of both the national food supply and consumption pattern. The standard deviation of each component data point represents the overall variability within. No data in this book has been borrowed or derived from other data sources and represents accurate nutritional information of foods that are consumed across the country. The data are of reasonable representation of year round nationwide means and fit for assessment of nutrient intakes and their impact on health of the population. Except for eggs, all other food component data are for foods in the raw form. Food being a biological matter exhibits variations in chemical composition due to multiple factors. This is particularly true for labile nutrients like vitamins and variations are imminent due to food processing. These limitations of the FCT need to be understood by the users.

Recent studies of the relationship between diet and health have led to increased interest in the range of biologically active constituents present in foods that accompany the nutrients. This book not only provides data of regular nutrients in foods complete in all respect but also on a whole range of bioactive substances. Vitamin D₂ content in plant foods is presented here for the first time in the world. The tables contain data on oligosaccharides, phytosterols, organic acids and individual polyphenols. This book also embodies an exhaustive database on amino acid and fatty acid profiles of various foods. The users of the FCT will vary greatly and the data is expected to essentially benefit every national activity touching on human nutrition research, policy and education in India.

Keeping food composition data up-to-date is a continuous challenge and ‘Indian Food Composition Tables, 2017’ does not contain a exhaustive list of all foods consumed in India. The multi-cultural nature of the Indian population can be observed in the diverse ethnic foods used across the regions for which compositional database is still inconsistent and fragmentary. Food composition tables are never complete due to the constant introduction of new foods into food supply, discovery of food components that are associated with health and disease, and continuous improvements in analytical methods and techniques.

International support is necessary and the International Network of Food Data Systems (INFOODS) at the Food and Agriculture Organization of the United Nations (FAO), Rome continues to provide assistance in terms of standards development and capacity building to strengthen national food composition activities across the world. Generating high quality food composition data is an expensive proposition but essential for elevating the nutrition scenario of the country. Therefore, sustained funding from the government through policy environment is required to sustain this cardinal activity.

ACKNOWLEDGEMENTS

Several individuals and organizations have been involved in the development of the ‘Indian Food Composition Tables, 2017’ right from conception of the programme, infrastructure establishment, capacity building and execution. This herculean task could not have been possible without the immense support from all corners.

Particular acknowledgement is due to Dr. V. M. Katoch, Former Secretary, Department of Health Research & Director General, Indian Council of Medical Research (ICMR) who recognized the importance and the need for new Indian Food Composition Database and provided the required financial grant for implementing the programme.

Special thanks to Dr. Soumya Swaminathan, Secretary, Department of Health Research & Director General, Indian Council of Medical Research for her constant support and encouragement in accomplishing the task.

Sincere thanks to Dr. B. Sesikeran, Former Director, National Institute of Nutrition (NIN) and Dr. G. S. Toteja, Scientist-G & Head, Nutrition, ICMR for facilitating the smooth operation of the project without which the project would not have seen the light of the day.

Particular thanks to Late Dr. B. S. Narasinga Rao, former Director of NIN and Dr. Padam Singh former Adll. Director General, ICMR and all the Expert Committee Members for their invaluable scientific inputs which strengthened the programme.

The constant support and encouragement provided by Dr. Ute Ruth Charrondiere, INFOODS Coordinator, FAO, Rome is gratefully acknowledged. Special appreciation and thanks to Dr. Kailash Chandra, Director, ZSI., Dr. Rajkumar Rajan, Officer-in-charge, Mr. A. Anand Kumar and Mr. Shrini Vaasu from Marine Biological Regional Centre, Chennai for their tireless effort in taxonomical identification of all varieties of fish, shellfish and mollusc analyzed.

To the project scientists Dr. P. Ravindra Naik, Dr. Charles Dorni, Dr. Hyma Pardipur, Dr. B. Sreedhar, Dr. S. Muthuswami, Dr. V. S. S. Prasad, Dr. Smitha Mathews and all the project Technical and Supporting staff, who worked tirelessly with so much passion, a special acknowledgment of gratitude. The invaluable contribution of Mr. V. Satish Babu, Instrumentation Officer who kept all the big and small instruments in excellent condition, Technical Officers Mr. K. Mangthya, Mr. K. Subhash & Mrs. P. S. Prashanti, is gratefully acknowledged for their technical support.

The extraordinary support received from various quarters of the National Institute of Nutrition - Administration, Stores, Purchase, Accounts, Leave Section, Electrical, Plumbing and Supporting Staff, Scientific and Technical colleagues cannot be forgotten and it will go down into history as the new book ‘Indian Food Composition Tables, 2017’ is released.

CONTENTS

S. No.	Title	Page No.
1.	Origin and progression of Indian Food Composition Tables	i
2.	Identification of key foods, National sampling plan and analytical parameters	xii
3.	General Information	xx
4.	References	xxiv
5.	Abbreviations	xxxi
6.	Food Composition Tables	
	Table 1: Proximate Principles and Dietary Fiber	1
	Table 2: Water Soluble Vitamins	31
	Table 3: Fat Soluble Vitamins	61
	Table 4: Carotenoids	91
	Table 5: Minerals and Trace Elements	111
	Table 6: Starch and Individual Sugars	169
	Table 7: Fatty Acid Profile	187
	Table 8: Amino Acid Profile	257
	Table 9: Organic Acids	313
	Table 10: Polyphenols	333
	Table 11: Oligosaccharides, Phytosterols, Saponins and Phytates	403
	Table 12: Fatty Acid Profile of Edible Oils and Fats	423
7.	Food Pictures and Description	427
8.	Index	501

The origin and progression of Indian food composition tables: 1937-2017

1. Introduction

Food composition tables (FCT) are data repository for the content of nutritionally relevant chemical constituents and energy values of foods. The data compiled in the FCT normally comprises of analytical, archival, imputed, calculated and/or derived values weighted towards the most representative of the true content in a given food (Greenfield & Southgate, 2003). FCT are relied upon for nutrition research and health practice as they provide critical information regarding the content and distribution of various components in different foods. The multi-dimensional utility of FCT is enabled by a great deal of effort that goes into their construction, development and management involving statistical designs, food sampling, component characterization, analytical method development, estimation, data quality assessment, documentation and presentation.

Compositional values of foods are useful in manifold ways; in nutritional surveillance, consumer nutrition appraisal, nutrition labeling, etiology of disease prevalence, setting school menu standards-meal planning, issue of dietary guidelines- recommendations and even to estimate intake of toxic and non-nutritive components as well as to assess environmental impact of foods (FAO/WHO, 1994; MacIntosh et al., 1997; FAO/WHO, 1998; Harinarayan et al., 2007; Ayoya, Kodio, Iknane, & Sodjinou, 2010; Cunningham & Sobolewski, 2011; Archer, Hand, & Blair, 2013; Ahuja, Moshfegh, Holden, & Harris, 2013; Seljak, Stibilj, Pograjc, Mis, & Benedik, 2013; Chiu et al., 2014; Su, Jia, Wang, Wang, & Zhang, 2015; Drewnowski, Rehm, Martin, Verger, Voinnesson, & Imbert, 2015; Jansen & Roodenburg, 2016). Thus, compilation of food composition data is an important activity the utility of which spans across various sectors and disciplines.

In India, nutrient profiling of foods began almost a century ago which manifested in four main published FCT editions in the year 1937, 1951, 1971 and 1989. This chapter aims to present a historical perspective of the Indian FCT and revisions through the decades. The evolutionary tracking and the associated viewpoints expressed in chronicling FCT development will provide the framework for evaluating nutrient supply trends in India.

2. Pioneering nutrient evaluations and the origin of the first FCT in India

Nutritional disorders were prominent public health concern in India during the early 20th century (Barry, 1900; Annual report of Government of India, 1905; Scott, 1916; Ernest, 1917). A general inclination was to pursue research that would elucidate the facts

responsible for the prevalence of malnutrition in order to issue guidelines and deliver solutions for its prevention and control. In the year 1918, an enquiry headed by Sir Robert McCarrison was launched to investigate the prevalence of beriberi under the auspices of Indian Research Fund Association (IRFA), now Indian Council of Medical Research (ICMR). Subsequently, the research broadened to a ‘deficiency disease enquiry’ and ultimately transformed into a fully functional research organization named Nutrition Research Laboratories (NRL) housed at the Pasteur Institute, Coonoor, Nilgiri, India (Narasinga Rao, 2005a).

One of the major public health concerns that NRL, Coonoor started looking into was the protein energy malnutrition (PEM). Incipient reports on nutrient evaluations in India, suggested an emphasis on protein content and quality of Indian foods and diets (Lewis, 1880; McNamara, 1906; McCay, 1910; McCay, 1911; McCay, 1912; Passmore, 1948). Prevalence of iron deficiency anemia (IDA) among infants and children of India was also widely recognized. However, comprehensive and conclusive epidemiological studies on nutritional deficiencies in India were scarce. Aykroyd and Rajagopal (1936) reported that the weight for height of Indian children was below that of American children and almost 14% of them showed signs of deficiency diseases. Nutrient deficiency diseases such as beriberi, keratomalacia, night blindness, rickets, osteomalacia, dental caries, pellagra, pregnancy anaemia and lathyrism were of the major concern (McCarrison, 1932). In addition, incidence of goiter due to iodine deficiency was also an issue of concern affecting the Indian population in many regions of the country.

Insufficient consumption of milk, eggs and meat was found to be the cause of inadequate supply of protein, minerals such as calcium and fat soluble vitamin A among certain sections of Indian populations (McCarrison, 1925). Prevalence of malnutrition due to inadequate nutrient intake was observed throughout the country. The cause of beriberi in India was found to be low dietary supply of vitamin B either from rice or other food grains (McCarrison & Norris, 1924). Aykroyd (1932) found that milled parboiled rice contained considerably higher amount of vitamin B1 as compared to raw milled rice. Meanwhile, McCarrison (1936) established that populations who preferred consuming raw milled rice over parboiled milled rice were more prone to beriberi.

Sporadic reports on the composition of foods were available at that time. Sahasrabuddhe (1925) as well as Stewart, Boyd, & De (1931) published the tabulated

results for the chemical analyses of few common Indian foods. Data generated by McCarrison (1929) for limited number of foods was nevertheless devoid of information on mineral content, an important component in the diet. Similarly, the chemical composition of common Indian foods reported by Ranganathan, Sundararajan, and Swaminathan (1937) was lacking in information on critical vitamins content probably because quantification of vitamins in those times required specialized analytical expertise. The available reports on nutrient content of Indian foods were not comprehensive and required consolidation for wider outreach and effective utility. Based on nutritional studies, McCarrison (1932) had advised that the solution to the nutritional problems in India should evolve from a survey of food sources and classification of natural products into nutritive values involving biochemical analysis of foods for its nutrient content. Consequently, the League of Nations Technical Commission on Nutrition recommended a study into the composition of dietaries and nutritive value of principal foods due to the precarious nutrition situation (Wilson, 1937). Hence, a special enquiry into the nutritive value of Indian foods funded by the IRFA, New Delhi was initiated.

The first Indian FCT containing 218 foodstuffs was

compiled by Aykroyd (1937) and released in the form of Health Bulletin No. 23 entitled 'The Nutritive Value of Indian Foods and The Planning of Satisfactory Diets'. These foodstuffs were classified into 11 food groups among which, other vegetables (20.1%), fruits (18.3%) and cereals (12.3%) were predominant. These vegetal foods were given importance as they were being widely consumed and were considered to have the potential to mitigate the prevalent nutritional problems. Animal source foods such as milk and milk products (3.6%) and flesh foods (5%) constituted relatively a small proportion (**Figure 1**). Condiments and spices accounted for 9.6% of the total foods. Fish samples represented those consumed in west-coast of Malabar region. All the selected foods were procured from the markets of Coonoor and Coimbatore in south India, and few other places such as Bellary (*Sorghum cernuum*), Bijnor (*Fagopyrum esculentum*; *Trapa bispinosa*), Mangalore (*Eleucine coracana*; *Triticum vulgare*; *Cicer arietinum*, *Dolichos biflorus*; *Cajanus indicus*), Darbanga (*Eleucine coracana*; *Glycine hispida*; *Lathyrus sativus*), Mysore (*Dolichos lablab*), Ahmedabad (*Glycine hispida*), Godavari (*Hibiscus sabdariffa*; *Spinacia oleracea*), West Godavari (*Momordica charantia*), Bangalore (*Coccinia indica*), Salem (*Mangifera indica*) and Punjab (*Citrus aurantium*) (Aykroyd, 1937).

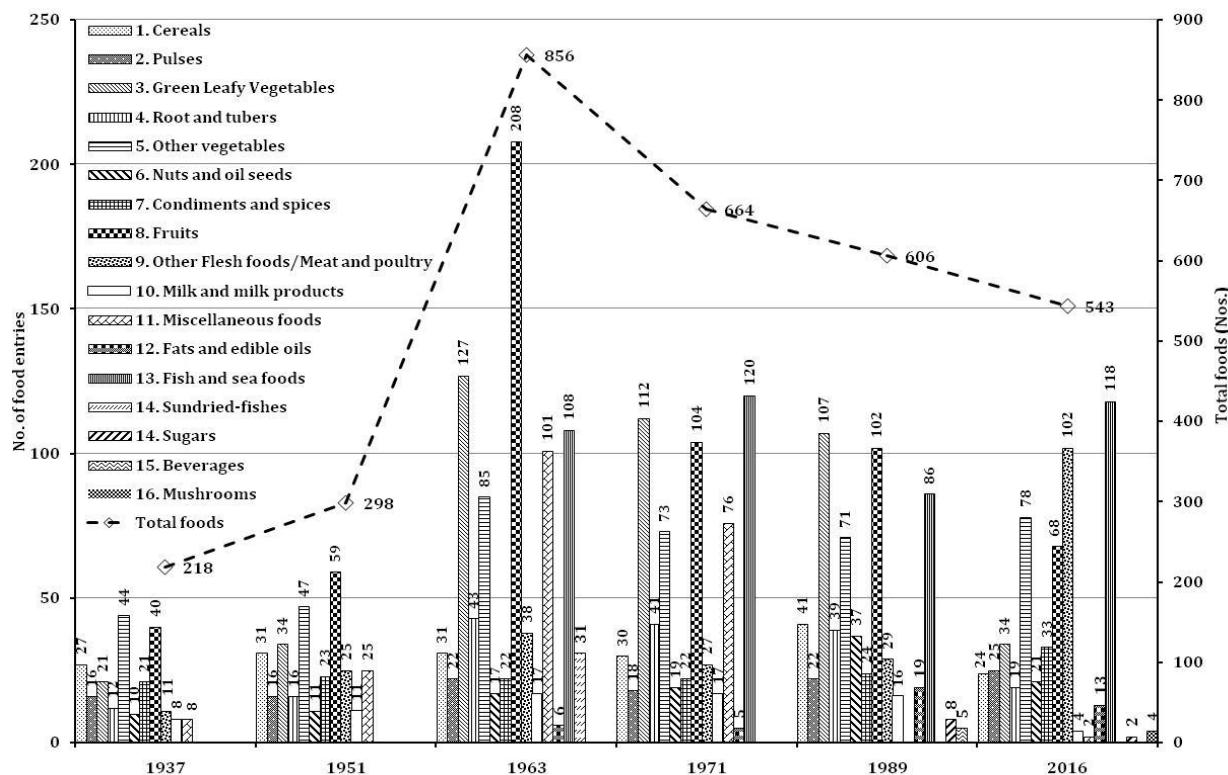


Figure 1. Metastasis of food representation by food groups in Indian Food Composition Tables, 1937-2017.
Sources: Aykroyd (1937); Aykroyd et al. (1951); Aykroyd et al. (1963); Gopalan et al. (1971); Gopalan et al. revised and updated by Narasinga Rao, Deosthale, and Pant (1989).

Values for a total of 17 components were reported in the first edition though some components were not complete for every food (**Table 1**). The methods described by Ranganathan et al. (1937) were adopted for analysis of various foodstuffs. The values for moisture, mineral matter, fat, crude fibre and protein were determined analytically and the results were presented as percentage of the original sample. Carbohydrate content was obtained by subtracting the sum of moisture, total mineral matter, ether extractives, crude fibre and proteins from 100 while calorific values were derived by calculation according to Atwater (1889), assuming that a gram of protein or carbohydrate yields 4 Cal and a gram of fat yields 9 Cal of energy. Calcium was analyzed by titrimetry (Ranganthan et al., 1937), phosphorus by volumetric method (Association of Official Agricultural Chemists AOAC, 1930) and these minerals were expressed as g/100g. Total iron content was estimated by colorimetry following potassium thiocyanate method and the results were reported as mg/100g. Carotene values were estimated by spectrophotometric method and the values were expressed as vitamin A equivalent international units (IU) per 100g. The data for vitamin B1 content for 75 food entries was sourced from the published journal articles particularly by Wilson et al. (1937) and were

presented in terms of IU per 100g. The tables thus provided the baseline availability of vitamin B1 in Indian foods to help formulate balanced diet and alleviate the incidence of beriberi. Vitamin B2 was estimated by biological method and the results were presented under the categories of rich (+++), good (++) presence (+) and poor (negligible). Vitamin C was estimated by chemical method and expressed as mg/100g (**Table 2**).

The protein biological value (BV) of 36 proteinaceous foodstuffs was also provided as an appendix in addition to the protein content of foods in regular tables. BV of proteins came from NRL, Coonoor and Seth Gordhandas Sunderdas Medical College (Now King Edward Memorial Hospital), Bombay (now Mumbai) where determination of protein BV was initiated (Narasinga Rao, 2005b). Similarly, the percentage of available iron out of total iron in 26 hematopoietic foodstuffs was also provided as an appendix to help in recommending foods for alleviating the prevalence of IDA. The available proportion of iron in Indian foodstuffs was then estimated by chemical balance method (Goswami & Basu, 1938). Food values in the Health Bulletin

Table 1. Delineation of food components in published editions of Indian food composition tables.

	1937 ¹	1951 ²	1963 ³	1971 ⁴	1989 ⁵
Proximate principles, Fibre & Energy	7 (218)	7 (298)	7 (843)	7 (664)	7 (598)
				IDF, SDF, TDF	3 (106)
	Ca, P, Fe 3 (218)	Ca, P, Fe 3 (298)	Ca, P, Fe 3 (830)	Ca, P, Fe 3 (664)	Ca, P, Fe 3 (598)
			Mg, Na, K, Cu, S, Cl 6 (830)	Mg, Na, K, Cu, S, Cl 6 (106)	Mg, Na, K, Cu, Mn, Mo, Zn, Cr, S, Cl 10 (227)
Minerals	Available Fe (%)	1 (26)	Ionizable Fe, Ionizable Fe (%)	2 (830)	Phytin P, Phytin P (%)
				2 (830)	2 (148)
				Phytin P, Phytin P (%)	P, P (%)
	Carotene A, B1, B2, C 5 (218)	Carotene , A, B1, B2, B3, (298) 6 C	Carotene, A, B1, B2, B3, B5, B6, B7, B8 , K, B9, C 12 (533)	Carotene, A, B1, B2, B3, C 6 (664)	Carotene, A, B1, B2, B3, B6, C 7 (363)
Vitamins			Free B9, Total B9	2 (68)	Free B9, Total B9
			B12	1 (17)	B12
		Choline	1 (533)	Choline	Choline
					β-carotene
Total Nitrogen & EAA			12 (73)	13 (118)	13 (124)
Fats & Fatty acids		PUFA	1 (9)	PUFA	1 (12)
Protein	BV (%)	1 (36)	BV (%)	1(49)	BV (%), PER 2 (75)
Acid-base balance			Acid, ml 0.1N, Base, ml 0.1N	2 (830)	Acid, ml 0.1N, Base, ml 0.1N 2 (106)
Oxalic acid				1 (830)	1 (148)
					1 (145)

Notes: Values represent No. of components. Figures in parenthesis indicate number of food entries. **Source:** **1:** Aykroyd (1937); **2:** Aykroyd et al. (1951); **3:** Aykroyd et al. (1963); **4:** Gopalan et al. (1971); **5:** Gopalan et al., revised and updated by Narasinga

No. 23 (Aykroyd, 1937) mostly represented the composition of Indian foods analyzed at NRL, Coonoor (Swaminathan, 1937; Ranganathan et al., 1937). Additionally some nutrient values from India published in scientific articles particularly those from the Department of Biochemistry and Nutrition, All India Institute of Hygiene and Public Health, Calcutta (now Kolkata) were also made use of. However, the proportion of data from NRL, Coonoor and those collected from other research laboratories in India could not be ascertained. Even though, the iodine content of 100 varieties of Indian foods was reported by Patnaik (1934) from NRL, Coonoor, they were not included in this edition of composition tables as the topic was so convoluted that it was considered outside the scope of the bulletin.

Many significant interpretations emanated from the food values in the first compiled edition of NRL, Coonoor. The data enabled calculation of the actual energy values of foods consumed and facilitated evaluation of optimal requirements. The FCT revealed that the proteins derived from animal sources such as beef muscle and whole egg had comparatively higher protein BV of 98 and 94%, respectively which were much higher than vegetal proteins like bengal gram

with 76% and soya bean with 54%. Among the vegetal foods, pulses were found to be rich sources of protein ranging from 17.08% in bengal gram to 43.22% in soya bean. Vitamin A was found to occur in animal fats and the richest source was halibut liver oil containing 3900000 IU/100g. Vegetable oils and fats were found to be generally devoid of vitamin A and carotene except red palm (*Elaeis guineensis*) oil, which contained carotene equivalent to 44,000 IU of vitamin A per 100g. Apart from leafy vegetables (2000 – 12630 IU), carrots (2000 – 4300 IU), ripe fruits such as mangoes and papaya with 2020 and 4800 IU carotene equivalent vitamin A per 100g, respectively were considered among the richest dietary source of carotene. Foods such as coconut, soy and avocado had fat content of 41.6, 19.5 and 22.8%, respectively and were regarded as rich sources of fat. Calcium was found to be present in large amounts in buffalo milk (0.203%), 'ragi' (0.334%) as well as leafy vegetables such as 'agathi' (1.131%) and 'curry leaves' (0.811%). The bioavailability of iron in meat, like pork muscle (86%) and beef liver (70%) was much higher than that of vegetables like spinach (19%) and lettuce (25%). Whole wheat was found to be rich source of vitamin B1 containing 230 IU/100g, while milled rice was observed to be poor source. Milk and milk products,

Table 2. Analyzed components and methods in published editions of Indian Food Composition Tables.

Component(s)	Method	Edition(s)
Moisture	Thermogravimetry	1937;1951;1971;1989
Protein	Kjeldahl method (N × 6.25)	1937;1951;1963;1971;1989
Fat	Ether extractives	1937;1951;1971;1989
Ash	Thermogravimetry	1937;1951;1971;1989
Crude fiber	AOAC (1930)	1937;1951
Carbohydrates	By difference	1937;1951;1963;1971;1989
Energy	Calculation	1937;1951;1963;1971;1989
Calcium	Titrimetry	1937;1951
Phosphorus	Volumetry	1937;1951
Calcium, Phosphorus	AOAC	1971;1989
Iron	Calorimetry	1937;1951
Iron, Magnesium	AOAC	1971;1989
Na, K, Cu, S, Cl	AOAC	1971
Na, K, Cu, Mn, Mo, Zn, Cr, S, Cl	AAS	1989
Vitamin A	Spectrophotometry	1937;1951;1963
β-carotene	HPLC	1989
Carotene	Spectrophotometry	1937;1951;1963;1971;1989
Thiamin	Biological and chemical method	1951;1963
Thiamin	Thiochrome method	1971;1989
Vitamin B2 (Now Riboflavin)	Chemical	1937
Riboflavin	Microbiological	1951;1971;1989
Niacin	Microbiological	1951;1971;1989
Folic acid	Microbiological	1971;1989
Vitamin C	Chemical	1937;1951;1963;1971;1989
Vitamin B12	Biological	1971;1989
Fats and fatty acid	Gas chromatography (Partly)	1989
PUFA	Gas liquid chromatography	1963;1971
Amino acids	Automated amino acid analyzer	1971;1989
Protein Biological Value	Biological, Human subjects	1937; 1951;1963
Protein Efficiency Ratio	Biological, Animal model	1963
Acid-Base balance	Calculation	1963;1971

eggs, pulses, leafy vegetables, certain roots and tubers were reported as good sources of vitamin B2. Unsprouted pulses lacked vitamin C; nevertheless, sprouted pulses contained 10 to 15 mg of vitamin C per 100g.

After one year, the second edition of Health Bulletin No. 23 was published in the year 1938 which was widely circulated and translated into several Indian languages for greater popularity, wider outreach, general public nutrition education and utility. In this edition, a section on infant feeding was also added and corrections were incorporated for bringing in more clarity. The general configuration however, remained unchanged.

A revised and enlarged third edition was published in the year 1941 wherein the reported number of foods increased to 284. Content wise the third edition was substantially similar to previous two editions. Calorie values of the foods per ounce were provided as an additional column. The scientific nomenclature of the foods was provided as a separate column alongside the nutrient values. The indicative expressions for vitamin B2 was excluded in third edition as these were not quantified values and were unreliable for estimating intake levels. The importance of '*amla*' (*Phyllanthus emblica*) as a rich source of vitamin C was highlighted. Indian fish liver oil was proposed as a substitute for cod liver oil. Vernacular names of the foodstuffs in 'Hindustani' (now Hindi) language were additionally provided in the appendix against english names for the general public reference.

3. Health Bulletin No. 23, 4th edition 1951

Between 1938 and 1951, there was a notable transition in the Indian nutrition scenario. Among tropical regions, India contributed substantially in the field of nutrition (Nicholls, 1945). The incidence of pellagra was noticed and the role of niacin in its cure was successfully demonstrated in India (Raman, 1940; Aykroyd & Swaminathan, 1940). The agricultural practices in India also underwent modifications with concomitant increase in the crop yields. However, the basic diet of individuals remained inadequate, devoid of animal fats and proteins, due to poor economic conditions (Day, 1944). The translation of nutrition research into sustained public health was hindered by obstacles of weak economy, ignorance and poverty (Aykroyd, 1941). Other deficiency diseases such as maternal anaemia, infant beriberi and osteomalacia continued to be rampant. Sustained nutritional issues prompted the revision of Indian FCT resulting in the publication of fourth edition of the Health Bulletin No. 23 by Aykroyd, Patwardhan, and Ranganathan (1951).

The food grouping pattern remained unchanged in the Health bulletin No. 23, 4th edition. However, new foods were added to the groups increasing the total number of foods to 298 (**Figure 1**) out of which, fruits, other vegetables, green leafy vegetables (GLVs) and cereals

constituted 19.7, 15.7, 11.4 and 10.4%, respectively. The number of flesh foods increased 2.2 times with addition of 14 new foods. Miscellaneous foods increased 3.1 times with addition of 17 new foods. Fruits and GLVs were expanded with addition of 19 and 13 foods, respectively. Three new foods were added in the class of milk and milk products. Pre-emptive knowledge regarding distribution of key micronutrients, mostly gained from past compilation, perhaps led to expansion of these food groups. The number of foods in pulses category however remained the same. Food sampling locations were the same as reported in the previous edition.

The 1951 version of the Health Bulletin No. 23 reflected improvement of analytical technique, which was quickly adopted in India. Unlike the previous 1937 edition where the values for B1 were sourced from scientific journals and expressed as IU/100g, in this revised edition, vitamin B1 was determined experimentally and the analytical values were expressed in terms of µg/100g (**Table 2**) to enable accurate intake estimations. Microbiological assays were introduced for determination of vitamins particularly that of riboflavin. The mode of expression for riboflavin was modified from indicative to quantitative form of µg/100g which made comparison of levels between different foods possible. Nicotinic acid content of foods, reported in terms of mg/100g, was added to the existing nutrient parameters to help in diet based mitigation of pellagra. However, the content of nicotinic acid and riboflavin were analyzed for some foods while the rest of information was drawn from literature. While taking the values from the scientific literature, preference was given to data that originated from India (Aykroyd, Patwardhan, & Ranganathan, 1951).

Since there was a great deal of difference between the Indian measures, the metric and avoirdupois system used in various provinces during those times, the nutrient values were additionally expressed either as gram (g) or milligram (mg) or microgram (µg) or international units (IU) per ounce of the edible portion. The appendix on the available percentage of iron in foodstuffs was dispensed with due to inconsistencies with estimations. However, the appendix on BV of proteins was retained and even augmented by providing additional data for 13 new foodstuffs. Vernacular names in 9 Indian languages viz., Hindi, Tamil, Telugu, Kannada, Oriya, Marathi, Bengali, Gujarati and Malayalam were provided against the English names for all the foodstuffs in addition to the scientific nomenclature for wider public utility across India.

Some of the significant and novel findings in this edition include the finding that the nutrient composition of undiluted buttermilk was similar to that of whole milk excluding its fat content. Honey was found to contain about 80% of sugars composed of fructose and

glucose and devoid of vitamins except vitamin C. Vitamin A content was found to be distributed in animal source foods like butter, ghee, whole milk, egg yolk, liver and fish. Among animal fats, cod liver oil (60000 to 200000 IU/100g) and halibut liver oil (390000 IU/100g) were reported as richest sources of vitamin A. Whole bengal gram (*Cicer arietinum*) was found to be devoid of vitamin C in their native state. Sprouted mung or green gram (*Phaseolus radiatus*) contained about three times more vitamin C than sprouted bengal gram whereas, ‘*amla*’ (*Emblica officinalis*) containing 600 mg of vitamin C per 100g was regarded as the richest source of vitamin C.

The fifth edition of Health Bulletin No. 23, published by Aykroyd and Patwardhan (1956) focused on the general aspects of nutritional physiology in India. Since rice was the major staple consumed in larger proportion, the nutritive values of rice and rice products were studied in detail and published exclusively as separate and new edition in the year 1959 entitled “Rice”- Health Bulletin No. 28.

4. Sixth revised edition of Indian FCT 1963

In the subsequent years between 1952 and 1962, growth in nutrition oriented research in India took place even while deficiency disorders continued to be widespread. The diets predominantly comprised of cereals, small quantities of pulses, green vegetables and lesser proportion of milk, meat and eggs. Protein malnutrition was of considerable magnitude particularly among the poor communities (Rao, Swaminathan, Swarup, & Patwardhan, 1959). Incidence of kwashiorkor and marasmus were observed across India (Gopalan & Ramalingaswami, 1955). Scientific articles around this time elucidated the role of amino acids in regulation of human health. Pellagra was reportedly instigated by amino acid imbalance of the sorghum diet, due to relatively excess leucine intake (Gopalan, 1961). Additionally, it was reported that the BV of proteins may not be limited by single amino acid but could be due to combined effects of partial amino acid deficiencies (Patwardhan, 1956). Among micronutrient deficiencies, iron deficiency anemia (IDA) was observed more among rural sections of populations while kwashiorkor occurred throughout India (Patwardhan, 1961). It was found that the prevalence of IDA was greater in India when compared to Europe due to excessive phosphorus and phytic acid with concomitant low calcium levels in the diet. About 16% of population had less than 8 g/100 dl mean blood haemoglobin level while the daily intake of iron among Indian populations ranged from 12 to 40 mg (Foy & Kondi, 1957). The occurrence of IDA was therefore observed to be not exclusively limited to the low iron intake from the diets but was also attributed to poor gastrointestinal absorption, inhibition of iron uptake by other dietary components or even the loss of absorbed iron.

The sixth revised edition was brought out by Aykroyd, Gopalan, and Balasubramanian (1963) in the form of a Special Report Series No. 42 retaining the original title ‘Nutritive value of Indian foods and the planning of the satisfactory diets’. All the available literature based nutrient values of the Indian foods in this edition were inclusively compiled which significantly raised the total number of foods to 856; the highest among all the FCT published so far (Figure 1). Fruits and GLVs constituted 24.2 and 14.8%, respectively. ‘Fishes and other sea foods’ category, introduced as a new food group in this edition, constituted about 12.6% of total foods. Fats and edible oils were classified as yet another additional food group accounting for 0.7% of total foods in the FCT. Addition of fish, fats and edible oils as new food groups implied a better understanding about the role of amino and fatty acids in regulation of human health and their distribution in different foods (Chakrabarty & Hilditch, 1951; Master & Magar, 1954; Subrahmanyam, Swaminathan, Rao, & Joseph, 1961; Subrahmanyam, Sreenivasan, & Swaminathan, 1962). Among the new food groups, the compositional values of 108 numbers of ‘fish and other sea foods’ comprised the largest section in the tables. ‘Milk and milk products’ constituted 1.9% of total foods. The number of food entries was expanded by 3.7, 4 and 2.7 times in GLVs, miscellaneous foods and ‘roots and tubers’ categories, respectively to widen the coverage of foods consumed across India. Compared to the last edition of the year 1951, additional columns for the biological nature and the mass percentage of edible portions were also given.

The consumption of skimmed milk powder was found to be beneficial in the treatment of kwashiorkor in the areas where milk availability was limited. Legume proteins were also found to be useful in treatment of protein malnutrition (Patwardhan, 1962; Gopalan, 1961). Therefore, skimmed milk along with whole milk powder and certain legumes were included in the 1963 edition. The values for PER, a measure of protein quality were provided in addition to the existing protein BV (Table 1). The BV of proteins represented percentage of absorbed nitrogen retained in the body when food was considered as the sole source of nitrogen. PER was calculated from the gain in weight per gram of protein consumed. Protein content was calculated from nitrogen content by multiplying with the factor of 6.25. The data for eleven essential amino acids along with total nitrogen were included in the 1963 tables for the first time, to provide dietary nutrition solutions to tackle the incidence of pellagra and protein malnutrition. Amino acid values were drawn from research work carried out in India based on initial microbiological methods and later using automated amino acid analyzer, mostly at National Institute of Nutrition (NIN), Hyderabad and Central Food Technological Research Institute (CFTRI), Mysore. Amino acid content was expressed in terms of g/g N.

In order to provide dietetic solutions for alleviating IDA, iron content of foods were reported as total, ionizable and percentage of ionizable iron out of total iron. Percent ionizable iron content was introduced into the main table rather than as appendix to enlist different haematopoietic foods. Calcium and magnesium salts of phytic acid are insoluble and these minerals are hence rendered less bio-available. Phytates are resistant to digestion and the phosphorus in them is also not readily available. Therefore, phosphorus contents of certain foods was reported in three different forms namely, total phosphorus, phytin-phosphorus and percent phytin-phosphorus out of total phosphorus to aid in efficient diet based mitigation of osteomalacia. For the first time, oxalic acid content was also reported for 830 food entries in this 1963 edition. Oxalic acid was considered as an anti-nutrient along with phytin-phosphorus and were tabulated together, since physiology of mineral absorption and nutritional impediments caused by anti-nutrients were well deciphered.

Mineral data comprised of 9 individual elements in total as compared to 3 elements in previous edition. Magnesium, sodium, potassium, copper, sulphur and chlorine were the new inclusions (**Table 1**). All mineral contents were expressed in terms of mg/100g. Acid-base balance of foods that could be calculated from mineral content were provided to aid in the formulation or use of foods as therapeutic diets since large sections of rural population in India depended on the Indian system of diet based therapeutics and medication. Intake of folic acid was thought to play important role in curing anaemia in those days. Among vitamins, the contents of biotin, choline, inositol, pantothenic acid, pyridoxine and vitamin K including folic acid for 533 food entries were new inclusions (**Table 1**). Total β-carotene content obtained by solvent partition was multiplied by a factor of 10/6 to arrive at vitamin A value in IU/100g. Vitamin B1 was estimated mostly by chemical and to a small extent by biological methods (**Table 2**). Data expression units were either in gm or mg or µg per 100g edible portion. The percentage of polyunsaturated fatty acids (PUFA) in oils and fats were also provided for the first time in this 1963 edition because of their relevance in the management of cardiovascular disease.

Nutrient content of foods in the sixth edition was mostly based on the work carried out at NRL, Coonoor where quantification of nutrient values was funded by Nutrition Research Funds Association (NRFA). Nutrient values were also obtained from institutions like University College of Technological Research Institute, Mysore; State Food and Drug Laboratory, Ambala Cantonment and Nutrition Laboratory, Patna to provide wider coverage for several constituents of different foods consumed across the country. However, no information was found on the extent of data obtained from these centers.

In order to meet the demands of teachers of home science and nutrition; researchers of diet and nutrition surveys as well as dieticians in hospitals, a handy and portable document, named Special Report Series No. 42 entitled “Nutritive Value of Indian Foods-Tables of Food Values” was brought out by Aykroyd, Gopalan, and Balasubramanian (1966). This book contained only the tabulated values and brief text on principles of nutrition and dietetics while the number of foods and component parameters, scientific and vernacular names remained unchanged.

5. Nutritive value of Indian foods (NVIF), 1971

In a relatively short duration between 1964 and 1970 there was very little probability for the alteration in the nutritive value of Indian foods. The dietary pattern remained similar despite economic growth, probably due to concomitant population expansion, low income and inadequate food supply (Rao, 1967). A slight upward trend was noted in the consumption of foods from animal sources, fats, sugars while a slight decline was noticed in the intakes of vegetables and food grains. Yet, diets were found to be inadequate in protein, vitamin A, calcium, iron, energy, ascorbic acid, thiamine and riboflavin according to Nutritional Advisory Committee (NAC) of the ICMR (Devadas et al., 1965). The Indian population continued to thrive on subsistence vegetarian diets with little or no milk. These dietetic and nutritional factors were considered while revising the FCT. Subsequently, a consolidated FCT entitled ‘Nutritive Value of Indian Foods’ was released by Gopalan, Ramasastri, and Balasubramanian (1971). The phrase ‘Planning of Satisfactory Diets’ was excluded from the title probably due to increase in consumer options triggered by economic growth.

Apart from inadequate dietary iron intake, the incidence of IDA was additionally ascribed to impair iron absorption leading to metabolic deficit due to preference for cereal rather than iron rich foods (Venkatachalam, 1968). Protein energy malnutrition (PEM) in the forms of Kwashiorkor (protein and calorie deficiency) and marasmus (calorie deficiency) were evident among children and were regarded as the most prevalent and widespread nutritional problems in India during those days (Gopalan, 1970). Nutritional hypertension observed among Indian population was at that time ascribed to the differential proportion of long chain versus short chain fatty acids in the fats and oils consumed (Malhotra, 1970).

The NVIF (1971), provided data for a total of 664 foods (**Figure 1**). The net reduction in number of components to 45 from 51 (in the previous 1963 edition) was due to exclusion of components parameters of ionisable iron, percent ionisable iron, biotin, inositol, pantothenic acid, pyridoxine, vitamin K, protein BV and PER and inclusion of free folate, B12 and tyrosine. The total number of food representations dwindled by 22% compared to previous

edition, since analytical values were prioritized. Fruits in particular were reduced by 50%. The descriptive column for the nature of edible portion was removed probably due to more emphasis on nutrient data.

Free folic acid and vitamin B12 were included as new components in this 1971 edition to provide dietetic options for solving the issues of certain types of anemia, cardiovascular disorders and neural dysfunctions caused by their inadequacy. Folate contents for 68 food entries were evaluated microbiologically and were presented as free and total folate to aid in deciphering the degree of bioavailability from different foods. The free and total folate contents were estimated before and after incubation of food extracts with folic acid conjugase, respectively. Vitamin B12 was estimated by biological method using *Euglena gracilis* as the test organism, and the data was presented for 17 animal source foods in terms of µg/100g of edible portion. Many vitamins such as biotin, inositol, pantothenic acid, pyridoxine and vitamin K were however not considered in this edition due to scarcity of updated data, lack of clarity on deficiency symptoms and obscure metabolic role in those times. Due to lack of definite information about the conversion of carotene to vitamin A in the body, β-carotene values (estimated by alcohol extraction and ether partitioning) were expressed as µg/100g. Vitamin A content of pertinent foods was calculated considering 1 IU of vitamin A as equal to 0.3 µg of retinol. Vitamin C was estimated by 2, 6-dichlorophenol indophenol-xylene extraction method to avoid interference of colored extracts. Choline values for 60 food entries were presented as a separate table in terms of mg/100g edible portion (**Table 1**). Riboflavin and nicotinic acid were estimated by microbiological assays (**Table 2**).

The contents of ionizable iron and percentage of ionizable iron out of total iron was excluded in this edition probably due to low analytical reliability. Minerals such as Ca, P and Fe were estimated by standard AOAC methods using atomic absorption spectroscopy (AAS). The values of certain trace elements such as Mn and Zn analyzed by chemical methods were considered unreliable and were therefore not included in the tables. Phytate content was determined as phytin-phosphorus and the values were expressed as mg/100g as well as percentage of phytin phosphorus out of total phosphorus.

Protein BV and PER were also not considered in this 1971 edition since amino acid composition was given preference. The amino acid composition and total nitrogen content of foods were partly analysed at National Institute of Nutrition (NIN), Hyderabad and partly sourced from Indian literature. Unlike previous editions, the derived energy values were expressed in terms of kcal/100g. The PUFA content of twelve commonly consumed fats and oils were mostly analyzed using gas liquid chromatography at CFTRI,

Mysore and NIN, Hyderabad and the results were expressed as gram percentage. The vernacular names of foods in Indian languages saw the inclusion of 'Kashmiri' and 'Punjabi' in this edition. The data presented in this edition was primarily taken from the work carried out at NIN, Hyderabad funded by ICMR, New Delhi. In order to increase the coverage of foodstuffs and the number of food constituents, data that originated from University College of Science and Technology, Calcutta; Haffkine Institute, Bombay (now Mumbai); CFTRI, Mysore; State Food and Drug Laboratories, Ambala Cantonment and Nutrition Laboratory, Patna were also included. The extent of sourced food values from various Indian scientific journals were neither specifically demarcated nor cited as to which components or foods.

Among the notable observations in this publication, fresh green vegetables, liver and pulses were regarded as good sources of folates. It was also reported that only animal source foods such as meat, milk and liver contained vitamin B12. GLVs were found to be rich in calcium, iron, carotene, riboflavin and folic acid. Potatoes contained significant amount of vitamin C (17 mg/100g). Jaggery (cane) was found to be a good source of iron with 11.4 mg/100g. The liver oils of cod, shark and halibut contained 20000-70000, 70000, and 1000000 µg of preformed vitamin A per 100g, respectively.

6. Nutritive value of Indian foods, 1989

The green revolution ushered in food security and there was a substantial decrease in the levels of poverty in India. After 1971, the status of nutritional deficiencies was observed to have improved with the reduction in the prevalence of IDA, vitamin A deficiency (VAD) and child malnutrition except the incidence of goitre which had escalated. Between 1971 and 1974, the prevalence of corneal disease (vitamin A deficiency) accounted for about 2% of the cases of blindness in India (Reddy, Shekar, Rao, & Gillespie, 1992). Between 1975 and 1990, there was a decline in clinical deficiency signs of VAD among children of 1 to 5 years in rural areas (National Nutrition Monitoring Bureau, NNMB Report, 1991). The prevalence of marasmus and kwashiorkor also decreased from 1.3 to 0.6 % and 0.4 to 0.1%, respectively. However, chronic diseases such as diabetes and cardiovascular health became matters of public health concern.

In order to rectify some of the shortcomings of the previous editions and to make space for new developments in nutrition situation, the NVIF was revised and updated (Gopalan, Ramasastri, & Balasubramanian, revised and updated by Narasinga Rao, Deosthale, & Pant, 1989). In this edition, foods were categorized into 14 groups with the segregation of 'meat and poultry', 'sugars' and 'beverages'. The content values for 64 individual components in 606 foods were compiled (**Table 1**). The foods were

classified into ‘common’ and ‘less familiar’. The content of proximate, minerals and trace elements, vitamins and essential amino acids were tabulated separately for ‘common’ and ‘less familiar’ foods. Total and β -carotene contents were quantified using high performance liquid chromatography (HPLC) for 29 food entries and the values were reported as $\mu\text{g}/100\text{g}$ in a separate table. Similarly, fatty acid composition, analyzed by gas chromatography for 16 commonly consumed edible oils and fats were given as separate table in addition to fat and fatty acid composition of 26 ‘common foods’. Thus, fatty acid compositions for a cumulative 42 food entries were provided, to aid in devising nutrition solutions for various age and physiological groups of populations. Vitamin B12 content of 2 fish foods, 8 flesh foods and 7 ‘milk and milk products’ were also provided as separate table. In this edition, miscellaneous foods were integrated with ‘less familiar’ foods (**Figure 1**).

Recognizing the importance of dietary fibers in regulation of human health, contents of soluble dietary fibre (SDF) and insoluble dietary fibre (IDF) were given for 106 food entries to find dietetic nutrition solutions for high prevalence of chronic diseases such as obesity and diabetes. Quantified values of trace elements such as manganese, molybdenum, zinc and chromium for 227 food entries were the new inclusions. The corrected values of nutrients particularly that of iron was included in this revised edition. Minerals such as Mg, Na, K, Cu, Mn, Mo, Zn, Cr, S and Cl were analyzed by AAS, whereas Ca, P and Fe were estimated by standard AOAC methods. Prevalence of iron deficiency was found to be not exclusively due to low dietary iron intake but also due to the folate and vitamin B12 deficiencies (Yusufji, Mathan, & Baker, 1973) as well as other factors such as absorption. Therefore, the components of ionizable iron content and percentage of ionisable iron out of total iron were dropped in this edition. Acid-base balances of foods were also withdrawn. However, the

components of oxalic acid and phytin-phosphorus were retained and that of vitamin B6 was reintroduced.

In this edition, pulses, millets and GLVs were in general regarded as relatively rich sources of dietary iron. Fenugreek seeds were found to contain 48.6% IDF and 20% SDF, substantially higher compared to other foods. Safflower oil contained high levels of unsaturated fats. Groundnut oil with moderate levels of polyunsaturated fatty acids (PUFA) was considered as a good source of essential fatty acids. Rice bran oil was found to have fatty acid composition similar to groundnut oil. Fishes were found to contain omega-3 fatty acids, considered beneficial for cardiovascular health.

7. Notable transitions between 1937 and 1989 editions of Indian FCT

A steady progress in the analytical methods and techniques ensued with every major revision. In 1937, crude fibre was estimated in the residue left after ether extraction of fat, but in the 1989 edition dietary fibre values determined by enzymatic analysis akin to human gastric digestion, were reported. Minerals previously estimated by titrimetry, volumetry and colorimetry were replaced with modern reliable methods and quantified using AAS. Total β -carotene estimated previously by chemical methods was quantified by liquid chromatography in the 1989 edition for selected foods. Vitamins were quantitatively expressed as μg or $\text{mg}/100\text{g}$ unlike initial FCT where they were reported in terms of $\text{IU}/100\text{g}$. Amino acid contents were expressed as mg/g N in 1989 edition as against g/g N in previous editions. Minerals were expressed in terms of $\text{mg}/100\text{g}$ as against g\% in earlier editions, thus progressing towards better precision.

The number of decimal places of the reported data values increased for thiamine, riboflavin, folic acid and PUFA over the decades (**Table 3**). The transition in the

Table 3. Data presentation for selected components in published editions of Indian food composition tables.

Components	1937 ¹		1951 ²		1963 ³		1971 ⁴		1989 ⁵	
	DP	Units	DP	Units	DP	Units	DP	Units	DP	Units
Proximates	2	g %	1	g %	1	g/100g	1	g/100gm	1	g/100g
Energy	1	Cal/100g	0	Cal/100g	0	Cal/100g	0	Kcal/100g	0	Kcal/100g
Calcium	3	g %	2	g %	0	mg/100g	0	mg/100g	0	mg/100g
Phosphorus	3	g %	2	g %	0	mg/100g	0	mg/100g	0	mg/100g
Iron	2	mg %	1	mg %	1	mg/100g	1	mg/100g	2	mg/100g
Vitamin A	1	I.U./100g	1	I.U./100g	0	I.U./100g	0	I.U./100g	0	$\mu\text{g}/100\text{g}$
Carotene	0	I.U./100g	0	I.U./100g	0	I.U./100g	0	$\mu\text{g}/100\text{g}$	0	$\mu\text{g}/100\text{g}$
Thiamin	0	I.U./100g	0	$\mu\text{g}/100\text{g}$	2	mg/100g	2	mg/100g	2	mg/100g
Riboflavin	*	(+,++,+++)	0	$\mu\text{g}/100\text{g}$	2	mg/100g	2	mg/100g	2	mg/100g
Folic acid	-	-	-	-	0	$\mu\text{g}/100\text{g}$	1	$\mu\text{g}/100\text{g}$	1	$\mu\text{g}/100\text{g}$
Vitamin C	1	mg/100g	0	mg/100g	0	mg/100g	0	mg/100g	0	mg/100g
Amino acids	-	-	-	-	2	g/gN	2	g/gN	0	mg/gN
PUFA	-	-	-	-	0	gms %	0	gms %	2	g %

Notes: * Non-numeric indicative data; - component not included in the FCT; DP Decimal places. **Source:** 1: Aykroyd (1937); 2: Aykroyd et al. (1951); 3: Aykroyd et al. (1963); 4: Gopalan et al. (1971); 5: Gopalan et al., revised and updated by Narasinga Rao, Deosthale, and Pant (1989).

Table 4. Summary of changes in the composition of foods from 1937 to 1989.

Food group	Moisture	Protein	Fat	Ash	Fibre	CHO	Energy	Ca	P	Fe	Caro-tene	B1	Vit-C
Cereals	-2.1	-2.1	10.4	-7.7	0.2	-0.6	-0.4	-0.8	-1.8	3.4	-13.3	-11.3	-
Condiments & spices	1.3	1.2	19.8	2.7	7.7	-5.6	1.3	-6.6	5.7	16.4	-8.0	-33.8	9.3
Flesh foods	-0.1	-2.6	1.7	3.0	-	-1.5	0.2	10.9	-0.5	9.4	-2.7	-30.7	-
Fruits	0.2	-6.4	23.1	9.7	-1.8	-4.6	-1.8	24.8	7.4	79.4	-6.4	-22.5	-7.7
Leafy vegetables	1.0	6.4	8.3	6.5	10.0	-12.3*	-4.4	1.4	6.1	-25.6	15.1	-60.4	-16.9
Milk & milk products	-0.3	-4.3	1.6	-3.1	-	-19.8	-4.0	4.5	0.0	-70.3	-10.1	-	-
Miscellaneous foods	0.0	0.4	6.0	1.3	-1.6	0.0	0.0	0.2	-4.0	34.7	-	-	-
Nuts & oil seeds	-7.9	-5.2	-0.6	2.2	-0.4	5.5	-0.3	2.7	-3.3	-21.6	-9.0	-2.9	
Other vegetables	0.5	1.5	12.7	-0.8	-0.7	-8.0	-6.4	-0.5	-0.5	-23.1	8.6	-31.2	-1.8
Pulses	0.0	0.1	0.1	0.0	-0.8	-1.8	-1.6	-6.2	-4.0	-4.7	2.9	-7.1	-
Root and tubers	0.1	1.6	26.8	7.6	1.1	-5.3	-4.3	-30.4	145.5	-19.3	47.7	66.9*	-37.5

Notes: Values were normalized to uniform expression units for each food group on dry weigh basis. * Significant change at $p \leq 0.05$ in the two-sided pair-wise comparisons test. - Not included in the analysis due to less than two common foods with data points. CHO, Carbohydrates.

data expression units and precision indicates enhanced accuracy and sensitivities of analytical techniques. The number of food constituents in FCT editions from 1963 onwards was resolved further into sub-components like phytin-phosphorus, ionizable iron fraction, free folic acid, individual essential amino acids, individual fatty acids, oxalic acid, SDF and IDF. Even while the number of foods increased in each food group, least expansion was observed in the ‘condiments and spices’ group with addition of only three new food items between 1937 and 1989.

The presentation of data value in all the published FCT were in the form of unitary numeric values either with or without decimal places and lacked variability of the contents. It was observed that the food sampling was limited to only few locations. Perhaps inclusion of data reported from other parts of the country served for the dimension of geographic distribution. Hence, the data were not true representation of foods consumed throughout the country. Unlike other countries FCT (McCance & Widdowson, 1960) which have additionally provided the composition of processed, prepared, preserved and cooked foods, Indian FCT have largely focussed on foods in their raw state due to large variation in the food habits, methods of preparation and minimal usage of processed foods in the country.

Common food groups in the FCT of 1937 and 1989 editions with an intermediary duration of about fifty years were compared based upon the mean nutrient and energy values after normalizing to common expression units on dry weight basis. It was observed that the alteration in nutrient content of 202 common foods

belonging to eleven common food groups were meager despite several intermittent revisions. Percent change in the mean moisture, protein, ash, fibre and energy values of all food groups were insignificant and below 10%. Apparent rise observed in fat contents of food groups, perhaps due to improvement in the extraction techniques and reduced interference, were nevertheless insignificant. Carbohydrates in leafy vegetables declined significantly though the magnitude of change was only 12%. Such decrease is due to cumulative changes in the protein, fat, ash and fibre contents because the carbohydrate values were derived ‘by difference’. Thiamine content of roots and tubers decreased significantly by 67% (**Table 4**). Despite alteration in agro-climatic conditions, modalities of food production and supply practices, sampling pattern, description of edible portions, advancement in the analytical techniques, the composition of large number of foods remained fairly steady without remarkable change which implies that substantial nutrient values exhibited carry forward trend from 1937 FCT.

The need for comprehensive and updated compositional data far surpassed the available range of food data for effective nutrition management. Sound food composition databases that are both comprehensive and representative of foods available and consumed in the country are essential basic tools for a variety of activities. Interest in food components is expanding rapidly, as are the varieties of foods that are available and consumed. The NVIF is an important contribution to the human knowledge, especially in the Indian context but the data is outdated and based on the methods available about 2-3 decades ago with partial or limited coverage of foods and nutrients. Further, no

documentation is available as to the sampling procedure followed or the source of the data. Due to deficit of many of the nutrient data which stimulate disproportional costs and inefficient use of resources, it was deemed necessary to completely revamp the Indian FCT with a totally new compositional database.

8. The New Indian Food Composition Tables, 2017

Economic liberalization and globalization changed the food and nutrition scenario in India. Between 1990 and 2010, the daily per capita supply of energy, protein and fat increased by 11, 12 and 30%, respectively. Consumption of fruits, starchy roots, vegetables increased by 91, 52 and 46%, respectively (Food and Agriculture Organization Statistics, FAOSTAT, 2013), though a steady increase in the food price was also observed. A change in dietary pattern was observed as the conventional diet of the Indian populations shifted largely due to the modified food supply systems. Reduction in incidence of kwashiorkor from 0.2 to 0% and bitot's spot from 0.7 to 0.2%, respectively among pre-school children (NNMB, 2012) was noticed. However, new public health issues emerged. The risk factors of overweight increased to 11.8 and 15.5% in men and women, respectively (NNMB, 2012). Prevalence of child malnourishment at 45.9% (National Family Health Survey NFHS-3, 2006), any anemia at 79% among 6-35 month children (NFHS-3, 2007), underweight among women at 35.6% women (NFHS-3, 2007), anemia at 55.3% among women of 15 to 49 years of age (NFHS-3, 2006), diabetes at 8.63% (International Diabetes Federation IDF, 2014), hypertension at 22.2% in men and 21.6% in women (NNMB, 2012) came to be matters of new public health concern.

The latest Indian food composition database funded by the ICMR covers all the key foods sampled from the entire country drawn from statistically valid sampling method. About 200 discrete food constituents including sub-components were standardized for analytical evaluation. In addition to the existing nutrients in NVIF, about 136 new components were additionally evaluated accounting for 212% increase over the number of components in the previous 1989 edition. Incorporation of such wide spectrum of nutritional components conforms to the requirements for dealing

with various nutritional issues present today. Individual data for endemic foods of six geographic regions of the country were generated and compiled.

9. Conclusions

In India, nutrient evaluation of food was pioneered by Sir Robert McCarrison almost a century back resulting in the publication of the first Indian FCT in the year 1937. Indian FCT underwent revisions both in design and data quality in about every 12.5 years until 1989 and has effectively served dieticians, nutritionists and clinicians. Demerging, extension and expansion of food groups brought more clarity and widened the options to formulate effective nutrition solutions. In every edition emphasis was laid on nutritionally relevant component of food according to the nutritional situation of the country. During progression of the FCT it was observed that analytical data gained importance with the availability of improved methods of analysis and resources. Increase in the number of individual food components also reflected better understanding of nutritional roles as well as accessibility to new sensitive and selective analytical methodologies.

As metabolic links between newly defined constituents of the human diet and health conditions are established and as new dietary patterns emerge, FCT need to be structured accordingly. Without good food composition data, nutrition research cannot establish or explain the interrelationship between diet and its influence on health. Food composition databases are never complete due to the constant introduction of new foods into a food supply, newly discovered food components that are associated with health and disease, and continued improvements in methods of analysis. The food supply is now more dynamic than ever with increased availability and access to various foods from different parts of the country due to enhanced transportation which means that the food data providers are aiming at a moving target to provide the most accurate and authentic data. The latest new 'Indian Food Composition Tables, 2017' provides values with widest possible coverage of nutrient and bioactive components of key foods representing all major food groups. The new Indian food composition tables will provide the much needed data in specialized fields and bring about paradigm change in nutritional research in the country.

Identification of key foods, development of national sampling plan and nutrient parameters for generating the Indian food composition tables

1. Introduction

Food composition tables (FCT) provides data of nutritionally relevant components in foods along with their biophysical descriptions (Dwyer, 1994). FCT is vital for the development of the nutritional sciences and represents the primary scientific resource from which all other nutritional and health studies flow. Earlier, attempts were made to globalize FCT, however, it was found necessary to have national or regional food composition tables as variations in nutritional contents exist due to multiple factors such as genetic variability, agro-climatic conditions, edaphic and processing effects (Vaask et al., 2004). Thus, compilation of FCT specific to a country or region reflects the said variations in the nutritional value of common foods.

Accurate food composition data is critical for those involved in nutrition and epidemiological research and in formulating government policies. Today, the use of FCT goes beyond traditional nutrition science into many specialized areas that were not well-anticipated several years ago. (Deharveng, Charrondiere, Slimani, Southgate, & Riboli, 1999; Dwyer, 1994). Food composition data must contain appropriate details of documentation with respect to the data origin, analytical methods, statistical parameters employed and allied information required by investigators and researchers (Dwyer, 1994). Thus, sound food composition databases that are both comprehensive and representative of foods available and consumed in the country have become essential tools for a multitude of public health activities.

The National Institute of Nutrition (NIN), Hyderabad has generated and maintained the Indian food composition tables (IFCT). The first Indian Food Composition Table entitled ‘Nutritive value of Indian Foods and the Planning of Satisfactory Diet’ was published by Akroyd (1937). Several revisions (Aykroyd, Patwardhan, & Ranganathan, 1951; Aykroyd, Gopalan, & Balasubramanian, 1963, 1966) have taken place since then and the book was renamed ‘Nutritive Value of Indian Foods’ (NVIF) in the subsequent years (Gopalan, Ramasastry, & Balasubramanyam, 1971). The last revision of NVIF was carried out in 1989.

During primordial development of food composition tables, considerable sharing of data took place. The extent of usage of borrowed data was even greater in developing countries. Most FCT carry forward a large proportion of old data derived from outmoded analytical techniques into newer revised versions. In any national FCT there are scientifically reliable data, though it is difficult to assess what proportion and to what extent of the data in the FCTs is accurate. With the

passage of time, due to improvement in analytical techniques and change in the food supply, the proportion of data that are considered to be reliable decreases. Further, keeping in mind the changing scope of the range of nutrients and bioactive substances in foods and their importance in health and disease, generating new data or revising FCT is necessary to cater the needs of the users.

In the previous versions of NVIF several limitations and deficiencies existed including limited coverage of foods, nutritional parameters, and other uncertainties regarding sampling, representativeness, use of outdated analytical methods and data origin etc. In order to address those issues the government of India initiated a program to generate new comprehensive compositional data on nutrient and bioactive substances in foods from nationally representative samples. The frame work that was adopted for identification of key foods, countrywide food sampling design and analytical parameters for the development of Indian food composition database are presented herewith.

2. Identification of key foods

Indian cuisine varies widely across the country according to the region, culture and tradition, characterized by the use of different spices, vegetables, grains, fruits and a variety of animal source foods. Analysing all the foods that are consumed in the country would not be feasible due to the prohibitive cost involved and thus it is essential to prioritize foods for compositional analysis. One method to set priorities is the ‘key foods approach’ developed by the United States Department of Agriculture (USDA) (Haytowitz, Pehrsson, Smith, Gebhardt, Matthews, & Anderson, 1996). Key foods are defined as those foods that contribute upto 75% of the nutrients intake by the population. The method combines food consumption data with its nutrient composition, and ranking the foods by applying a scoring system to identify the key foods that contribute significantly to the diet in terms of their nutrients (Haytowitz, Pehrsson, & Holden, 2000).

Large nationwide dietary surveys provide adequate information on the different foods consumed and the contribution of such foods to the overall nutrient intakes by the population in the country. In India, the National Nutrition Monitoring Bureau (NNMB) has been collecting dietary intake data for the states of Andhra Pradesh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu, Uttar Pradesh and West Bengal since 1972. These 10 states cover about 3/4th of the geographical area and 2/3rd of the total population of the country. Therefore, in order to identify and prioritize the key foods for sampling and analysis, nationwide food consumption survey carried

out by NNMB (NNMB, 2006) in rural areas of India was utilized. Dietary intakes data of 30,244 individuals of all age groups collected using 24 hour dietary recall method (Thimmayamma & Rao, 1969) was utilized.

The method adopted to determine key foods for analysis is the nutrient consumption scoring approach. However, in the present study, the use of nutrients of current or potential health importance as carried out by the USDA (Pehrsson, Haytowitz, Holden, Perry, & Beckler, 2000) is not used; rather contribution of each food to one or more nutrients is taken into consideration. The first step in determining the key foods is based on the consumption pattern of different recipes/foods prepared and used at household level. Food wise ingredients are listed and weighted to represent the amounts consumed by the survey respondents. All the foods that are consumed by the population are considered and their contributions for each nutrient is calculated. The amount of each food consumed is multiplied by the nutrient in the food obtained from NVIF to arrive at the nutrient contribution per food for the amount consumed by the population. Due to limitations of NVIF, intakes of only 12 nutrients namely, protein, total fat, iron, calcium, phosphorus, vitamin A, thiamine, riboflavin, niacin, vitamin C and total folic acid including energy, are taken into consideration. The relative contribution of each food to a particular nutrient is tabulated and sorted in descending order. Similar procedure is adopted for all the 12 nutrients. Finally, foods are sorted out according to score and cumulative percentage is calculated. Foods contributing to maximum number of nutrients in terms of intake are arranged in descending order and a total of 227 mutually exclusive foods are identified as the key foods of the Indian population. Given the relative importance of every key food in the Indian diet, similar sample units are adopted for collection of each food in order to obtain representative analytical data for all these foods.

2.1 National food sampling design

The next step is to provide the best estimate of the nutrient profile of the key foods identified. This involves food sampling, a critical step for generating reliable data representing the composition of the food of interest. The sampling procedure to generate the national food composition database for key foods involves selecting self-weighing, nationally representative estimates of the composition of foods (Pehrsson et al., 2000). To this end, a probability proportional to size national sampling plan is developed to sample the district and analyse the key foods (Cochran, 1977; Chaudhury & Vos, 1988). In India, the population size is not uniform across the States/Union Territories (UTs). Therefore, the number of districts in each State/UT is considered as the basis for fixing the sample size (Census of India, 2001). The country is divided into six broad geographic regions i.e. North,

Central, West, South, East and Northeast India (**Table 1**). Similar categorization of states into regions is done in the National Family Health Surveys (NFHS, 2006) carried out at different time-points. The only exception in this case is the State of Uttar Pradesh which is considered under central region.

Table 1. Categorization of the States/UTs into six different regions.

Central	Chhattisgarh; Madhya Pradesh; Uttar Pradesh and Uttarakhand
East	Bihar; Jharkhand; Orissa and West-Bengal
North	Chandigarh; Delhi; Haryana; Himachal Pradesh; Jammu & Kashmir; Punjab and Rajasthan
Northeast	Arunachal Pradesh; Assam; Manipur; Mizoram; Meghalaya; Nagaland; Sikkim and Tripura
South	Andaman & Nicobar Islands; Andhra Pradesh; Karnataka; Kerala; Lakshadweep; Pondicherry; Telangana State and Tamil Nadu
West	Dadra & Nagar Haveli; Diu & Daman; Goa; Gujarat and Maharashtra

The next stage involves categorization of states /UTs according to the frequency distribution of number of districts for determining the number of districts to be sampled within the state of UT (**Table 2**). Only one district is selected from each of the northeast states except Assam and Arunachal Pradesh due to small area and population size. All the States/UTs are categorized into their Natural geographic regions (NGRs) and wherever NGRs are not available, administrative regions of the states/UTs are considered. Once sorted, a probability proportional to the size of districts is drawn using simple random sampling procedure to include one sample (district) from each NGR or Administrative region.

Table 2. Frequency distribution of States/ UTs for fixing the number of districts to be sampled.

No. of Districts	No. of States/UTs	No. of districts to be selected from each State/UT	Total No. of districts to be sampled
1-5	9	1	9
6-10	4	2	8
11-20	9	3	27
21-30	7	4	28
31-40	4	5	20
41-50	1	6	6
51-60	0	7	0
61-70	0	8	0
>70	1	9	9
Total	35		107

Overall, 107 districts out of the total 630 districts representing 17% of the country are selected for the collection of key foods for analysis (**Map 1**). The number of districts sampled in each state is presented in **Table 3**. Due to logistic reasons, the district headquarters of the selected districts constituted the primary sampling units (PSUs) and retail shops in the main markets of towns constituted the secondary sampling units (SSUs).

The sampling design thus arrived at provides geographically well dispersed districts that are statistically representative with respect to region and country. A centrally located well connected city is identified within each region for region wise collection and compositing of samples (**Table 4**). The sample size varied from a minimum of 11 districts in Northeast India to a maximum of 23 in North India to obtain a comprehensive picture of what is being consumed regionally; through compositing at regional level (**Figure 1**), it was possible to reduce the cost of analysis and still produce the most reliable estimate of nutrient content in food. The sampling design also ensures

adequate number of samples, which takes care of the variables affecting their composition in order to obtain representative data (Greenfield et al., 2009; Tarley, Visentainer, Matsushita, & de Souza, 2004). This sampling plan is considered adequate for each food to express the data through distribution of values, calculation of mean/median, ranges and coefficient of variation taking into account the operational, logistic and perishable nature of the food. The mean of the six regions will represent the national value.

2.3 Validation of sampling design

National Bureau of Soil Survey & Land Use Planning (NBSS & LUP) (Velayutham, Mandal, Mandal, & Sehgal, 1999) has mapped twenty agro-ecological zones in the country. When the selected towns were super imposed on the agro-ecological map, it was observed that the spatial distributions of the selected sites were adequately dispersed across all twenty agro-ecological zones in the country indicating adequate representation of the entire country.



Map – 1. Sample collection centres and zones.

Table 3. Number of primary sampling units (districts) in each State/UT.

Sl. No.	State name	Total No. of Districts	No. of Districts Selected
1	Andhra Pradesh	23	4
2	Arunachal Pradesh	16	2
3	Assam	27	3
4	Bihar	38	9
5	Chhattisgarh	18	3
6	Goa	2	1
7	Gujarat	25	4
8	Haryana	21	4
9	Himachal Pradesh	12	3
10	Jammu and Kashmir	15	3
11	Jharkhand	24	4
12	Karnataka	30	4
13	Kerala	14	3
14	Madhya Pradesh	50	8
15	Maharashtra	35	5
16	Manipur	9	1
17	Meghalaya	7	1
18	Mizoram	8	1
19	Nagaland	11	1
20	Orissa	30	4
21	Punjab	20	3
22	Rajasthan	32	7
23	Sikkim	4	1
24	Tamil Nadu	32	5
25	Tripura	4	1
26	Uttarakhand	13	3
27	Uttar Pradesh	71	8
28	West Bengal	18	3
Union Territories			
A	Andaman & Nicobar	3	1
B	Chandigarh	1	1
C	Dadra and Nagar Haveli	1	1
D	Daman and Diu	2	1
E	Lakshadweep	1	1
F	National Capital Territory of Delhi	9	2
G	Puducherry	4	1
Total		630	107

2.4 Sample collection, handling and transportation

Sample collection, handling and transportation are critical to ensure integrity of the samples and subsequent accurate estimation of nutrient values (Trainer et al., 2010). The national food sampling plan has a wide geographical dispersion with 107 sampling sites selected according to probability-proportional to size. A systematic protocol was developed for collection and handling of various types of foods in order to optimize the sample integrity and thereby the stability of nutrients at the point of consumption. The

sampling sites are categorised into six regions therefore, food sampling is carried out region-wise.

Table 4. Regional compositing centres and sample size of each region.

Region	Regional Compositing centre	Sample size
North	Delhi	23
East	Kolkata	20
South	Bangalore	19
West	Mumbai	12
Central	Varanasi	22
North East	Guwahati	11

All plant foods, egg and poultry are continuously sampled in batches from the selected sampling sites in the country (**Figure 1**). Purchase, collection and delivery to the laboratory is staggered to minimise any nutrient loss that may occur prior to analysis. All the samplers are trained in-house and on-site in one district to reduce intra and inter sampler variability and also to gain practical experience in order to ensure consistency in the handling methods such as packaging, storage and transportation. Each food sampler reaches the sampling site with adequate necessary supplies and information on the samples to be collected, method of collection, amount to be sampled, labeling and transportation to the regional compositing centre. Detailed instructions specifically customized for the type of foods to be sampled are given to each food sampler. All samplers are instructed not to sample fresh produce with signs of spoilage or intrinsic damage. The sampling of perishable foods is carried out using coolers and ice packs/dry ice.

Upon reaching the sampling town/city of the particular district, the samplers identify a number of wholesale/big retail shops spread across the city. One wholesale/big retail shop is then selected at random for procuring the food items. If any vegetal food has more than one cultivar available in the market, the sampler is instructed to pick up all the cultivars. In case any specific food item is not available at the primary sampling shop, the samplers are advised to proceed to the next shop to look for the missing items. Sampling perishable food items requires coordination and transportation methods to ensure that foods arrive at the regional compositing centres within a few hours of purchase. Maintaining short duration from sampling point to reaching the compositing centre is critical to preserve food integrity. Therefore, all samplers collect food samples simultaneously from multiple cities in the region and reach the regional compositing centres at an appointed day and time.

Virtually no food material can be analysed in its entirety. Therefore, careful sampling techniques are required to obtain representative samples. All irrelevant extraneous matter is removed from the sample. Edible

portion of the fresh produce are separated out and composite samples of each food are prepared. In case of staple foods like rice and wheat, individual units from every sampling point of the region are collected and analysed individually. Similar varieties of some fruits and vegetables within the species are composited and analysed. Thus, a composite sample is a homogenous mixture of several samples of the same food collected from within the specified regions as per the sampling plan (**Figure 1**). Compositing reduces nutrient variability by increasing the effective sample size. Two aliquots of the composited samples from each of the six regions are transported by air to NIN, Hyderabad. One aliquot is used for analysis while another is stored as reserve sample.

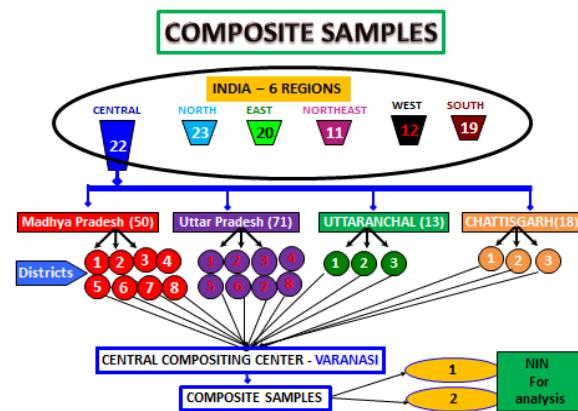


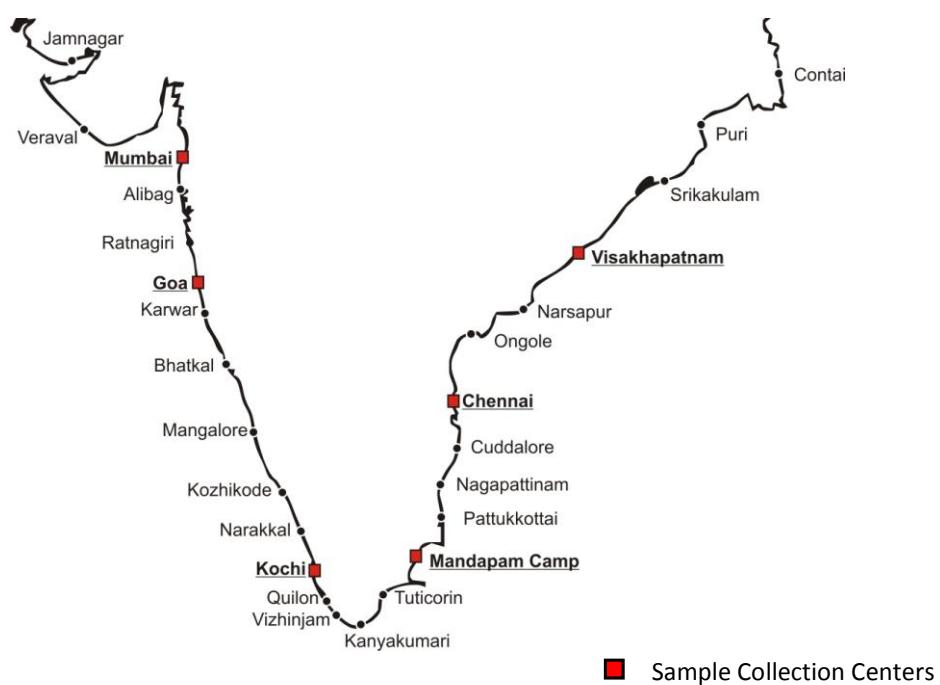
Figure 1. Overview of food sample compositing at regional centre.

2.5 Sampling plan for 'meat & meat products' and 'inland fish & shellfish'

Due to logistic reasons, all meat and meat products including inland fish are collected from the regional compositing centres only. However, six numbers of each meat sample is collected from six different outlets dispersed spatially across the city. Different meat cuts of all animals including organ meat are collected from every shop. The bone and connective tissues are removed, extra fat is trimmed as per the current practice in the regions and ready-to-cook samples are collected from the butcher. Six samples of each body part or organs collected from every shop are composited. Two aliquots of composited samples are collected, frozen under dry ice and transported by air under frozen condition to NIN for analysis. Similarly for inland fish and shellfish, samples are cleaned, scaled/skinned, eviscerated and deboned at the shop itself and only edible portion is collected from six different outlets. After compositing, the samples are sealed/air lock and frozen under dry ice and transported to NIN for analysis.

2.6 Sampling plan of marine fish and shellfish

All marine samples are collected directly from the fish landing ports stratified into east and west coast of the country to capture the variety of marine fish and shellfish consumed in the country. The marine products landing ports identified by the Central Marine Fisheries Research Institute, Cochin is used for sampling the fish and shellfish (**Map 2**).



Map 2. Fish and other sea food sampling sites.

Simple random sampling procedure is used to select three sites from the two coastal belts in India for collection of fish and shellfish. The selected sites are Vishakhapatnam, Chennai and Mandapam from east coast belt as well as Mumbai, Goa and Kochi from west coast belt. All varieties of marine fish and shellfish available at the time of sampling at all the six landing sites are collected. All samples are cleaned, scaled/skinned, eviscerated and deboned at the collection site and only edible portion is composited. Two identical composited samples are collected and transported to NIN by air in frozen condition under dry ice, for analysis.

Upon arrival at the laboratory, the samples are checked for sample integrity. Fresh vegetables are expected to arrive at the laboratory cold and fresh in acceptable conditions, while frozen meat or fish samples are to be without any apparent sign of thawing. Any damaged sample was immediately discarded and logged onto the list for collection in the next sampling cycle. Descriptions of all sample handling, processing, and distribution of composite samples for analysis is maintained. Each sample is assigned an alpha numeric code upon arrival at the laboratory and all subsequent analysis and documentation is linked to that number. All samples are stored at appropriate location or at ambient temperature in the laboratory based on the sample perishability.

2.7 Analytical parameters

Interest in food components is expanding rapidly and the need to access core data on more nutrients and bioactive substances in foods is far out-stripping the amount of data that is available. Special interest database on emerging bioactive components in foods are necessary to meet the increasing demands of health professionals, dieticians, policy makers, epidemiologist studying the relationships between diet and health, as well as consumer interest in what is in the food they eat. In view of the demand for newer components in foods, it was decided to undertake a comprehensive analysis of nutrients and bioactive components in all key foods.

Official methods of analysis of Association of Official Analytical Chemist (AOAC) or if no AOAC method was available, other appropriate and reliable analytical methods that have undergone collaborative evaluations were tested and adopted. Each method was standardized in the laboratory and validated as per the IUPAC/AOAC method validation procedures with respect to precision, accuracy, simplicity, cost-effective, sensitivity and selectivity. About 200 discrete food constituents including sub-components were standardized for each food in the new food composition database representing proximate principles (8), energy (1), water-soluble vitamins (13), fat soluble vitamins (17), carotenoids (11), individual free sugars (5), oligosaccharides (4), minerals (20), organic acids (8), fats and fatty acids (40), amino acid composition (20), sterols (4), polyphenols (39), and bioactive components

(5) (**Table 5**). All the methods adopted here have been fully scrutinized for their robustness in analysing the compound of interest in different food matrices of different foods types.

2.8 Quality assurance and quality control (QAQC) scheme

Analytical Quality Assurance (QA) plan was designed to monitor the performance of the measurement systems to maintain statistical control and provide rapid feedback so that corrective measures could be taken before data quality was compromised. The programme ensures that reported data were sufficiently complete, comparable, representative, unbiased and precise so as to be suitable for their intended use. Certified Reference Material (CRMs) in which one or more properties are well quantified is used for calibration of analytical methods and to ensure data quality. The CRMs are procured from the European Commission Community Bureau of Reference (BCR), Belgium and the National Institute of Standards and Technology (NIST), Gaithersburg, USA.

As far as possible, certified reference materials (CRM) are used in this study, however, due to the prohibitive cost of CRMs, market rice sample is used as in-house quality control material with every batch of analysis. For this, a relatively large amount of the rice was homogenized and kept under controlled conditions. While market rice does not have a certified value, it develops an expected value through repeated analysis. The rationale for the development of control composites is driven by the need for precision and accuracy of data generated for the food samples. Control composites and CRM are included according to the level of validation needed for specific foods and nutrients. Regular participation in external proficiency testing programmes assured quality of the data generated in the laboratory.

3. Conclusions

The current national sampling plan addresses the key foods identified in the Indian food supply but does not include food specific to the sub-population of the country. The Indian national food composition database programme was initiated in India in 2011 with the objective of generating and improving the quantity and quality of food composition data in the country. Adequate infrastructure was developed at the National Institute of Nutrition, Hyderabad to meet the analytical requirements for all the components in foods. The identification of key foods, statistically derived sampling plan and analytical parameters described above provide what may be called an ideal plan. This ideal plan involves sampling all key foods identified as important in the Indian dietary supply from geographically dispersed areas across India covering all agro-ecological zones of the country. The ideal plan also includes the analysis of more than 150 analytical

Table 5. Analytical methods of nutrient and bioactive components.

Analyte	Method	Reference
Moisture	Gravimetric using vacuum /Hot air oven	AOAC 934.01
Protein	Titrimetry by combustion/Kjeldahl/Mixed catalyst	AOAC 2001.11; Jones (1941)
Ash	Gravimetric using Muffle furnace	AOAC 942.05
Total fat	Gravimetry; Ether extraction using Soxhlet apparatus	AOAC 963.15
Total, soluble and insoluble dietary fiber	Enzymatic-gravimetric	AOAC 991.43
Available carbohydrate	Calculation by difference Trienzyme extraction and spectrophotometry	Greenfield & Southgate (2003) AOAC 991.43; AOAC 985.29
Energy	Atwater conversion factors	Merrill & Watt (1973); FAO / INFOODS Guidelines (2012)
Thiamin	Fluorometry	AOAC 942.23; Ramasastri (1975)
Riboflavin	Turbidometric-Microbiological assay	AOAC 940.33; AOAC 960.46
Niacin	Turbidometric-Microbiological assay	AOAC 985.34; 960.46
Pantothenic acid	RP-HPLC with UV detector	David & Harvey (2000)
Vitamin B6	HPLC-fluorometric detection	AOAC 985.32; Ollilainen (2008)
Biotin	U-HPLC and LC-ESI-IT-MS method	Holler et al. (2006)
Vitamin B9	Trienzyme Extraction and U-HPLC - UV or fluorescence detection	Finglas et al. (1999); Vahteristo et al. (1996); AOAC 2011.06; AOAC 2013.13
Vitamin C	RP-HPLC	AOAC 985.33; Keating & Haddad (1982)
Vitamin E	HPLC	AOAC 992.03; AOAC 2012.10
Vitamin A	HPLC	AOAC 974.29; Bieri et al. (1979)
Carotenoids	HPLC	Delia & Mieko (2004)
Vitamin D2 & D3	RP- HPLC-APCI-MS.	AOAC 982.29
Vitamin K1 & K2	RP- HPLC-APCI-MS	AOAC 992.27
Free sugars	HPLC-RID	AOAC 2013.12
Starch	Calculated from the increase in the amount of glucose by using conversion factor	Casterline et al. (1998)
Oligosaccharides (Raffinose, Stachyose, Verbascose and Ajucose)	HPLC	Frias et al. (1994); Johansen et al. (1996); Sanchez-Mata et al. (1998)
Iron, Zinc, Copper, Manganese, Potassium, Magnesium, Sodium, Calcium, Aluminium	Atomic Absorption Spectrophotometry (AAS)	
Lead, Cadmium, Nickel, Cobalt, Chromium, Lithium, Molybdenum	Graphite furnace Atomic Absorption Spectrophotometry	AOAC 968.08; AOAC 999.10; AOAC 999.11
Arsenic, Antimony, Mercury, and Selenium	Atomic Absorption Spectrophotometry (Hydride generation)	
Phosphorus	Colorimetry	AOAC 935.45; AOAC 995.11; Fiske & Subbarow (1925)
Heavy and trace metals Lead, Mercury, Antimony, Cadmium, Molybdenum, Selenium, Arsenic, Cobalt, Nickel, Chromium, Aluminum, Lithium	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	AOAC 2013.06
Citric acid, Malic acid, Fumaric acid, Succinic acid, Lactic acid, Cis-Aconitic acid, Tartaric acid and Quinic acid	HPLC	AOAC 969.30; AOAC 950.35; AOAC 948.14

Table 5. Continue...

Analyte	Method	Reference
Oxalic acid (Total)		
Soluble oxalic acid	Fast- HPLC	Moreau & Savage (2009)
Insoluble oxalic acid		
Fatty acid profile	Gas Chromatography with Flame Ionization Detector	AOAC 996.06; AOAC 996.01; AOAC 2012.13
Amino acid profile	Amino acid analyzer (Ion exchange chromatography)	AOAC 994.12; AOAC 985.28; Landry & Delhaye (1992)
Stigmasterol, β -Sitosterol, Campesterol, Ergosterol, 5-alpha-Cholestenol	Gas Chromatography (GC)	AOAC 922.06; Sorenson & Sullivan (2007)
Polyphenols	HPLC	Sakakibara et al. (2003)
Phyates	Ion Exchange and Spectrophotometry	AOAC 986.11-1988
Total Saponin	Colorimetry	Dini et al. (2009)

parameters in each food representing six regions of the country to enable region specific nutritional and epidemiological data interpretation. For every food sampled under this design, composite nutrient means are determined for each region and the means of six regions form the country wide average, wherein the

standard deviation provides estimates of the content variability. The ambitious plan could be implemented due to the generous funds received from the Indian Council of Medical Research, Department of Health Research, Government of India, New Delhi.

General information

The new Indian Food Composition Tables (IFCT) 2017 is the major source of food composition data in India, generated, developed, managed and maintained by the National institute of Nutrition (ICMR), Hyderabad. All data except for poultry and egg pertains to raw food. None of the food sampled for analysis is fortified and it represents only inherent values. The uniqueness of the IFCT is that all nutrient values presented here have been derived from comprehensive national food sampling followed by analysis and contains only analytical data. The data set were carefully scrutinized in detail for consistency and validity, using FAO/INFOODS ‘Guidelines for Checking Food Composition Data prior to Publication of a User Tables/Database – version 1.0 (2012)’.

1. Food identification

The Food entity is described by its most common english name, scientific name and photographs of the food sampled for analysis in order to provide as much description as possible. Scientific names consisting of the genus and the species are provided for clarity and to avoid confusion. Foods have been arranged alphabetically by english name for easy identification. The names of foods are also listed in regional official Indian languages namely Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Telegu and Urdu to make them acquiescent with the local or regional needs. For animal source foods, the specific body part sampled for analysis is also given. Each food tabulated has a unique four character alphanumeric identification code. The alphabetic food character indicates the food group and the numeric character(s) represent a record position within a category. This allows convenient tracking of the data for each food throughout the food composition database.

2. Food groups

Foods with common characteristics have been placed together and arranged in groups (**Table1**). Each food group is preceded by text covering points of specific relevance to the foods in that group. All foods have been categorized into 20 food groups and the number in parenthesis indicates the total number of foods present in each group. A total of 528 foods have been analyzed for more than 150 parameters and presented under different nutrient component parameter.

3. Information on nutrients

3.1 Proximate components include moisture, protein, total fat, ash and carbohydrates. The Difference between 100 and the sum of proximate components including total dietary fibre represents carbohydrate ‘by difference’.

3.2 Available carbohydrate is the sum of total free sugars and total starch. Free sugars are individual monosaccharides (galactose, glucose and fructose) and disaccharides (sucrose, lactose and maltose). The values for available carbohydrate have generally been obtained from the sum of individually analyzed values for these components and will differ with figures for carbohydrate ‘by difference’. Available carbohydrates are those which is digested and absorbed, and are glucogenic in human corresponding to the term ‘glycaemic carbohydrates’. For conversion between carbohydrate weights and monosaccharide equivalents, the factors shown in **Table 2** was used.

3.3 Total dietary fibre (TDF) is made of complex and heterogeneous polymeric materials such as soluble and insoluble polysaccharides and non-digestible oligosaccharides, as well as a range of non-swellable, more or less hydrophobic compounds such as cutins, suberins and lignins. Currently three different AOAC approved methods for measuring TDF values are available. TDF was analyzed using enzymatic gravimetric method (AOAC 991.43).

3.4 Protein values were calculated from the estimated total nitrogen in the food using the Jones (1941) conversion factors (**Table 3**). Protein values for soybean and mushrooms contain considerable non-protein nitrogen (NPN) in several form including urea, purines & pyrimidine. Therefore, NPN was estimated and subtracted from total nitrogen of mushrooms and soybean before multiplying with the Jones factor.

Table 1. Food groups in the IFCT.

Code	Food groups	No. of food entries
A	Cereals and Millets	24
B	Grain Legumes	25
C	Green Leafy Vegetables	34
D	Other Vegetables	78
E	Fruits	68
F	Roots and Tubers	19
G	Condiments and Spices	33
H	Nuts and Oil Seeds	21
I	Sugars	2
J	Mushrooms	4
K	Miscellaneous Foods	2
L	Milk and Milk Products	4
M	Egg and Egg Products	15
N	Poultry	19
O	Animal Meat	63
P	Marine Fish	92
Q	Marine Shellfish	8
R	Marine Mollusks	7
S	Fresh Water Fish and Shellfish	10
T	Edible Oils and Fats	14

Table 2. Conversion of carbohydrate weights to monosaccharide equivalents.

S. No.	Carbohydrate	Equivalent after Hydrolysis (g/100g)	Conversion to monosaccharide equivalent
1	Monosaccharides e.g. glucose	100	No conversion necessary
2	Disaccharides e.g. sucrose, lactose, maltose	105	x 1.05 or ÷ 0.95
3	Oligosaccharides		
	a. Raffinose (trisaccharide)	107	x 1.07 or ÷ 0.93
	b. Stachyose (tetrasaccharide)	108	x 1.08 or ÷ 0.93
	c. Verbascose (pentasaccharide)	109	x 1.09 or ÷ 0.92
4	Polysaccharides e.g. starch	110	x 1.10 or ÷ 0.90

Table 3. Jones factors for conversion of nitrogen to protein.

Food	Conversion Factor
Barley and its Flour; Rye and its flour; Oats	5.83
Rice and its flour	5.95
Wheat whole	5.83
Wheat bran	6.31
Refined wheat flour (Maida)	5.70
Almonds	5.18
Peanuts	5.46
Soybean	5.71
Cashew nuts, pistachio nut,	
Chest nut	5.30
Egg whole	6.25
Meat and Fish	6.25
Milk and milk products	6.38
Sunflower seeds	5.30
Food where specific factor is not listed	6.25

3.5 Total fat content of foods is determined by gravimetric methods, including acid hydrolysis and extraction methods using a mixed solvent system of chloroform and methanol. Total fat includes the triglyceride and other lipid components such as glycerol, sterols and phospholipids.

3.6 Food energy is expressed in kilojoules (kJ) calculated based on the Atwater system for determining energy values (**Table 4**). The data represent physiologically available energy, which is the energy value remaining after digestive and urinary losses are deducted from gross energy. Food energy in kilojoules (kJ) can be converted using the formula 1 kcal = 4.18 kJ.

3.7 Minerals and trace elements included in the table are Aluminium, Arsenic, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Sodium and Zinc. Except phosphorus, levels of all minerals and trace elements are determined by atomic absorption spectroscopy (AAS) or inductively coupled plasma

mass spectrometry (ICP-MS). Phosphorus was determined by spectrophotometric method.

3.8 Thiamin, Riboflavin and Niacin: Thiamin was determined chemically by the thiochrome procedure and riboflavin by microbiological method. Niacin is determined by microbiological method. The values represent only preformed niacin and do not include the niacin contributed by tryptophan, a niacin precursor. Niacin equivalent applies to the sum of the preformed niacin and the amount that could be derived from tryptophan can be calculated as

$$\text{Niacin equivalents (mg)} = \text{Niacin (mg)} + (\text{Tryptophan, mg} / 60).$$

3.9 Vitamin C data include both ascorbic and L-dehydroascorbic acids, as both forms are biologically active, the sum of which is expressed as total ascorbic acid content.

3.10 Vitamin B6 occurs in foods as pyridoxine, pyridoxal, pyridoxamine and their phosphates which were estimated by HPLC. The sum of all forms represents vitamin B6.

3.11 Pantothenic acid in foods was determined by liquid chromatographic methods.

Table 4. Metabolizable energy conversion factors.

Component	kJ/g	kcal/g
Protein	17	4
Fat	37	9
Available carbohydrate	17	4
Fibre	8	2
Alcohol	29	7

3.12 Food folate values are analyzed using the trienzyme procedure and liquid chromatography. Food folate was expressed as the sum of one or more individual folate vitamers namely 5-methyl tetrahydrofolate, 10-formyl folic acid, 5-formyl tetrahydrofolic acid and tetrahydrofolic acid.

3.13 Vitamin A content is expressed as retinol and provitamin A carotenoid. The groups of plant pigments that are precursors of vitamin A are called carotenoids. Individual carotenoids available in the IFCT includes Lutein, zeaxanthin, lycopene, β -cryptoxanthin, α -carotene, β -carotene, γ -carotene and total carotenoids. The body can utilize these inactive forms once they are converted to the active form, retinol. Vitamin A activity values in Retinol Activity Equivalents (RAE) are calculated from the content of individual carotenoids using appropriate factors. Incidentally, there are many conversion factors for carotenoids and no universal factor exists.

3.14 Vitamin D have been reported in the IFCT which is lacking in many food composition databases. Ergocalciferol or vitamin D₂ content in plant foods measured by LC-MS has been reported for the first time in the world. Cholecalciferol or vitamin D₃ in animal source foods including 25 hydroxy-D₃ measured by LC-MS/MS has also been reported. The availability of new analytical vitamin D data in foods will permit dietary intake assessment. Vitamin D₂ (ergocalciferol) made commercially has been reported to have the similar potency in human. Total vitamin D activity has been taken as the sum of vitamin D₃ (cholecalciferol) and five times 25-hydroxy vitamin D₃ (25-hydroxy cholecalciferol), where data are available.

3.15 Vitamin E in food is presented as tocopherols and tocotrienols and its isomers. The new Dietary Reference Intake (DRI) for vitamin E (Krinsky, 2000) has stated that with the exception of α -tocopherol all other individual isomers of tocopherols and tocotrienols do not contribute to vitamin E activity, nevertheless, they are included in the database.

3.16 Vitamin K data as phylloquinone in plant foods and menaquinone in animal foods estimated using liquid chromatography are presented in the IFCT.

3.17 Fatty acid profile is obtained as the percentage of fatty acid methyl esters determined by gas liquid chromatographic (GLC) analysis. Fatty acids are expressed as the actual quantity of fatty acid in mg per 100g of edible portion of food calculated using Sheppard conversion factor as detailed in Weihrauch et al. (1977). Detailed information on individual fatty acids of each food including values for total saturated, monounsaturated and polyunsaturated fatty acids are reported.

3.18 Amino acid profile of each food is determined by three different analyses. Tryptophan is determined by alkaline hydrolysis, methionine and cystine by performic oxidation and the rest of the amino acids by acid hydrolysis. The amino acid profile of each food is expressed as g/100 g protein.

3.19 Organic acids is naturally present in a wide

variety of foods especially fruits, berries and vegetables. Organic acids *cis*-aconitic acid, citric acid, fumaric acid, malic acid, quinic acid, succinic acid and tartaric acid were determined in single liquid chromatographic run. Soluble, insoluble and total oxalates were determined separately by HPLC method. The organic acids are energy contributing components, although it varies between the different organic acids. According to the Codex Alimentarius Commission's Guidelines for Nutrition Labeling, the energy conversion factor for organic acids is 13 kJ/g. However, organic acids have not been included in the total energy of foods given in the IFCT.

3.20 Polyphenols exhibit highly diverse structures characterized by the presence in their structure of one or several phenolic groups. The recognition of the antioxidant properties of polyphenols, and their probable role in the prevention of various diseases associated with oxidative stress has generated great interest. Polyphenols are found abundantly in our diet and over 500 different molecules are known to be present in foods. The IFCT presents data on 37 individual and total polyphenols present in key Indian foods.

3.21 Cholesterol values are generated primarily by gas liquid chromatographic method in foods of animal origin assuming that cholesterol is present only in animal origin foods. Cholesterol values are expressed as mg/100g food. To convert to mmol cholesterol, divide the values by 386.6.

3.22 Plant sterols data on campesterol, stigmasterol, and β -sitosterol are obtained by gas-chromatographic procedures and summed to calculate total phytosterols.

3.23 Oligosaccharides are indigestible but the beneficial colonic bacteria break them down in the large intestine. In the recent times there is great interest in the health properties of non-digestible oligosaccharides (NDO) as prebiotic compounds. Data on the oligosaccharide content in foods are very meager, making it difficult to assess oligosaccharide consumption of any population in the world. Therefore, content of raffinose, stachyose, verbascose and ajugoes in key Indian foods is presented.

3.24 Saponins consist of a polycyclic aglycones attached to one or more sugar side chains and are found in most vegetables, beans and herbs. Saponins were not destroyed by processing or cooking and have many health benefits.

3.25 Phytate is commonly known as phytic acid, inositol hexaphosphate and IP-6. It has received considerable attention as anti-nutrient because it binds minerals in the digestive tract, making them less available metabolically to our bodies. However, in the recent years, some novel metabolic effects of phytate

or some of its degradation products have been recognized as antioxidant and may help fight some cancers and other diseases.

4. The expression of nutrient values

All foods are expressed per 100g edible portion. Generally the values have been expressed to a constant number of decimal places for each nutrient. The values of the more variable vitamins or minerals and trace elements have been expressed to less than their usual number of places where greater values render the extra places non-significant.

5. Nutrient identification-Tagnames

A unique abbreviation for a food component developed by International Network of Food Data Systems (INFOODS), have been used to aid in data interchange. Tagnames unambiguously indicate how the nutrient data are obtained indicating the methods of analysis used for the data. In case data was derived by calculation, tagname even indicates the formula used for calculation. INFOODS Tagnames, utilized worldwide, facilitate international data interchange and harmonization.

6. Data documentation

The alpha-numeric code provides a unique food identifier within the IFCTs. The foods are sorted alphabetically in the tables. All analytical data scrutinized against quality control data, unit of expression, conversion factors and calculations applied to each nutrient data and accepted after all criteria were met. The metadata was compiled in the archival database which has all the information on the sampling plan, numbers of samples analyzed, analytical methods used and quality assurance procedures in place.

The data presented in this book is the nutrient mean of all six regions representing the country wide value where the standard deviation represents the variation of the particular nutrient. The second type of sample is the individual sample of rice and wheat collected from the 107 sampling sites and analysed individually which increased variability by increasing the effective sample size. Such samples were drawn only for the main staples in the country and not for other foods due to the high cost associated with such analysis. The third type of samples are those of food within the species which were also analysed according to varieties/cultivars for some foods.

The values of six separate regions namely East, Northeast, North, West, South and Central India obtained from compositing adequate number of similar foods collected from within the region was tabulated. The mean value of six regional data was then used to calculate the national value with standard deviation to represent the variation within each nutrient. The mean \pm SD of all nutrients and bioactive components in foods are tabulated to represent the user database or the Indian Food Composition tables (**Figure 1**). All blank spaces in the nutrient tables represents below detectable limit of the particular method used for analysis.

Electronic format allow capturing higher volume of data, easier to update and can reach wider distribution if they are made publicly available. The region specific database is available in the electronic version at the National Institute of Nutrition (NIN). Regional foods may have a different nutrient profile that may differ from national average and hence individuals seeking local specific nutrient data are encouraged to obtain region specific data from NIN.

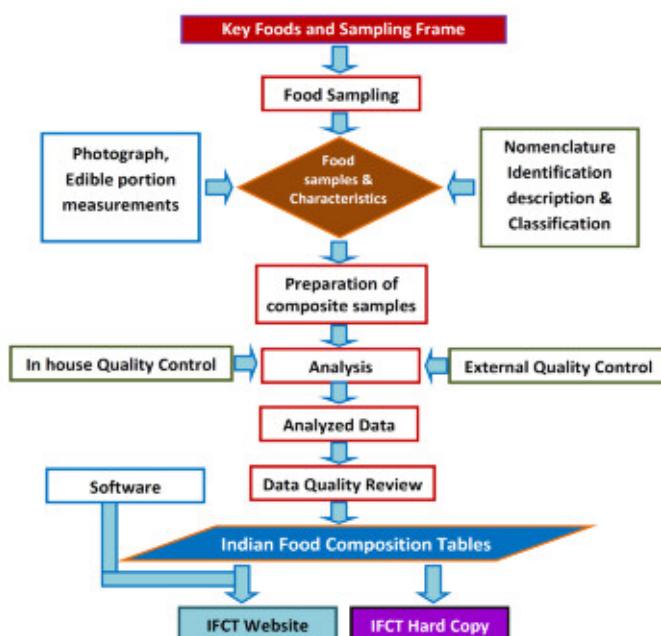


Figure 1. Indian food composition tables-data flow

References

- Ahuja, J. K., Moshfegh, A. J., Holden, J. M., & Harris, E. (2013). USDA food and nutrient databases provide the infrastructure for food and nutrition research, policy, and practice. *The Journal of nutrition*, 143(2), 241S-249S.
- Annual Report of GoI (1905). *Annual report of the sanitary commissioner with the Government of India (GoI)*. pp. 126
- AOAC (1930). *Association of Official Agricultural Chemists.Official and tentative methods of analysis.* (3rded) Washington.
- AOAC (2005). Amino acids in feeds performic acid oxidation with acid hydrolysis sodium metabisulfite method. *AOAC Official Method 994.12*.
- AOAC (2005). Loss on Drying (Moisture) at 95°–100°C for Feeds Dry Matter on Oven Drying at 95°–100°C for Feeds. *AOAC Official Method 934.01*.
- AOAC (2005). Acetic and propionic acids in bread chromatographic method. *AOAC Official Method 950.35*.
- AOAC (2005). Determination of Lead, Cadmium, Copper, Iron, and Zinc in Foods. autoanalyzer/flame atomic absorption spectroscopy, autoanalyzer/ graphite furnace atomic absorption spectroscopy after dry ashing. *AOAC Official Method 999.11*.
- AOAC (2005). Fat in flour. Acid hydrolysis method. *AOAC Official Method 922.06*.
- AOAC (2005). Lead, cadmium, zinc, copper, and iron in foods. autoanalyzer/graphite furnace atomic absorption spectroscopy, autoanalyzer/flame atomic absorption spectroscopy, after microwave digestion. *AOAC Official Method 999.10*.
- AOAC (2005). Minerals in animal feed and pet food, Atomic absorption spectrophotometric method. *AOAC Official Method 968.08*.
- AOAC (2005). Niacin and niacinamide (nicotinic acid and nicotinamide) in ready-to-feed milk-based infant formula microbiological-turbidimetric method. *AOAC Official Method 985.34*.
- AOAC (2005). Organic acids (foreign) in fruit juices chromatography/paper chromatography. *AOAC Official Method 969.30*.
- AOAC (2005). Phosphorus (total) in foods colorimetric method. *AOAC Official Method 995.11*.
- AOAC (2005). Phosphorus in fruits and fruit products colorimetric method. *AOAC Official Method 935.45*.
- AOAC (2005). Phytate in foods anion exchange method. *AOAC Official Method 986.11*.
- AOAC (2005). Protein (Crude) in Animal Feed, Forage (Plant Tissue), Grain, and Oilseeds. *AOAC Official Method 2001.11*.
- AOAC (2005). Quinic, Malic, and citric acids in cranberry juice cocktail and apple juice. *AOAC Official Method 986.13*.
- AOAC (2005). Riboflavin (Vitamin B₂) in vitamin preparations microbiological methods. *AOAC Official Method 940.33*.
- AOAC (2005). Succinic Acid in Eggs. *AOAC Official Method 948.14*.
- AOAC (2005). Sulfur amino acids in food, feed ingredients, and processed foods ion exchange chromatographic method. *AOAC Official Method 985.28*.
- AOAC (2005). Thiamine (Vitamin B1) in human and pet foods. *AOAC Official Method 942.23*.
- AOAC (2005). Total dietary in foods—enzymatic gravimetric method. *AOAC Official Method 985.29*.
- AOAC (2005). Total, soluble, and insoluble dietary fiber in foods, enzymatic-gravimetric method. *AOAC Official Method 991.43*.
- AOAC (2005). Trans-vitamin K1 (Phylloquinone) in ready-to-feed milk-based infant formula. *AOAC Official Method 992.27*.
- AOAC (2005). Vitamin A in mixed feeds, premixes, and human and pet foods. *AOAC Official Method 974.29*.
- AOAC (2005). Vitamin assays, Turbidimetric Method. *AOAC Official Method 960.46*.
- AOAC (2005). Vitamin B6 (Pyridoxine, Pyridoxal, Pyridoxamine) in ready to feed milk based infant formula. 50.1.18. *AOAC Official Method 985.32*.
- AOAC (2005). Vitamin C (Reduced Ascorbic Acid) in ready-to-feed milk-based infant formula. *AOAC Official Method 985.33*.
- AOAC (2005). Vitamin D in mixed feeds, premixes, and pet foods. *AOAC Official Method 982.29*.
- AOAC (2012). Arsenic, Cadmium, mercury, and lead in foods. Pressure Digestion and Inductively Coupled Plasma-Mass Spectrometry. *AOAC Official Method 2013.06*.
- AOAC (2012). Ash of Animal Feed. *AOAC Official Method 942.05*.
- AOAC (2012). Determination of labeled fatty acids content in milk products and infant formula Capillary Gas Chromatography. *AOAC Official Method 2012.13*.
- AOAC (2012). Fat (total, saturated, and unsaturated) in foods hydrolytic extraction gas chromatographic method. *AOAC Official Method 996.06*.
- AOAC (2012). Fat (total, saturated, unsaturated, and monounsaturated) in cereal products acid hydrolysis capillary gas chromatographic method. *AOAC Official Method 996.01*.
- AOAC (2012). Folate in infant formula and adult/pediatric nutritional formula. UHPLC-MS/MS.Chromatography/Liquid Chromatography. *AOAC Official Method 2013.13*.
- AOAC (2012). Simultaneous determination of 13-cis and all-trans vitamin A palmitate (Retinyl Palmitate), vitamin A acetate (Retinyl Acetate), and total vitamin E (DL- α -Tocopherol and DL- α -

- Tocopherol Acetate) in infant formula and adult nutritional. *AOAC Official Method 2012.10*.
- AOAC (2012). Total carbohydrates in wine and wine-like beverages. HPLC with a refractive index detector. *AOAC Official Method 2013.12*.
- AOAC (2012). Total folates in infant formula and adult nutrionals trienzyme extraction and UPLC-MS/MS quantitation. *AOAC Official Method 2011.06*
- AOAC (2012). Vitamin E activity (All-rac-alpha-Tocopherol) in milk-based infant formula, Liquid chromatography. *AOAC Official Method 992.03*.
- AOAC (2012). Fat in Cacao Products. Soxhlet extraction method. Gravimetric. *AOAC Official Method 963.15*.
- Archer, E., Hand, G. A., & Blair, S. N. (2013). Validity of US nutritional surveillance: National health and nutrition examination survey caloric energy intake data, 1971–2010. *PloS One*, 8(10), e76632.
- Atwater, W. O. (1889). Food and Health. *Public Health Papers and Reports*, 15, 208-221
- Aykroyd, W. R. & Rajagopal, K. (1936). The State of Nutrition of School Children in South India. Part I. *Indian Journal of Medical Research*, 24, 419-37.
- Aykroyd, W. R., & Swaminathan, M. (1940). The nicotinic acid contents of cereals and pellagra. *Indian Journal of Medical Research*, 27, 667-678
- Aykroyd, W. R. (1932). The effect of parboiling and milling on the antineuritic vitamin (B 1) and phosphate content of rice. *Journal of Hygiene*, 32(2), 184-192.
- Aykroyd, W. R. (1937). *The nutritive value of Indian foods and the planning of satisfactory diets*. Health Bulletin No. 23. Government of India (GoI) press, Simla. pp.48
- Aykroyd, W. R. (1941). Economic aspects of the problem of nutrition in India. *Indian Journal of Social Work*, 2, 1-14.
- Aykroyd, W. R., Patwardhan, V. N., & Ranganathan, S. (1951). *The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets*. Health Bulletin, No. 23. pp. 79
- Aykroyd, W.R. & Patwardhan, S. (1956). *The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets*. (5th ed). Health bulletin No. 23. New Delhi, India.
- Aykroyd, W.R., Gopalan, C., & Balasubramanian, S. C. (1963). *The nutritive value of Indian Foods and the planning of satisfactory diets*. (6th revised ed). Special report No. 42. Indian Council of Medical Research, New Delhi.
- Aykroyd, W.R., Gopalan, C., & Balasubramanian, S. C. (1966). *The nutritive value of Indian Foods and the planning of satisfactory diets*. (6th revised ed). Special report No. 42. Indian Council of Medical Research, New Delhi.
- Ayoya, M. A., Kodio, J., Iknane, A. A., & Sodjinou, R. (2010). Nutritional value of locally produced foods and potential for developing age-appropriate complementary foods for children under 2 years of age in Mali. *Food and Nutrition Bulletin*, 31(3), 391-399.
- Barry, C. (1900). Notes on beri-beri in Rangoon, *Indian Medical Gazette*, 35, 343–345
- Bieri, J. G., Tolliver, T. J., & Catignani, G. L. (1979). Simultaneous determination of alpha-tocopherol and retinol in plasma or red cells by high pressure liquid chromatography. *The American Journal of Clinical Nutrition*, 32(10), 2143-2149.
- CasterlineJr, J. L., Oles, C. J., & Ku, Y. (1998). Measurement of sugars and starches in foods by a modification of the AOAC total dietary fiber method. *Journal of AOAC International*, 82(3), 759-765.
- Census of India (2001). The Registrar General & Census Commissioner, India, New Delhi, Ministry of Home Affairs, Government of India. (www.censusindia.gov.in).
- Chakrabarty, M. M., & Hilditch, T. P. (1951). The fatty acids and glycerides of an Indian sesame oil. *Journal of the Science of Food and Agriculture*, 2(6), 255-259.
- Chaudhuri, A., & Vos, J. W. E. (1988). *Unified theory and Strategies of survey Sampling*. NHC: New York.
- Chiu, T. H., Huang, H. Y., Chiu, Y. F., Pan, W. H., Kao, H. Y., Chiu, J. P., Lin, M. N., & Lin, C. L. (2014). Taiwanese vegetarians and omnivores: dietary composition, prevalence of diabetes and IFG. *PloS One*, 9(2), e88547.
- Cochran, W. G. (1977). *Sampling Techniques*. Wiley, Newyork, NY.
- Cunningham, J., & Sobolewski, R. (2011). Food composition databases for nutrition labelling: Experience from Australia. *Journal of Food Composition and Analysis*, 24(4), 682-685.
- David, C. W., & Harvey, E. I. (2000). The analysis of pantothenic acid in milk and infant formulas by HPLC. *Food Chemistry*, 69, 201-208.
- Day, C. M. (1944). Nutritional deficiencies and dental caries in northern India. *British Dental Journal*, 76(5), 115-22.
- Deharveng, G., Charrondiere, U. R., Slimani, N., Southgate, D.A., & Riboli, E. (1999). Comparison of nutrients in the food composition tables available in the nine European countries participating in EPIC. European Prospective Investigation into Cancer and Nutrition. *European Journal of Clinical Nutrition*, 53, 60–79.
- Delia, B. R-A., & Mieko, K. (2004). HarvestPlus Handbook for Carotenoid Analysis. Harvest plus technical monograph Series 2. International Food Policy Research Institute. Washington, DC USA. pp-58.
- Devadas, R. P., Usha, T. M., Sankarj, L., Rajalakshmi, R. S., Pateath, G., & Babtiwale, M. (1965). Diet and nutrition survey of a village community in South India. *Indian Journal of Nutrition and Dietetics*, 2, 83-87.

- Dini, I., Tenore, G. C., & Dini, A. (2009). Saponins in *Ipomoea batatas* tubers: Isolation, characterization, quantification and antioxidant properties. *Food Chemistry*, 113(2), 411-419.
- Drewnowski, A., Rehm, C. D., Martin, A., Verger, E. O., Voinnesson, M., & Imbert, P. (2015). Energy and nutrient density of foods in relation to their carbon foot print. *The American Journal of Clinical Nutrition*, 101(1), 184-191.
- Dwyer, J. T. (1994). Future directions in food composition studies. *Journal of Nutrition*, 124, 1783S–1788S
- Ernest, E. W. (1917). *Diabetes, its causation and treatment (with special reference to India)*. Calcutta Thacker, Spink and Co. Agricultural Research Institute Pusa. pp. 170
- FAO/INFOODS (2012). FAO/INFOODS Guidelines for checking food composition data prior to the publication of a user table/database. <http://www.fao.org/docrep/017/ap810e/ap810e.pdf>
- FAO/WHO (1998). *Carbohydrates in Human Nutrition*. Report of a Joint FAO/WHO Expert Consultation. Food and Nutrition Paper No. 66. 14-18 April 1997, Rome, Italy.
- FAO/WHO (1994). *Fats and oils in human nutrition*. Report of a Joint FAO/WHO Expert Consultation. Food and Nutrition Paper No. 91.19-26 October 1993, Rome, Italy.
- FAOSTAT (2013). Food and Agriculture Organization of the United Nations, FAOSTAT database (2013). <http://faostat.fao.org/> Accessed 12.03.16
- Finglas, P. M., Wigertz, K., Vahteristo, L., Witthoft, C., Southon, S., & de Froidmont-Gortz, I. (1999). Standardisation of HPLC techniques for the determination of naturally-occurring folates in food. *Food Chemistry*, 64 (2), 245-255.
- Fiske, C. H., & Subbarow, Y. (1925). The colorimetric determination of phosphorus. *Journal of Biological Chemistry* 66(2), 375-400
- Foy, H., & Kondi, A. (1957). Anaemias of the tropics: Relation to iron intake, absorption and losses during growth, pregnancy and lactation. *Journal of Tropical Medicine and Hygiene*, 60(5), 105-18.
- Frias, J., Hedley, C. L., Price, K. R., Fenwick, G. R., & Vidal-Valverde, C. (1994). Improved method of oligosaccharide analysis for genetic study of legume seeds. *Journal of Liquid Chromatography*, 17, 2469-2484.
- Gopalan, C., & Ramalingaswami, V. (1955). Kwashiorkor in India. *Indian Journal of Medical Research*, 43(4), 751-73.
- Gopalan, C. (1961). *A report of some recent studies on protein malnutrition in India*. Progress in meeting protein needs of infants and preschool children. Proceedings of an International Conference., Washington D.C., NRC Publication 843, pp. 211-223.
- Gopalan, C. (1970). Some recent studies in the Nutrition Research Laboratories, Hyderabad. *The American Journal of Clinical Nutrition*, 23(1), 35-51.
- Gopalan, C., Rama Sastri, B. V., Balasubramanian, S. C., Revised and updated by Narasinga Rao, B. S., Deosthale, Y. G., & Pant, K.C. (1989). *Nutritive Value of Indian Foods*. Revised and updated Edition. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Gopalan, C., Ramasastry B. V. & B. V. Balasubramanyam (1971). *Nutritive values of Indian Foods*, National Institute of Nutrition (ICMR), Hyderabad (India).
- Goswami, H., & Basu, U. P. (1938). 'Available' iron in Indian foodstuffs. *Indian Journal of Medical Research*, 25, 893-899.
- Greenfield, H., & Southgate, D. A. T. (2003). Food composition data. Production, management and use.2nd edition. Rome: *Food and Agricultural Organization of the United Nations*.
- Greenfield, H., Arcot, J., Barnes, J. A., Cunningham, J., Adorno, P., & Stobaus, T., et al. (2009). Nutrient composition of Australian retail pork cuts 2005/2006. *Food Chemistry*, 117, 721-730.
- Harinarayan, C. V., Ramalakshmi, T., Prasad, U. V., Sudhakar, D., Srinivasarao, P. V., Sarma, K. V., & Kumar, E. G. T. (2007). High prevalence of low dietary calcium, high phytate consumption, and vitamin D deficiency in healthy south Indians. *The American Journal of Clinical Nutrition*, 85(4), 1062-1067.
- Haytowitz, D. B., Pehrsson, P. R. & Holden, J. M. (2000). Setting priorities for nutrient analysis in diverse populations. *Journal of Food Composition and Analysis*, 13, 425-433.
- Haytowitz, D. B., Pehrsson, P. R., Smith, J., Gebhardt, S. E., Matthews, R. H., & Anderson, B. A. (1996). Key foods: setting priorities for nutrient analyses. *Journal of Food Composition and Analysis*, 9(4), 331-364.
- Holler, U., Wachter, F., Wehrli, C., & Fizet, C. (2006). Quantification of biotin in feed, food, tablets, and premixes using HPLC-MS/MS. *Journal of Chromatography B*, 831, 8-16.
- IDF (2014). International Diabetes Federation.IDF diabetes atlas. International Diabetes Federation, Executive Office. www.idf.org. Accessed 29.03.16
- Jansen, L., & Roodenburg, A. J. (2016).The use of food composition data in the choices international programme. *Food Chemistry*, 193, 196-202.
- Johansen, H. N., Glitso, V., & Bach-Knudsen, E. K. (1996). Influence of extraction solvent and temperature on the quantitative determination of oligosaccharides from plant materials by high-performance liquid chromatography. *Journal of Agricultural and Food Chemistry*, 44, 1470-1474.
- Jones, D. B. (1941). Factors for converting percentages of nitrogen in foods and feeds into percentages of proteins. Circ No.183 (slight revision). Washington, D.C.: U.S. Department of Agriculture.

- Keating, R. W., & Haddad, P. R. (1982). Simultaneous determination of ascorbic acid and dehydroascorbic acid by reversed-phase ion-pair high-performance liquid chromatography with pre-column derivatisation. *Journal of Chromatography A*, 245(2), 249-255.
- Krinsky, N. I., Beecher, G. R., Burk, R. F., Chan, A. C., Erdman, J. W., Jr., Jacob, R. A., et al. (2000). Dietary reference intakes for vitamin C, vitamin E, selenium, and carotenoids. Washington DC: National Academy Press.
- Landry, J., & Delhaye, S. (1992). Simplified procedure for the determination of tryptophan of foods and feed stuffs from barytic hydrolysis. *Journal of Agricultural and Food Chemistry*, 40, 776-779.
- Lewis, T. R. (1880). *Dieteries of laboring prisoners in Indian jails*. Annual report of sanitary commissioner of government of India (GoI), for 1880, pp. 159
- MacIntosh, D. L., Williams, P. L., Hunter, D. J., Sampson, L. A., Morris, S. C., Willett, W. C., & Rimm, E. B. (1997). Evaluation of a food frequency questionnaire-food composition approach for estimating dietary intake of inorganic arsenic and methylmercury. *Cancer Epidemiology Biomarkers & Prevention*, 6(12), 1043-1050.
- Malhotra, S. L. (1970). Dietary factors causing hypertension in India. *The American Journal of Clinical Nutrition*, 23(10), 1353-1363.
- Master, F., & Magar, N. G. (1954). Studies in the nutritive value of Bombay fish. 2. Amino acid composition. *Indian Journal of Medical Research*, 42, 509-513.
- McCance, R. A., & Widdowson, E. M. (1960). The Composition of Foods, Medical Research Council Special Report Series No. 297. London
- McCarrison, R. (1925). The Relationship of Diet to the Physical Efficiency of Indian Races. *Practitioner*, 114, No. 1 (679.), 90-100.
- McCarrison (1929). 'Food' Macmillan and Co., Madras.
- McCarrison, R., & Norris, R. V. (1924). The Relationship of Rice to Beri-Beri in India. *Indian Medical Research Memoirs*, (Memoir 2), 1-87.
- McCarrison, R. (1932). Problems of Nutrition in India. *Nutrition Abstracts and Reviews*, 2, 1-8.
- McCarrison, R. (1936). Nutrition and national health. *British Medical Journal*, 1, No. 3921, 427-430
- McCay D. (1912). *Protein elements in nutrition*. XVI. pp. 214
- McCay, D. (1910). *Investigations on Bengal jail dietaries with some observations on the influence of dietary on the physical development and well being of the people of Bengal. Scientific memoirs by officers of the medical and sanitary departments of the government of India (GoI)*, New Series, No. 37
- McCay, D. (1911). *Investigations into the jail dietaries of the united provinces with some observations on the physical development and well being of the people of United Provinces. Scientific memoirs by officers of medical and sanitary department of government of India (GoI)*, New Series, No. 48. pp. 200
- McNamara, R. J. (1906). *Notes on Indian jail dietaries with special reference to the Punjab*. (Quoted by McCay, 1910)
- Merrill, A. L., & Watt, B. K. (1973). Energy value of foods, basis and deviation. Human Nutrition Research Branch. Agriculture Research Service, United States Department of Agriculture. Agriculture Handbook No.74.
- Moreau, A. G., & Savage, G. P. (2009). Oxalate content of purslane leaves and the effect of combining them with yoghurt or coconut products. *Journal of Food Composition and Analysis*, 22(4), 303-306.
- Narasinga Rao B. S. (2005a). Progress and development of nutrition research in India. Historical perspective Pre-independence period 1900-1950. In B. S. Narasinga Rao (Ed), *Development of nutritional science in India* (pp.40-43). Allied Publishers (P) Limited, India.
- Narasinga Rao B. S. (2005b). Nutrient and non-nutrient composition of Indian foods. In B. S. Narasinga Rao (Ed), *Development of nutritional science in India* (pp. 274-298). Allied Publishers (P) Limited, India.
- National Family Health Survey (NFHS-3) 2005-06. International Institute for Population Sciences, Mumbai.
- National Nutrition Monitoring Bureau (NNMB) (2006). *Diet and Nutritional status of rural population*, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- NFHS-3 (2007). *National Family Health Survey (2005-06)*. International Institute of Population Sciences IIPS: India. Vol. I. Mumbai.
- Nicholls, L. (1945). *Tropical Nutrition and Dietetics*. (2nd ed). Baillibre, Tindall and Cox, London. pp.370
- NNMB (1991). *Report of Repeat Surveys 1988-90*. National Nutrition Monitoring Bureau. National Institute of Nutrition, Hyderabad. Indian Council of Medical Research
- NNMB (2012). *Diet and nutritional status of rural population, prevalence of hypertension, and diabetes among adults and infants and young child feeding practices. Report of third repeat survey (2011-2012)*. National Nutrition Monitoring Bureau. National Institute of Nutrition, Hyderabad. Indian Council of Medical Research, New Delhi.
- Ollilainen, V. M. (2008). HPLC analysis of vitamin B6 in foods. *Agricultural and Food Science*, 8(6), 515-619.
- Passmore, R. (1948). *Nutritional diseases in India*. U.N. Dhur and Sons Ltd., Calcutta
- Patnaik, M. (1934). The Iodine content of Indian foodstuffs. *Indian Journal of Medical Research*, 22, 249-262.

- Patwardhan, V. N. (1956). Protein element in Indian nutrition. *Indian Journal of Medical Sciences*, 10(1), 1-18.
- Patwardhan, V. N. (1961). *Nutrition in India*. (2nd ed) Indian Journal of Medical Sciences. Bombay.
- Patwardhan, V. N. (1962). Pulses and beans in human nutrition. *American Journal of Clinical Nutrition*, 11, 12-30.
- Pehrsson, P. R., Haytowitz, D. B., Holden, J. M., Perry, C. R., & Beckler, D. G. (2000). USDA's National Food and Nutrient Analysis Program: Food sampling. *Journal of Food Composition and Analysis*, 12, 379-389.
- Raman, T. K. (1940). Pellagra in India. A study of twenty-five cases in Vizagapatam. *Indian Journal of Medical Research*, 27, 743-756.
- Ramasastri, B. V. (1975). A simple method for estimation of thiamine in foods using base-exchange on sand instead of Decalso. International journal for vitamin and nutrition research. Internationale Zeitschrift fur Vitamin-und Ernahrungsorschung. *Journal International de Vitaminologie et de Nutrition*, 46(4), 403-411.
- Ranganathan, S., Sundararajan, A. R., & Swaminathan, M. (1937). Survey of the nutritive value of Indian foodstuffs. Part I. The chemical composition of 200 common foods. *Indian Journal of Medical Research*, 24, 689-706
- Rao, K. S., Swaminathan, M. C., Swarup, S., & Patwardhan, V. N. (1959). Protein malnutrition in south India. *Bulletin of the World Health Organization*, 20(4), 603.
- Rao, K. V. (1967). Pattern and trends in food consumption in India. *Indian Journal of Nutrition and Dietetics*, 4, 79-87.
- Reddy, V., M. Shekar, Rao, P., & Gillespie, S. (1992). "Nutrition in India." ACC/SCN case study. National Institute of Nutrition, Hyderabad. Indian Council of Medical Research.
- Rice (1959). *Health Bulletin No. 28*. Delhi. Government of India (GoI) Press
- Sahasrabuddhe, D. L. (1925). *The chemical composition of the food grains, vegetables and fruits of western India*. Department of Agriculture, Bombay, Bulletin No. 124 of 1925
- Sakakibara, H., Honda, Y., Nakagawa, S., Ashida, H., & Kanazawa, K. (2003). Simultaneous determination of all polyphenols in vegetables, fruits, and teas. *Journal of Agricultural and Food Chemistry*, 51(3), 571-581.
- Sanchez-Mata, M. C., Penuela-Teruel, M. J., Camara-Hurtado, M., Diez-Marques, C., & Torija-Isasa, M. E. (1998). Determination of mono-, di-, and oligosaccharides in legumes by high-performance liquid chromatography using an amino-bonded silica column. *Journal of Agricultural and Food Chemistry*, 46, 3648-3652.
- Scott, A. C. (1916). A contribution to the study of osteomalacia in India. *Indian Journal of Medical Research*, 4(1), 140-168.
- Seljak, B. K., Stibilj, V., Pograjc, L., Mis, N. F., & Benedik, E. (2013). Food composition databases for effective quality nutritional care. *Food Chemistry*, 140(3), 553-561.
- Sheppard, A. J. (1992). Lipid Manual: Methodology for appropriate fatty acid - cholesterol analysis. Dubuque, I.A.: U.S. Food and Drug Administration, William C. Brown Publishers.
- Sorenson, W. R., & Sullivan, D. (2007). Determination of campesterol, stigmasterol, and beta-sitosterol in saw palmetto raw materials and dietary supplements by gas chromatography: collaborative study. *Journal of AOAC International*, 90(3), 670-678.
- Stewart, A. D., Boyd, T. C., & De, D. C. (1931). Analyses and calorific values of some Indian food-stuffs. *Indian Journal of Medical Research*, 19, 675-89.
- Su, C., Jia, X., Wang, Z., Wang, H., & Zhang, B. (2015). Trends in dietary cholesterol intake among Chinese adults: a longitudinal study from the China health and nutrition survey, 1991–2011. *BMJ Open*, 5(6), e007532.
- Subrahmanyam, V., Sreenivasan, A., & Swaminathan, M. (1962). *Protein consumption in India and other countries*. Proceedings. National Institute of Sciences of India. No. 20, pp. 134
- Subrahmanyam, V., Swaminathan, M., Rao, M. N. & Joseph, K. (1961). Protein and amino acid requirements of infants, children and adults. *Indian Journal of Pediatrics*, 28(8), 313-334.
- Swaminathan, M. (1937). The relative value of the proteins of certain foodstuffs in nutrition. Part II The comparative biological values of the proteins of certain cereals, pulses and skimmed milk powder, measured by the growth of young rats. *Indian Journal of Medical Research*, 25(2), 57-79
- Tarley, C. R. T., Visentainer, J. V., Matsushita, M., & De Souza, N. E. (2004). Proximate composition, cholesterol and fatty acids profile of canned sardines (*Sardinella brasiliensis*) in soybean oil and tomato sauce. *Food Chemistry*, 88, 1-6.
- Timmayamma, B. V. S., & Rao, H. D. A (1969). Comparative study of the oral questionnaire method with actual observation of the dietary intake of pre-school children. *Journal of Nutrition & Dietetics*, 6, 177.
- Trainer, D., Pehrsson, P. R., Haytowitz, D. B., Holden, J. M., Phillips, K. M., Rasor, A. S., & Conley, N. A. (2010). Development of sample handling procedures for foods under USDA's National Food and Nutrient Analysis Program. *Journal of Food Composition and Analysis*, 23, 843-851.
- Vaask, S., Pomerleau, J., Pudule, I., Grinberga, D., Abaravicius, A., Robertson, A., & McKee, M. (2004). Comparison of the Micro-Nutrica Nutritional Analysis program and the Russian Food Composition Database using data from the Baltic Nutrition Surveys. *European Journal of Clinical Nutrition*, 58, 573-579.

- Vahteristo, L., Finglas, P. M., Witthöft, C., Wigertz, K., Seale, R., & de Froidmont-Görtz, I. (1996). Third EU MAT intercomparison study on food folate analysis using HPLC procedures. *Food Chemistry*, 57(1), 109-111.
- Velayutham, M., Mandal, D. K., Mandal, C., & Sehgal, J. (1999). Agro-ecological subregions of India for planning and development. *NBSS Publication*, (35).
- Venkatachalam, P. S. (1968). Iron metabolism and iron deficiency in India. *The American Journal of Clinical Nutrition*, 21(10), 1156-1161.
- Weihrauch, J. L., Posati, L. P., Anderson, B. A., & Exler, J. (1977). Lipid conversion factors for calculating fatty acid contents of foods. *Journal of the American Oil Chemists' Society*, 54(1), 36-40.
- Wilson, D. (1937). Nutrition and diet in Northern India: A comparative dietary survey. *The Lancet*, 230, 1445-1448.
- Wilson, H., Ahmad, B., Ray, G., & Guha, R. (1937). The vitamin-B1 content of some common Indian foodstuffs. *Indian Journal of Medical Research*, 24, 813-16.
- Yusufji, D., Mathan, V. I., & Baker, S. J. (1973). Iron, folate, and vitamin B12 nutrition in pregnancy: a study of 1000 women from southern India. *Bulletin of the World Health Organization*, 48(1), 15.

Abbreviations

A.	Assamese	Kh.	Khasi
AAS	Atomic Absorption Spectroscopy	kJ	kilo Joule
AOAC	Association of Official Analytical Chemists	Kon.	Konkani
APCI	Atmospheric Pressure Chemical Ionization	M.	Manipuri
B.	Bengali	Mal.	Malayalam
BV	Biological Value	Mar.	Marathi
CFTRI	Central Food Technological Research Institute	N	Normality
CHO	Carbohydrate	N.	Nepali
Common	Common name	NAC	Nutritional Advisory Committee
CRM	Certified Reference Material	NDO	Non-digestible oligosaccharides
DRI	Dietary reference intake	NFHS	National Family Health Survey
EAA	Essential Amino Acids	NIN	National Institute of Nutrition
ESI	Electro Spray Ionization	NNMB	National Nutrition Monitoring Bureau
FAO	Food and Agriculture Organization of the United Nations	NRFA	Nutrition Research Funds Association
FAOSTAT	Food and Agriculture Organization Statistics	NRL	Nutrition Research Laboratories
FCT	Food Composition Tables	NVIF	Nutritive Value of Indian Foods
G.	Gujarati	O.	Oriya
GC	Gas Chromatography	P.	Punjabi
GLVs	Green Leafy Vegetables	PEM	Protein Energy Malnutrition
H.	Hindi	PER	Protein Efficiency Ratio
HPLC	High Performance Liquid Chromatography	PSUs	Primary Sampling Units
ICMR	Indian Council of Medical Research	PUFA	Polyunsaturated Fatty Acids
ICP-MS	Inductively Coupled Plasma Mass Spectrometry	QAQC	Quality assurance and quality control
IDA	Iron Deficiency Anemia	RAE	Retinol equivalent activity
IDF	Insoluble Dietary Fibre	RID	Refractive index detector
IDF	International Diabetes Federation	RP	Reversed phase
IFCT	Indian Food Composition Tables	S.	Sanskrit
INFOODS	International Network of Food Data Systems	Sci.	Scientific name
IP-6	Inositol hexaphosphate	SD	Standard deviation
IRFA	Indian Research Fund Association	SDF	Soluble Dietary Fibre
IU	International Units	SSUs	Secondary sampling units
Kan.	Kannada	Tam.	Tamil
Kash.	Kashmiri	TDF	Total Dietary Fibre
		Tel.	Telugu
		U.	Urdu
		UT	Union territory
		UV	Ultra violet
		VAD	Vitamin A deficiency
		WHO	World Health Organization

Table 1

**PROXIMATE PRINCIPLES
AND
DIETARY FIBRE**



Table 1. PROXIMATE PRINCIPLES AND DIETARY FIBRE

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g				
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
A CEREALS AND MILLETS											
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	9.89	14.59	2.78	5.74	7.02	5.76	1.26	59.98	1490
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	9.20±0.40	13.27±0.34	3.05±0.30	5.56±0.33	7.47±0.09	5.80±0.17	1.67±0.21	61.46±0.60	1489±10
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	8.97±0.60	10.96±0.26	1.37±0.17	5.43±0.64	11.49±0.62	9.14±0.58	2.34±0.42	61.78±0.85	1456±18
A004	Barley (<i>Hordeum vulgare</i>)	6	9.77±0.38	10.94±0.51	1.06±0.22	1.30±0.20	15.64±0.64	9.98±0.62	5.66±0.68	61.29±0.77	1321±19
A005	Jowar (<i>Sorghum vulgare</i>)	6	9.01±0.77	9.97±0.43	1.39±0.34	1.73±0.31	10.22±0.49	8.49±0.40	1.73±0.40	67.68±1.03	1398±13
A006	Maize, dry (<i>Zea mays</i>)	6	9.26±0.55	8.80±0.49	1.17±0.16	3.77±0.48	12.24±0.93	11.29±0.85	0.94±0.18	64.77±1.58	1398±25
A007	Maize, tender, local (<i>Zea mays</i>)	6	68.29±0.52	3.57±0.42	0.38±0.04	1.40±0.30	3.67±0.26	3.23±0.23	0.43±0.07	22.69±0.94	502±7
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	74.40±0.71	4.16±0.41	0.36±0.06	1.35±0.07	3.30±0.51	2.71±0.53	0.59±0.11	16.42±0.89	405±14
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	10.43	13.11	2.65	5.50	14.66	10.21	4.46	53.65	1374
A010	Ragi (<i>Eleusine coracana</i>)	5	10.89±0.61	7.16±0.63	2.04±0.34	1.92±0.14	11.18±1.14	9.51±0.65	1.67±0.55	66.82±0.73	1342±10
A011	Rice flakes (<i>Oryza sativa</i>)	6	10.36±0.53	7.44±0.35	0.85±0.13	1.14±0.11	3.46±0.32	2.65±0.34	0.81±0.12	76.75±0.96	1480±16
A012	Rice puffed (<i>Oryza sativa</i>)	6	9.40±0.22	7.47±0.15	1.28±0.10	1.62±0.13	2.56±0.33	1.76±0.13	0.80±0.38	77.68±0.54	1514±4
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	9.33±0.39	9.16±0.75	1.04±0.18	1.24±0.08	4.43±0.54	3.60±0.55	0.82±0.15	74.80±0.85	1480±10
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	10.09±0.43	7.81±0.63	0.65±0.08	0.55±0.08	3.74±0.36	2.98±0.35	0.76±0.09	77.16±0.76	1471±8
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	9.93±0.75	7.94±0.58	0.56±0.08	0.52±0.05	2.81±0.42	1.99±0.39	0.82±0.22	78.24±1.07	1491±15
A016	Samai (<i>Panicum miliare</i>)	6	11.36±0.19	10.13±0.45	1.34±0.16	3.89±0.35	7.72±0.92	5.45±0.48	2.27±0.52	65.55±1.29	1449±19
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	14.23±0.45	8.92±1.09	1.72±0.27	2.55±0.13	6.39±0.60	4.29±0.82	2.11±0.34	66.19±1.19	1388±10
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	11.34±0.93	10.36±0.29	0.51±0.07	0.76±0.07	2.76±0.29	2.14±0.30	0.62±0.14	74.27±0.92	1472±16

Table 1. Proximate Principles and Dietary Fibre

Food code	Food Name	No. of Regions	← g →	Dietary Fibre			Carbohydrate	Energy			
				Moisture	Protein	Ash	Total Fat	Total	Insoluble	Soluble	
				WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	11.10±0.35	10.57±0.37	1.28±0.19	1.53±0.12	11.36±0.29	9.73±0.47	1.63±0.64	64.17±0.32	1340±7
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	10.58±1.11	10.59±0.60	1.42±0.19	1.47±0.05	11.23±0.77	9.63±0.19	1.60±0.75	64.72±1.74	1347±23
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	8.61±0.32	10.84±0.75	1.23±0.06	1.45±0.02	8.81±0.45	6.56±0.20	2.25±0.38	69.06±0.74	1430±6
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	8.94±0.68	11.38±0.37	0.80±0.17	0.74±0.10	9.72±0.74	8.16±0.58	1.55±0.18	68.43±0.99	1396±18
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	9.59±0.37	9.70±0.52	0.60±0.04	0.45±0.03	9.28±0.69	7.53±0.51	1.75±0.24	70.39±0.61	1392±8
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	7.61±0.47	10.37±0.70	0.56±0.04	0.49±0.05	9.55±0.40	7.79±0.29	1.76±0.18	71.42±0.71	1423±13

B GRAIN LEGUMES

+	B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	9.18±0.58	21.55±1.45	2.10±0.10	5.31±0.06	15.15±0.17	12.67±0.22	2.48±0.15	46.72±1.29	1377±10
	B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	8.56±0.37	18.77±0.42	2.78±0.13	5.11±0.11	25.22±0.39	22.70±0.60	2.52±0.87	39.56±0.16	1201±9
	B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	9.16±0.35	23.06±0.59	3.17±0.02	1.69±0.12	11.93±0.26	7.58±0.13	4.35±0.15	51.00±0.80	1356±9
	B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	8.70±0.33	21.97±0.63	3.35±0.03	1.58±0.06	20.41±0.06	15.47±0.05	4.94±0.07	43.99±0.76	1219±5
	B005	Cowpea, brown (<i>Vigna catjang</i>)	6	9.42±0.39	20.36±0.59	2.90±0.11	1.15±0.06	11.54±0.13	8.75±0.09	2.80±0.05	54.62±0.49	1340±7
	B006	Cowpea, white (<i>Vigna catjang</i>)	1	9.32	21.25	2.83	1.14	11.70	8.91	2.79	53.77	1340
	B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	9.57	19.93	2.73	0.92	23.40	17.99	5.41	43.46	1155
	B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	8.74	19.90	2.74	0.98	22.40	17.32	5.08	45.24	1184
	B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	8.61±0.36	19.84±1.04	3.09±0.15	0.94±0.02	22.99±0.83	17.45±2.27	5.54±2.28	44.53±1.42	1173±24
	B010	Green gram, dal (<i>Vigna radiata</i>)	6	9.77±0.67	23.88±0.61	3.04±0.03	1.35±0.20	9.37±0.38	7.75±0.39	1.62±0.19	52.59±0.45	1363±10
	B011	Green gram, whole (<i>Vigna radiata</i>)	6	9.95±0.42	22.53±0.43	3.22±0.04	1.14±0.17	17.04±0.38	14.59±0.42	2.44±0.15	46.13±0.64	1229±10
	B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	9.28±0.57	21.73±0.29	3.24±0.11	0.62±0.04	7.88±0.02	6.22±0.03	1.66±0.03	57.24±0.50	1379±9
	B013	Lentil dal (<i>Lens culinaris</i>)	6	9.71±0.48	24.35±1.10	2.23±0.13	0.75±0.04	10.43±0.39	8.60±0.42	1.83±0.23	52.53±1.05	1349±11

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g				
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	9.20±0.77	22.49±0.58	2.39±0.35	0.64±0.02	16.82±1.30	14.16±1.33	2.66±0.42	48.47±1.12	1251±23
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	9.75	22.87	2.20	0.61	16.66	14.15	2.51	47.91	1246
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	8.14±0.49	19.75±0.38	3.14±0.18	1.76±0.09	15.12±0.49	14.50±0.44	0.62±0.10	52.09±0.96	1291±16
B017	Peas, dry (<i>Pisum sativum</i>)	6	9.33±0.61	20.43±0.79	2.41±0.09	1.89±0.08	17.01±0.63	14.55±0.73	2.47±0.17	48.93±0.45	1269±13
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	8.69	19.01	3.35	1.62	17.74	15.16	2.58	49.59	1247
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	9.68±0.79	19.50±0.84	3.36±0.19	1.68±0.07	16.95±0.27	14.33±0.19	2.62±0.16	48.83±0.59	1245±12
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	9.87±0.30	19.91±1.44	3.28±0.21	1.77±0.04	16.57±0.63	13.86±0.43	2.70±0.20	48.61±0.65	1252±14
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	9.20±0.61	21.70±0.50	3.26±0.03	1.56±0.03	9.06±0.30	6.67±0.23	2.39±0.15	55.23±0.83	1384±10
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	9.30±0.45	20.47±0.72	3.53±0.03	1.38±0.08	22.84±0.43	19.69±0.30	3.15±0.34	42.48±0.77	1146±10
B023	Ricebean (<i>Vigna umbellata</i>)	1	11.12	19.97	3.54	0.74	13.37	10.04	3.33	51.26	1265
B024	Soybean, brown (<i>Glycine max</i>)	6	5.51±0.13	35.58±0.66	4.74±0.31	19.82±0.26	21.55±0.66	16.56±0.30	5.00±0.52	12.79±0.97	1596±11
B025	Soybean, white (<i>Glycine max</i>)	1	5.47	37.80	4.52	19.42	22.63	17.04	5.59	10.16	1579

C GREEN LEAFY VEGETABLES											
C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	74.43	8.01	2.42	1.35	8.60	6.00	2.60	5.21	295
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	86.85±1.21	3.29±0.57	2.52±0.32	0.65±0.07	4.41±0.10	3.21±0.08	1.20±0.09	2.28±0.62	128±17
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	85.56	3.93	2.61	0.63	4.91	3.72	1.19	2.37	140
C004	Amaranth leaves, red and green mix (<i>Amaranthus gangeticus</i>)	4	86.37±0.38	3.09±0.14	2.55±0.20	0.53±0.03	4.60±0.36	3.23±0.18	1.37±0.23	2.87±0.35	132±6
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	86.46±0.48	3.54±0.31	2.94±0.21	0.36±0.02	5.10±0.32	3.89±0.26	1.20±0.07	1.61±0.40	110±5
C006	Amaranth spined, leaves, red and green mix (<i>Amaranthus spinosus</i>)	2	86.64	2.80	3.20	0.34	5.57	3.82	1.75	1.45	99
C007	Basella leaves (<i>Basella alba</i>)	2	92.68	1.57	1.09	0.45	2.21	1.64	0.57	2.01	82

Table 1. Proximate Principles and Dietary Fibre

6

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
			← g →								KJ
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
C008	Bathua leaves (<i>Chenopodium album</i>)	2	88.77	2.50	1.71	0.44	4.01	2.34	1.68	2.56	116
C009	Beet greens (<i>Beta vulgaris</i>)	6	86.68±1.35	2.38±0.35	2.69±0.12	0.75±0.02	3.64±0.13	2.20±0.10	1.43±0.19	3.86±1.63	145±23
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	84.93±0.85	2.51±0.29	2.33±0.18	0.75±0.02	2.12±0.20	1.32±0.16	0.80±0.05	7.37±0.66	202±14
C011	Betel leaves, small (<i>Piper betle</i>)	4	85.92±0.16	2.62±0.28	2.59±0.18	0.75±0.04	1.97±0.13	1.17±0.12	0.80±0.09	6.16±0.33	183±2
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	84.39	4.26	1.47	0.50	4.29	3.35	0.94	5.09	185
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	93.19	1.58	0.73	0.13	2.01	1.55	0.45	2.36	75
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	89.53	3.63	0.81	0.27	2.98	2.04	0.94	2.79	126
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	91.85±0.97	1.36±0.07	0.67±0.06	0.12±0.01	2.76±0.20	1.91±0.18	0.85±0.10	3.25±0.91	90±16
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	91.94	1.39	0.71	0.21	2.21	1.58	0.62	3.54	97
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	87.64±1.33	3.90±0.87	1.22±0.12	0.42±0.02	3.43±0.26	2.37±0.20	1.06±0.12	3.39±0.70	148±22
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	83.61±0.59	3.42±0.29	2.30±0.11	1.38±0.09	5.60±0.18	4.32±0.16	1.29±0.12	3.69±0.49	182±9
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	75.65±1.49	6.41±0.35	2.46±0.18	1.64±0.12	8.21±0.19	6.12±0.08	2.10±0.11	5.62±1.44	282±27
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	86.73±0.66	3.68±0.36	1.69±0.19	0.83±0.02	4.90±0.21	3.20±0.14	1.70±0.09	2.17±0.32	144±10
C021	Garden cress (<i>Lepidium sativum</i>)	2	84.02	5.62	2.48	0.80	2.60	1.77	0.83	4.48	208
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	87.42±0.41	1.86±0.16	0.98±0.08	1.09±0.03	4.59±0.39	3.24±0.16	1.35±0.30	4.06±0.18	152±2
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	87.98	1.85	0.97	1.07	3.89	2.66	1.23	4.24	153
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	86.20	3.12	1.42	0.35	2.76	1.81	0.95	6.16	178
C025	Lettuce (<i>Lactuca sativa</i>)	3	92.27±0.99	1.54±0.48	1.11±0.10	0.27±0.03	1.79±0.24	1.32±0.04	0.47±0.28	3.01±0.56	91±16
C026	Mustard leaves (<i>Brassica juncea</i>)	3	88.17±0.56	3.52±0.21	1.47±0.11	0.51±0.05	3.92±0.06	3.04±0.03	0.87±0.03	2.41±0.46	127±9
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>chinensis</i>)	1	93.56	1.41	1.10	0.25	1.91	1.44	0.47	1.78	67

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g				
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
C028	Parsley (<i>Petroselinum crispum</i>)	3	77.76±1.13	5.55±0.34	2.25±0.17	1.14±0.12	3.87±0.05	2.79±0.15	1.09±0.12	9.43±1.05	305±18
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	79.43	5.29	2.65	0.71	6.74	5.63	1.11	5.17	213
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	85.82±1.04	4.21±0.41	2.24±0.21	0.74±0.03	2.25±0.09	1.56±0.13	0.69±0.15	4.75±1.01	185±15
C031	Radish leaves (<i>Raphanus sativus</i>)	6	91.19±0.53	2.22±0.23	1.50±0.21	0.51±0.05	1.82±0.10	1.18±0.04	0.63±0.07	2.77±0.34	109±9
C032	Rumex leaves (<i>Rumex patientia</i>)	2	93.18	1.62	1.27	0.33	1.27	0.93	0.34	2.33	82
C033	Spinach (<i>Spinacia oleracea</i>)	6	90.31±0.46	2.14±0.14	2.47±0.38	0.64±0.03	2.38±0.24	1.52±0.15	0.86±0.10	2.05±0.31	102±7
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	71.69±0.06	5.84±0.01	1.25±0.06	0.49±0.01	10.70±0.02	9.34±0.01	1.36±0.01	10.04±0.02	299±1

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6	92.17±0.42	0.79±0.06	0.70±0.08	0.14±0.02	3.37±0.23	2.52±0.26	0.85±0.13	2.84±0.22	73±4
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	94.56	1.33	0.55	0.35	1.55	1.06	0.49	1.67	68
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	85.51±1.22	2.86±0.27	0.96±0.03	0.99±0.06	4.50±0.25	3.76±0.14	0.74±0.21	5.16±1.45	179±21
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	90.87±0.56	1.44±0.17	0.86±0.04	0.24±0.01	3.78±0.16	3.10±0.19	0.68±0.07	2.82±0.32	87±6
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	91.60±0.28	1.34±0.12	0.81±0.06	0.24±0.01	3.49±0.18	2.96±0.10	0.53±0.11	2.53±0.26	79±5
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	91.24	1.61	0.88	0.26	3.72	3.05	0.67	2.29	81
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	95.17±0.33	0.53±0.05	0.36±0.04	0.13±0.02	2.12±0.07	1.65±0.05	0.48±0.07	1.68±0.33	46±6
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	94.50±0.32	0.42±0.02	0.34±0.05	0.12±0.03	2.10±0.15	1.72±0.13	0.38±0.05	2.53±0.21	57±3
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	94.63	0.49	0.40	0.13	2.11	1.74	0.37	2.25	54
D010	Brinjal-1 (<i>Solanum melongena</i>)	1	89.95	1.77	0.83	0.39	3.57	2.37	1.20	3.49	114
D011	Brinjal-2 (<i>Solanum melongena</i>)	1	90.28	1.82	0.85	0.34	4.01	2.80	1.21	2.71	99
D012	Brinjal-3 (<i>Solanum melongena</i>)	2	90.02	1.36	0.65	0.33	4.26	3.10	1.16	3.38	102

Table 1. Proximate Principles and Dietary Fibre

Food code	Food Name	No. of Regions	← WATER	PROTCNT	ASH	FATCE	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
			g →			KJ					
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	90.28±1.21	1.51±0.24	0.66±0.09	0.31±0.03	4.04±0.65	3.03±0.82	1.01±0.22	3.19±0.86	100±18
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	89.45±1.73	1.38±0.26	0.72±0.12	0.29±0.06	4.13±0.70	3.10±0.43	1.03±0.29	4.02±2.01	111±38
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	90.57	1.46	0.72	0.29	3.68	3.00	0.68	3.29	97
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	91.25	1.40	0.57	0.37	3.32	2.30	1.02	3.10	98
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	89.28±0.39	1.82±0.16	0.80±0.06	0.33±0.04	4.01±0.48	2.79±0.53	1.22±0.05	3.75±0.18	117±2
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	89.83	1.47	0.83	0.35	4.00	2.94	1.06	3.52	106
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	89.38	1.68	0.72	0.25	3.90	2.74	1.16	4.08	116
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	89.93±0.89	1.43±0.20	0.68±0.07	0.31±0.04	4.12±0.52	2.95±0.56	1.17±0.28	3.53±1.01	105±16
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	90.94	1.60	0.58	0.27	3.89	2.70	1.19	2.73	93
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	89.14	1.49	0.64	0.31	3.92	2.61	1.31	4.51	124
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	90.31±0.06	1.56±0.19	0.64±0.02	0.35±0.03	3.87±0.59	2.50±0.76	1.37±0.24	3.27±0.39	106±9
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	89.44±0.96	1.58±0.27	0.74±0.05	0.29±0.03	3.99±0.79	2.82±0.72	1.17±0.08	3.96±0.19	114±6
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	90.39	1.26	0.80	0.34	3.74	2.54	1.20	3.46	103
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	90.83	1.18	0.81	0.36	3.94	2.80	1.14	2.89	91
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	89.07±0.78	1.47±0.15	0.66±0.02	0.33±0.06	4.38±0.25	3.23±0.15	1.15±0.18	4.10±0.88	116±18
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	90.41±0.55	1.26±0.06	0.66±0.05	0.31±0.02	3.97±0.18	2.81±0.42	1.16±0.27	3.39±0.36	100±8
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	90.65±0.79	1.44±0.21	0.68±0.08	0.34±0.04	3.73±0.21	2.64±0.37	1.09±0.21	3.15±0.60	99±10
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	89.83	1.36	0.69	0.35	3.85	2.57	1.28	3.93	113
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	90.00±0.90	1.48±0.22	0.70±0.08	0.32±0.04	3.98±0.49	2.84±0.52	1.14±0.22	3.52±0.80	106±15
D032	Broad beans (<i>Vicia faba</i>)	3	84.20±0.17	3.85±0.13	1.05±0.08	0.15±0.01	8.63±0.15	6.61±0.07	2.03±0.09	2.11±0.11	123±4
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	93.89±0.32	1.11±0.11	0.76±0.05	0.34±0.03	2.06±0.22	1.33±0.29	0.73±0.17	1.84±0.32	68±6

Table 1. Proximate Principles and Dietary Fibre

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							← g →				
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	92.99±1.47	1.47±0.36	0.76±0.14	0.47±0.05	2.19±0.17	1.58±0.13	0.61±0.10	2.14±1.06	83±24
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	93.38±0.37	1.35±0.35	0.72±0.12	0.41±0.02	2.19±0.13	1.39±0.06	0.80±0.08	1.95±0.16	78±4
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	90.76±0.22	2.15±0.15	0.91±0.10	0.44±0.03	3.71±0.27	2.66±0.35	1.04±0.13	2.03±0.22	96±5
D037	Celery stalk (<i>Apium graveolens</i>)	3	92.87±0.22	0.98±0.13	1.50±0.16	0.24±0.04	2.09±0.13	1.57±0.07	0.52±0.16	2.33±0.23	69±6
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	93.78±0.12	0.66±0.07	0.38±0.05	0.15±0.03	1.55±0.08	1.19±0.07	0.36±0.12	3.47±0.18	79±2
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	84.65±0.83	3.55±0.38	1.68±0.13	0.37±0.04	4.83±0.54	3.55±0.48	1.28±0.13	4.91±0.58	168±15
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	91.15	0.76	0.91	0.34	3.01	1.81	1.20	3.83	100
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	92.67±0.44	0.91±0.16	1.00±0.04	0.22±0.02	2.33±0.06	1.26±0.03	1.07±0.08	2.86±0.34	81±7
D042	Corn, baby (<i>Zea mays</i>)	6	75.44±0.98	2.69±0.23	2.79±0.21	1.33±0.23	6.09±0.50	4.47±0.28	1.62±0.31	11.66±1.40	306±18
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	92.96±0.48	0.71±0.11	0.54±0.06	0.16±0.04	2.14±0.42	1.52±0.43	0.63±0.11	3.48±0.47	82±8
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	93.52±0.44	0.83±0.14	0.52±0.06	0.18±0.05	2.13±0.26	1.60±0.33	0.54±0.16	2.82±0.49	73±10
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	92.80	0.98	0.52	0.24	2.46	1.78	0.68	3.01	82
D046	Drumstick (<i>Moringa oleifera</i>)	6	85.39±0.64	2.62±0.22	1.27±0.09	0.12±0.01	6.83±0.22	5.60±0.26	1.23±0.06	3.76±0.70	123±11
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	86.98	3.06	0.94	0.64	5.64	4.84	0.79	2.75	129
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	85.57±1.32	3.71±0.62	1.08±0.12	0.60±0.02	6.19±0.47	5.37±0.43	0.82±0.10	2.85±0.32	140±15
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	89.14±0.52	2.49±0.21	1.05±0.09	0.26±0.02	4.38±0.41	3.88±0.36	0.51±0.11	2.68±0.48	102±8
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	90.11	2.12	0.77	0.19	4.18	3.53	0.65	2.63	93
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	85.52±0.86	1.98±0.16	0.99±0.10	0.35±0.05	7.69±0.20	7.15±0.13	0.54±0.08	3.48±0.70	110±15
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	72.32±0.53	5.79±0.14	1.02±0.16	0.44±0.03	8.63±0.09	7.83±0.05	0.80±0.07	11.81±0.74	322±10
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	93.14±0.27	1.58±0.24	0.79±0.03	0.35±0.02	2.75±0.07	2.31±0.09	0.44±0.04	1.39±0.21	67±4
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	92.78±0.61	1.39±0.23	0.58±0.07	0.24±0.08	3.00±0.26	2.19±0.18	0.81±0.11	2.01±0.54	73±10

Table 1. Proximate Principles and Dietary Fibre

10

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
			$\leftarrow \text{g} \rightarrow$						KJ		
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	92.40	1.22	0.47	0.24	3.25	2.14	1.12	2.41	80
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	89.06±0.30	2.08±0.37	0.94±0.09	0.22±0.03	4.08±0.20	2.80±0.29	1.28±0.37	3.62±0.26	115±5
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	85.14±0.59	0.69±0.09	0.49±0.07	0.08±0.02	3.01±0.19	1.68±0.15	1.34±0.11	10.59±0.37	205±8
D058	Onion, stalk (<i>Allium cepa</i>)	6	88.35±0.79	2.07±0.21	1.13±0.09	0.26±0.02	5.21±0.10	3.76±0.07	1.45±0.11	2.99±0.50	107±12
D059	Papaya, raw (<i>Carica papaya</i>)	6	92.04±0.44	0.50±0.06	0.55±0.06	0.23±0.03	2.28±0.05	1.32±0.04	0.96±0.04	4.40±0.37	100±7
D060	Parwar (<i>Trichosanthes dioica</i>)	6	91.57±0.27	1.40±0.10	0.59±0.03	0.30±0.04	2.61±0.07	1.82±0.04	0.79±0.07	3.54±0.32	101±5
D061	Peas, fresh (<i>Pisum sativum</i>)	6	73.37±1.13	7.25±1.03	1.05±0.02	0.13±0.02	6.32±0.26	5.04±0.19	1.28±0.25	11.88±0.67	340±19
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	89.14±0.59	1.47±0.12	1.35±0.09	0.63±0.02	5.25±0.39	4.72±0.44	0.52±0.07	2.15±0.43	89±8
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	76.15±0.42	1.18±0.20	1.27±0.14	0.23±0.02	3.60±0.27	2.79±0.25	0.81±0.05	17.58±0.35	334±6
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	87.53±1.01	0.35±0.05	1.20±0.09	0.16±0.07	2.12±0.04	1.33±0.08	0.80±0.09	8.64±0.93	165±15
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	91.73	0.87	0.47	0.18	2.53	1.28	1.25	4.22	103
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	91.85±0.45	0.84±0.21	0.58±0.09	0.16±0.02	2.56±0.11	1.44±0.14	1.12±0.08	4.00±0.64	97±8
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	64.00	8.09	1.64	0.92	5.90	3.66	2.25	19.46	520
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	94.99±0.35	0.91±0.08	0.44±0.04	0.14±0.01	1.81±0.13	1.20±0.16	0.61±0.08	1.72±0.46	55±7
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	94.27±0.62	0.98±0.13	0.53±0.06	0.13±0.01	1.85±0.28	1.31±0.17	0.54±0.10	2.24±0.41	64±8
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	94.81±0.28	0.98±0.33	0.42±0.04	0.25±0.01	2.27±0.11	1.69±0.15	0.58±0.08	1.27±0.15	52±4
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	94.92	0.89	0.45	0.25	2.27	1.69	0.58	1.23	50
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	94.35	0.54	0.41	0.26	2.29	1.61	0.68	2.15	61
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	94.41±0.32	1.02±0.04	0.51±0.03	0.17±0.01	2.00±0.04	1.68±0.06	0.32±0.02	1.90±0.37	58±6
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	93.21±0.46	1.12±0.08	0.60±0.03	0.27±0.07	1.62±0.08	1.05±0.07	0.57±0.04	3.18±0.40	87±7
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	93.79±0.42	0.76±0.03	0.43±0.05	0.25±0.02	1.58±0.16	1.27±0.13	0.30±0.05	3.20±0.30	79±6

Food code	Food Name	No. of Regions	← g →	Dietary Fibre			Carbohydrate	Energy			
				Moisture	Protein	Ash	Total Fat	Total	Insoluble	Soluble	
				WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF
D076	Tomato, ripe, local (<i>Lycopersicon esculentum</i>)	6	93.62±0.16	0.90±0.07	0.52±0.08	0.47±0.06	1.77±0.04	1.44±0.11	0.33±0.08	2.71±0.08	82±4
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	92.83	1.10	0.93	0.51	2.30	1.42	0.88	2.33	84
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	93.15	1.31	1.08	0.44	1.84	1.37	0.47	2.20	79
E FRUITS											
E001	Apple, big (<i>Malus domestica</i>)	6	83.01±0.94	0.29±0.08	0.36±0.04	0.64±0.04	2.59±0.15	1.43±0.15	1.16±0.17	13.11±0.76	261±15
E002	Apple, green (<i>Malus domestica</i>)	6	85.54±0.98	0.46±0.07	0.31±0.04	0.50±0.05	2.54±0.26	1.72±0.22	0.81±0.16	10.65±1.00	214±17
E003	Apple, small (<i>Malus domestica</i>)	6	82.91±0.48	0.31±0.05	0.24±0.02	0.53±0.05	2.06±0.12	1.44±0.09	0.62±0.12	13.95±0.48	267±8
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	82.79	0.27	0.29	0.60	2.07	1.53	0.54	13.99	269
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	16.68±0.59	3.17±0.29	3.46±0.14	0.74±0.03	3.32±0.13	2.72±0.11	0.60±0.04	72.63±0.27	1321±9
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	85.75±0.81	1.47±0.15	0.61±0.16	0.64±0.04	0.59±0.01	0.43±0.02	0.16±0.02	10.93±0.88	236±12
E007	Avocado fruit (<i>Persea sp.</i>)	1	73.56	2.95	1.19	13.86	6.69	5.26	1.42	1.75	604
E008	Bael fruit (<i>Aegle marmelos</i>)	1	61.36	2.63	0.91	0.57	6.31	3.31	3.00	28.21	569
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	70.13	1.25	1.15	0.32	2.21	1.43	0.78	24.95	463
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	71.32	1.49	1.09	0.35	2.33	1.29	1.04	23.41	445
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	70.28	1.29	0.95	0.29	1.98	1.26	0.72	25.21	467
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	71.93±0.85	1.23±0.08	0.94±0.17	0.33±0.01	1.94±0.07	1.23±0.10	0.71±0.07	23.63±0.74	440±14
E013	Black berry (<i>Rubus sp.</i>)	5	82.94±0.42	0.92±0.10	0.52±0.04	0.63±0.02	4.35±0.25	3.44±0.16	0.91±0.13	10.64±0.35	227±6
E014	Cherries, red (<i>Prunus cerasus</i>)	4	83.61±0.21	1.49±0.22	0.45±0.02	0.46±0.05	2.12±0.12	1.35±0.09	0.78±0.06	11.87±0.31	250±4
E015	Currants, black (<i>Ribes nigrum</i>)	1	83.27	1.51	0.69	0.53	4.07	2.43	1.64	9.93	227
E016	Custard apple (<i>Annona squamosa</i>)	1	71.55	1.62	0.68	0.67	5.10	3.17	1.93	20.38	414

Table 1. Proximate Principles and Dietary Fibre

Table 1. Proximate Principles and Dietary Fibre

12

Food code	Food Name	No. of Regions	← WATER	PROTCNT	ASH	FATCE	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g	→	KJ		
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	11.14±0.73	2.45±0.24	2.20±0.07	0.35±0.03	8.95±0.23	7.53±0.22	1.42±0.14	74.91±0.52	1340±12
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	13.13	2.38	2.39	0.35	9.10	7.57	1.53	72.67	1301
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	22.01	1.18	1.93	0.41	6.52	5.68	0.84	67.95	1197
E020	Fig (<i>Ficus carica</i>)	6	75.60±1.16	2.03±0.22	1.08±0.18	0.37±0.06	4.64±0.41	2.59±0.22	2.05±0.23	16.28±1.13	341±18
E021	Gooseberry (<i>Emblica officinalis</i>)	5	87.02±0.78	0.34±0.03	0.34±0.05	0.16±0.04	7.75±0.64	6.20±0.43	1.55±0.43	4.39±1.09	99±19
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	83.88±0.56	0.76±0.13	0.46±0.04	0.32±0.02	1.35±0.14	0.82±0.06	0.52±0.09	13.23±0.60	254±11
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	85.07±0.29	0.77±0.12	0.43±0.05	0.29±0.03	1.25±0.04	0.81±0.02	0.44±0.02	12.19±0.20	235±4
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	84.46±1.60	0.95±0.11	0.48±0.07	0.29±0.04	1.28±0.10	0.85±0.05	0.43±0.09	12.55±1.38	244±26
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	75.30±1.55	1.41±0.26	0.70±0.13	0.46±0.11	1.64±0.15	0.98±0.19	0.66±0.08	20.48±0.97	395±23
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	85.55±1.70	0.62±0.13	0.47±0.08	0.26±0.02	1.28±0.05	0.85±0.05	0.44±0.01	11.81±1.52	224±28
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	76.90±1.40	1.24±0.25	0.49±0.05	0.35±0.03	1.15±0.19	0.83±0.04	0.32±0.15	19.86±1.58	374±25
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	83.79±0.30	1.44±0.09	0.72±0.05	0.32±0.03	8.59±0.05	7.14±0.02	1.45±0.04	5.13±0.33	135±5
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	81.22±0.45	1.19±0.19	0.81±0.06	0.25±0.03	7.39±0.38	6.12±0.29	1.28±0.09	9.14±0.27	195±6
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	78.56±0.34	2.74±0.47	0.91±0.08	0.15±0.02	3.62±0.17	2.21±0.17	1.41±0.06	14.01±0.56	302±3
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	83.33	0.82	0.31	0.17	3.07	2.40	0.67	12.30	235
E032	Karonda fruit (<i>Carissa carandas</i>)	1	86.04	1.15	1.02	1.67	7.25	5.87	1.38	2.87	141
E033	Lemon, juice (<i>Citrus limon</i>)	6	91.59±0.53	0.41±0.05	0.28±0.03	0.75±0.02				6.97±0.56	153±9
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	91.32±0.33	0.76±0.09	0.47±0.03	0.20±0.06	2.07±0.11	1.33±0.04	0.74±0.08	5.18±0.37	114±5
E035	Litchi (<i>Litchi chinensis</i>)	4	85.56±0.27	0.99±0.09	0.44±0.06	0.26±0.02	1.34±0.05	0.81±0.10	0.53±0.06	11.41±0.20	225±5
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	88.44±0.55	0.54±0.10	0.42±0.04	0.55±0.03	1.88±0.15	1.01±0.08	0.87±0.11	8.18±0.49	175±9
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	86.65	0.52	0.32	0.53	1.67	1.03	0.64	10.32	209

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g				
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	88.04±0.10	0.46±0.04	0.38±0.02	0.54±0.02	1.55±0.13	0.82±0.19	0.73±0.06	9.03±0.26	187±5
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	85.07±0.59	0.54±0.05	0.44±0.07	0.57±0.03	2.02±0.20	1.09±0.05	0.93±0.14	11.36±0.49	231±8
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	88.41	0.68	0.38	0.55	1.77	0.97	0.79	8.21	178
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	87.69	0.68	0.42	0.58	1.97	0.99	0.98	8.67	188
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	84.14	0.41	0.47	0.49	1.73	0.95	0.78	12.75	248
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	85.52	0.63	0.33	0.24	1.87	1.23	0.64	11.41	219
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	74.54	3.56	2.82	1.14	4.40	3.30	1.10	13.54	342
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	92.97±0.38	0.42±0.06	0.52±0.02	0.35±0.02	1.51±0.28	0.84±0.20	0.67±0.11	4.24±0.40	97±8
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	91.84±0.93	0.53±0.05	0.48±0.04	0.26±0.02	1.49±0.10	0.79±0.08	0.70±0.05	5.40±1.04	116±18
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	89.61±0.19	0.70±0.12	0.36±0.02	0.13±0.02	1.29±0.05	0.73±0.05	0.56±0.02	7.92±0.27	156±4
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	91.93	0.50	0.13	0.12	2.40	1.87	0.53	4.92	101
E049	Papaya, ripe (<i>Carica papaya</i>)	6	91.47±0.76	0.42±0.05	0.51±0.03	0.16±0.01	2.83±0.26	1.75±0.16	1.08±0.10	4.61±0.48	100±9
E050	Peach (<i>Prunus communis</i>)	1	88.31	0.86	0.51	0.37	2.13	1.22	0.91	7.82	168
E051	Pear (<i>Pyrus sp.</i>)	6	86.49±0.18	0.36±0.04	0.32±0.02	0.27±0.04	4.48±0.08	4.02±0.07	0.46±0.03	8.09±0.23	157±3
E052	Phalsa (<i>Grewia asiatica</i>)	2	77.48	1.66	1.09	0.14	4.54	3.44	1.09	15.09	299
E053	Pineapple (<i>Ananas comosus</i>)	6	86.06±1.19	0.52±0.09	0.38±0.04	0.16±0.02	3.46±0.12	2.88±0.08	0.59±0.06	9.42±1.15	180±19
E054	Plum (<i>Prunus domestica</i>)	3	84.44±1.25	0.64±0.13	0.35±0.16	0.40±0.16	2.07±0.36	1.23±0.22	0.84±0.16	12.10±1.47	238±19
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	83.55±0.39	1.33±0.07	0.57±0.04	0.15±0.02	2.83±0.06	2.26±0.05	0.57±0.02	11.58±0.43	229±6
E056	Pummelo (<i>Citrus maxima</i>)	3	86.97±1.52	0.68±0.06	0.49±0.03	0.42±0.01	0.80±0.04	0.49±0.03	0.31±0.01	10.64±1.54	210±26
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	19.69±0.59	2.57±0.20	2.19±0.14	0.34±0.02	3.92±0.23	2.55±0.30	1.37±0.17	71.29±0.48	1279±12
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	21.50±0.51	2.76±0.26	2.04±0.17	0.35±0.03	4.56±0.50	3.04±0.55	1.53±0.26	68.79±1.00	1241±16

Table 1. Proximate Principles and Dietary Fibre

14

Food code	Food Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g				
			WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	80.87	0.68	0.43	0.16	1.02	0.71	0.30	16.84	306
E060	Sapota (<i>Achras sapota</i>)	6	73.64±1.01	0.92±0.07	0.68±0.05	1.26±0.02	9.60±0.57	8.46±0.58	1.14±0.04	13.90±1.13	307±18
E061	Soursop (<i>Annona muricata</i>)	1	80.85	0.74	0.58	0.94	4.95	3.79	1.16	11.94	260
E062	Star fruit (<i>Averrhoa carambola</i>)	1	91.18	0.79	0.33	0.39	2.81	2.17	0.64	4.51	110
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	92.03±0.64	0.97±0.10	0.54±0.02	0.56±0.02	2.50±0.03	1.51±0.08	0.99±0.08	3.40±0.64	103±11
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	20.83±0.57	2.92±0.22	3.44±0.31	0.15±0.02	5.31±0.27	3.73±0.24	1.58±0.09	67.35±0.45	1207±7
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	94.54±0.63	0.60±0.06	0.13±0.02	0.16±0.01	0.70±0.14	0.35±0.11	0.34±0.05	3.86±0.59	85±10
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	95.33±0.22	0.59±0.03	0.12±0.01	0.16±0.01	0.78±0.11	0.40±0.07	0.38±0.08	3.02±0.21	70±4
E067	Wood Apple (<i>Limonia acidissima</i>)	3	79.36±0.17	3.14±0.30	1.15±0.05	3.62±0.03	5.21±0.38	3.77±0.08	1.44±0.40	7.52±0.58	327±3
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	84.39	1.34	0.80	0.35	3.73	2.71	1.02	9.40	204

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	86.95±0.50	1.95±0.14	1.46±0.21	0.14±0.01	3.31±0.32	2.60±0.30	0.71±0.06	6.18±0.61	149±9
F002	Carrot, orange (<i>Daucus carota</i>)	6	87.69±0.56	0.95±0.15	1.16±0.09	0.47±0.02	4.18±0.30	2.81±0.18	1.37±0.21	5.55±0.48	139±9
F003	Carrot, red (<i>Daucus carota</i>)	4	86.07±1.34	1.04±0.09	1.22±0.10	0.47±0.04	4.49±0.19	3.09±0.26	1.40±0.21	6.71±1.11	160±19
F004	Colocasia (<i>Colocasia esculenta</i>)	6	73.49±0.32	3.31±0.59	1.95±0.27	0.17±0.03	3.22±0.34	2.54±0.30	0.68±0.05	17.85±0.94	372±9
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	76.26±0.87	1.94±0.32	1.50±0.10	0.93±0.06	4.70±0.04	2.86±0.01	1.84±0.05	14.67±0.45	332±14
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	80.72±0.40	1.54±0.17	0.92±0.08	0.23±0.02	1.71±0.03	1.13±0.02	0.58±0.04	14.89±0.40	292±7
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	82.97	1.35	0.87	0.22	1.69	1.15	0.54	12.90	255
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	79.72	1.83	1.13	0.22	1.68	1.11	0.57	15.43	306
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	89.32±0.29	0.67±0.03	0.73±0.02	0.13±0.02	2.46±0.16	1.96±0.03	0.49±0.15	6.71±0.12	134±3

Food code	Food Name	No. of Regions	← WATER	PROTCNT	ASH	FATCE	Dietary Fibre			Carbohydrate	Energy KJ
							Total	Insoluble	Soluble		
			g →								
	F010 Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	89.05±0.72	0.77±0.08	0.82±0.10	0.15±0.02	2.65±0.15	1.98±0.16	0.67±0.08	6.56±0.70	135±11
	F011 Radish, round, red skin (<i>Raphanus sativus</i>)	1	89.68	0.89	0.91	0.16	2.29	1.56	0.73	6.07	130
	F012 Radish, round, white skin (<i>Raphanus sativus</i>)	2	89.76	0.80	0.80	0.14	2.37	1.63	0.74	6.13	129
	F013 Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	69.21±0.83	1.33±0.12	0.96±0.07	0.26±0.06	3.99±0.05	2.57±0.07	1.43±0.04	24.25±0.77	456±15
	F014 Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	69.58±0.22	1.27±0.09	0.95±0.01	0.33±0.06	3.94±0.10	2.53±0.04	1.41±0.07	23.93±0.15	452±4
	F015 Tapioca (<i>Manihot esculenta</i>)	3	75.23±0.55	1.03±0.10	1.12±0.11	0.20±0.01	4.61±0.12	3.85±0.08	0.76±0.05	17.81±0.57	334±10
	F016 Water Chestnut (<i>Eleocharis dulcis</i>)	1	73.34	0.86	0.95	0.37	3.02	2.15	0.87	21.46	400
	F017 Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	74.39±0.31	2.56±0.28	1.29±0.10	0.14±0.02	4.17±0.05	3.25±0.03	0.92±0.03	17.46±0.55	353±5
15	F018 Yam, ordinary (<i>Amorphophallus</i> sp.)	4	74.28±0.63	2.18±0.26	1.64±0.19	0.17±0.02	4.08±0.07	3.32±0.32	0.76±0.25	17.65±0.57	349±12
	F019 Yam, wild (<i>Dioscorea villosa</i>)	2	69.35	3.07	1.76	0.30	4.57	3.29	1.29	20.95	430

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	84.47±0.29	2.62±0.35	1.01±0.14	0.73±0.02	4.86±0.65	3.31±0.42	1.55±0.35	6.32±0.41	191±5
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	85.72±0.49	2.28±0.13	0.85±0.06	0.75±0.04	5.13±0.56	3.79±0.33	1.34±0.27	5.27±0.42	167±7
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	85.59±0.79	2.38±0.40	0.95±0.13	0.75±0.02	5.10±0.10	3.61±0.46	1.50±0.49	5.23±0.71	169±12
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	85.29±0.53	2.33±0.30	0.87±0.13	0.74±0.01	4.15±0.29	2.84±0.17	1.31±0.26	6.63±0.61	190±9
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	85.93±0.11	2.01±0.26	0.82±0.08	0.65±0.03	3.95±0.60	2.83±0.37	1.12±0.32	6.64±0.39	180±10
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1	84.93	3.01	0.96	0.64	5.15	3.91	1.24	5.31	175
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1	85.83	2.12	0.90	0.60	4.95	3.75	1.20	5.61	163
G008	Chillies, green - all varieties (<i>Capsicum annuum</i>)	6	85.39±0.68	2.36±0.34	0.91±0.12	0.72±0.05	4.77±0.61	3.41±0.52	1.37±0.34	5.86±0.77	177±14
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	86.99±0.41	3.52±0.26	2.19±0.15	0.70±0.06	4.66±0.24	3.24±0.21	1.42±0.15	1.93±0.27	130±9

Table 1. Proximate Principles and Dietary Fibre

16

Food code	Food Name	No. of Regions	← WATER	PROTCNT	ASH	FATCE	Dietary Fibre			Carbohydrate	Energy KJ
							Total	Insoluble	Soluble		
			g →								
							FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
G010	Curry leaves (<i>Murraya koenigii</i>)	6	65.33±1.57	7.41±0.26	4.86±0.58	1.06±0.04	16.83±0.78	13.81±0.43	3.02±0.44	4.51±1.79	266±32
G011	Garlic, big clove (<i>Allium sativum</i>)	6	64.38±0.56	6.92±0.20	1.40±0.11	0.16±0.02	5.22±0.41	2.56±0.38	2.66±0.17	21.93±0.82	518±12
G012	Garlic, small clove (<i>Allium sativum</i>)	3	64.42±0.30	6.75±0.24	1.38±0.17	0.14±0.01	5.47±0.07	2.61±0.02	2.86±0.07	21.84±0.74	514±8
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	64.49	6.12	1.76	0.16	4.01	2.20	1.81	23.46	523
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	81.27±0.22	2.22±0.16	1.33±0.13	0.85±0.03	5.36±0.40	4.28±0.25	1.08±0.21	8.97±0.28	230±4
G015	Mango ginger (<i>Curcuma amada</i>)	3	84.55±0.16	1.45±0.37	1.57±0.14	0.70±0.03	4.74±0.50	3.79±0.13	0.95±0.62	6.98±0.15	177±3
G016	Mint leaves (<i>Mentha spicata</i>)	4	84.24±0.71	4.66±0.15	2.18±0.17	0.65±0.05	5.89±0.49	4.49±0.54	1.40±0.06	2.39±0.36	155±4
G017	Onion, big (<i>Allium cepa</i>)	6	85.76±0.43	1.50±0.10	0.50±0.04	0.24±0.03	2.45±0.21	1.92±0.15	0.53±0.08	9.56±0.44	201±9
G018	Onion, small (<i>Allium cepa</i>)	5	84.67±0.12	1.82±0.20	0.61±0.07	0.16±0.01	1.16±0.19	0.70±0.18	0.46±0.09	11.58±0.37	237±4
G CONDIMENTS AND SPICES-DRY											
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	9.42±0.56	6.34±0.53	5.90±0.12	1.26±0.02	5.13±0.33	3.90±0.37	1.23±0.25	71.95±0.71	1387±9
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	11.24±0.51	8.10±0.41	7.21±0.46	2.60±0.15	23.10±0.14	20.46±0.09	2.64±0.10	47.76±0.47	1067±16
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	6.69±0.47	6.69±0.31	7.84±0.40	2.80±0.24	23.46±0.58	20.73±0.39	2.74±0.37	52.53±1.51	1132±13
G022	Chillies, red (<i>Capsicum annum</i>)	6	14.57±0.42	12.69±0.22	5.73±0.15	6.40±0.04	31.15±0.04	26.55±0.17	4.60±0.15	29.46±0.62	990±8
G023	Cloves (<i>Syzygium aromaticum</i>)	6	26.49±0.68	5.86±0.21	5.99±0.23	8.41±0.15	34.52±0.48	28.07±0.42	6.46±0.10	18.73±0.39	781±6
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	8.72±0.47	10.66±0.33	5.36±0.15	17.47±0.22	44.81±2.36	35.27±1.77	9.54±2.42	12.98±2.62	1125±38
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	10.59±0.51	13.91±0.50	5.90±0.09	16.64±0.15	30.35±0.71	25.73±0.77	4.62±0.27	22.62±1.05	1274±19
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	7.82±0.37	25.41±0.24	2.93±0.15	5.72±0.02	47.55±0.54	27.63±0.59	19.92±0.51	10.57±0.57	983±10
G027	Mace (<i>Myristica fragrans</i>)	6	20.06±0.70	6.24±0.27	2.47±0.28	24.41±0.20	20.31±0.23	16.78±0.23	3.54±0.17	26.51±0.81	1488±12
G028	Nutmeg (<i>Myristica fragrans</i>)	6	15.55±0.55	6.30±0.24	1.99±0.11	36.52±0.04	11.99±0.18	10.54±0.18	1.46±0.14	27.64±0.70	1940±11
G029	Omum (<i>Trachyspermum ammi</i>)	6	9.71±0.18	15.89±0.61	8.18±0.23	21.11±0.08	20.58±0.04	17.20±0.02	3.38±0.04	24.53±0.68	1495±7

Food code	Food Name	No. of Regions	← g →	Dietary Fibre			Carbohydrate	Energy			
				Moisture	Protein	Ash	Total Fat	Total	Insoluble	Soluble	
				WATER	PROTCNT	ASH	FATCE	FIBTG	FIBINS	FIBSOL	CHOAVLDF
G030	Pippali (<i>Piper longum</i>)	6	10.95±0.48	10.53±0.45	6.41±0.07	2.27±0.02	34.14±0.60	29.57±0.55	4.57±0.39	35.70±0.45	906±8
G031	Pepper, black (<i>Piper nigrum</i>)	6	13.18±0.40	10.12±0.40	4.58±0.13	2.74±0.02	33.16±0.29	30.61±0.29	2.54±0.11	36.22±0.45	910±8
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	4.22±0.32	20.31±0.40	6.04±0.19	30.38±1.87	26.68±3.04	15.62±2.29	11.06±1.75	12.37±1.95	1768±77
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	10.58±0.49	7.66±0.44	6.13±0.38	5.03±0.07	21.38±0.29	18.79±0.42	2.59±0.29	49.22±0.55	1174±7

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6	4.37±0.31	18.41±0.04	2.62±0.13	58.49±0.04	13.06±0.31	10.55±0.22	2.52±0.34	3.04±0.24	2549±4
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	6.63±0.15	5.78±0.45	1.39±0.09	4.35±0.03	11.44±0.64	10.14±0.44	1.30±0.32	70.42±0.81	1467±12
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	6.30±0.32	6.46±0.51	1.41±0.04	4.46±0.03	11.11±0.34	10.09±0.25	1.03±0.27	70.27±0.96	1477±9
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	37.70	2.73	1.43	5.51	7.63	6.59	1.03	45.00	1024
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	4.44±0.22	18.78±0.58	2.25±0.08	45.20±0.07	3.86±0.47	2.23±0.35	1.63±0.24	25.46±0.70	2438±11
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	3.97±0.73	7.27±0.02	1.61±0.17	63.26±0.30	15.88±0.79	14.55±0.23	1.33±0.99	8.01±1.02	2611±9
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	36.14±0.36	3.84±0.04	1.93±0.15	41.38±0.42	10.42±0.28	9.43±0.24	0.99±0.07	6.30±0.43	1711±13
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	4.60±0.21	23.36±0.32	6.37±0.11	23.74±0.09	8.27±0.04	6.33±0.06	1.95±0.10	33.66±0.50	1863±3
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	4.51±0.44	19.17±0.64	5.78±0.22	43.10±0.03	17.16±0.19	13.57±0.13	3.59±0.13	10.29±0.74	2124±8
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	3.62±0.32	21.61±0.71	4.58±0.13	43.22±0.08	17.21±0.18	13.58±0.18	3.63±0.11	9.76±1.01	2161±8
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	3.30±0.28	21.70±0.44	4.13±0.16	43.05±0.04	16.99±0.30	13.49±0.19	3.51±0.15	10.83±0.50	2174±9
H012	Ground nut (<i>Arachis hypogaea</i>)	6	6.97±0.69	23.65±0.85	2.11±0.07	39.63±0.29	10.38±0.18	8.58±0.15	1.79±0.22	17.27±0.33	2176±9
H013	Mustard seeds (<i>Brassica nigra</i>)	6	5.67±0.48	19.51±0.23	3.73±0.05	40.19±0.21	14.10±0.66	10.63±0.57	3.47±0.20	16.80±0.71	2132±16
H014	Linseeds (<i>Linum usitatissimum</i>)	6	5.48±0.28	18.55±0.15	3.15±0.10	35.67±0.70	26.17±0.39	21.83±0.60	4.33±0.84	10.99±0.86	1857±16
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	4.65±0.59	18.92±1.61	3.91±0.26	38.61±0.41	10.93±0.05	10.50±0.03	0.43±0.04	22.98±2.64	2144±11

Table 1. Proximate Principles and Dietary Fibre

18

Food code	Food Name	No. of Regions	← WATER	PROTCNT	ASH	FATCE	Dietary Fibre			Carbohydrate	Energy
							Total	Insoluble	Soluble		
							g →				KJ
							FIBTG	FIBINS	FIBSOL	CHOAVLDF	ENERC
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	5.66±0.29	18.34±2.11	4.92±0.22	39.53±0.26	10.96±0.14	10.54±0.12	0.41±0.03	20.59±1.85	2128±6
H017	Pine seed (<i>Pinus</i> sp.)	5	5.32±0.15	12.55±0.25	2.78±0.10	48.79±0.10	3.79±0.03	2.23±0.03	1.57±0.03	26.77±0.35	2486±3
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	4.68±0.22	23.35±0.35	3.02±0.13	42.49±0.34	10.64±0.16	8.23±0.15	2.41±0.11	15.82±0.52	2257±10
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	5.24±0.16	17.66±0.54	2.57±0.15	30.87±0.98	13.49±0.45	10.24±0.27	3.25±0.22	30.18±1.20	1981±20
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	3.53±0.29	23.53±0.56	3.44±0.26	51.85±0.07	10.80±0.13	8.51±0.17	2.29±0.07	6.85±0.99	2453±8
H021	Walnut (<i>Juglans regia</i>)	6	3.56±0.22	14.92±0.62	1.72±0.08	64.27±0.05	5.39±0.19	4.74±0.17	0.65±0.03	10.14±0.69	2809±3
I SUGARS											
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	11.20±0.49	1.85±0.19	1.92±0.17	0.16±0.02				84.87±0.63	1480±9
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	85.54±0.99	0.16±0.03	0.23±0.02	0.40±0.05	0.56±0.09	0.40±0.05	0.16±0.05	13.11±0.93	242±18
J MUSHROOMS											
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1	90.09	3.68	0.71	0.42	3.11	2.76	0.35	1.98	115
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1	92.43	1.84	0.74	0.25	1.99	1.82	0.18	2.76	89
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	82.94	3.19	1.11	0.76	3.02	2.03	0.99	8.98	243
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	4.51	19.04	1.41	2.86	39.12	35.64	3.48	33.07	1019
K MISCELLANEOUS FOODS											
K001	Toddy (<i>Borassus flabellifer</i>)	10	93.86±0.59	0.18±0.05	0.21±0.03	0.03±0.01				5.72±0.55	101±10
K002	Coconut Water (<i>Cocos nucifera</i>)	6	95.77±0.42	0.26±0.04	0.65±0.06	0.16±0.02				3.16±0.39	64±7

Food code	Food Name	No. of Regions	Moisture ← WATER	Protein PROTCNT	Ash ASH	Total Fat FATCE	Dietary Fibre			Carbohydrate CHOAVLDF	Energy ENERC	
							Total	Insoluble	Soluble			
							g →					
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6	80.68±0.66	3.68±0.13	0.67±0.02	6.58±0.20				8.39±0.71	449±9	
L002	Milk, whole, Cow	6	86.64±1.10	3.26±0.06	0.68±0.02	4.48±0.29				4.94±1.02	305±23	
L003	Paneer	6	51.96±0.76	18.86±0.75	1.98±0.08	24.78±0.17				2.41±0.12	1278±61	
L004	Khoa	6	42.51±0.21	16.34±0.61	4.00±0.14	20.62±0.83				16.53±1.26	1322±14	

Table 1. Proximate Principles and Dietary Fibre

20

Food Code	Food Name	No. of Regions	Moisture		Ash	Total Fat	Energy KJ			
			← g →							
			WATER	PROTCNT						
M EGG AND EGG PRODUCTS										
M001	Egg, poultry, whole, raw	6	76.51±0.20	13.28±0.29	0.81±0.04	9.15±0.14	564±3			
M002	Egg, poultry, white, raw	6	86.68±0.11	10.84±0.07	0.75±0.03	0.06±0.01	187±1			
M003	Egg, poultry, yolk, raw	6	53.57±0.40	15.74±0.33	1.05±0.05	26.34±0.17	1242±9			
M004	Egg, poultry, whole, boiled	6	73.46±0.22	13.43±0.28	0.86±0.04	10.54±0.19	618±6			
M005	Egg, poultry, white, boiled	6	83.54±0.18	12.37±0.16	0.81±0.04	0.26±0.02	220±3			
M006	Egg, poultry, yolk, boiled	6	51.42±0.22	16.13±0.45	1.38±0.14	27.46±0.24	1290±8			
M007	Egg, poultry, omlet	3	68.48±0.13	16.53±0.43	0.96±0.03	11.60±0.22	710±4			
M008	Egg, country hen, whole, raw	1	72.96	13.14	0.86	13.00	704			
M009	Egg, country hen, whole, boiled	1	70.43	14.43	0.94	14.10	767			
M010	Egg, country hen, omlet	1	67.80	14.80	1.08	16.30	855			
M011	Egg, duck, whole, boiled	1	71.61	13.80	0.97	13.61	738			
M012	Egg, duck, whole, raw	1	70.53	14.60	0.99	13.83	760			
M013	Egg, duck, whole, omlet	1	68.90	15.10	1.18	14.80	804			
M014	Egg, quail, whole, raw	1	75.11	12.39	0.94	11.46	635			
M015	Egg, quail, whole, boiled	1	74.41	13.03	0.99	11.50	647			
N POULTRY										
N001	Chicken, poultry, leg, skinless	4	67.61±0.30	19.44±0.79	1.14±0.08	12.64±0.53	1605±23			
N002	Chicken, poultry, thigh, skinless	6	67.58±0.46	18.18±0.57	1.14±0.10	14.23±0.84	836±38			
N003	Chicken, poultry, breast, skinless	5	67.15±0.18	21.81±0.81	1.19±0.09	9.00±0.52	704±24			
N004	Chicken, poultry, wing, skinless	5	67.48±0.21	17.42±0.60	1.13±0.05	13.81±0.26	807±17			

Food Code	Food Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		WATER	PROTCNT	ASH	FATCE	KJ
									ENERC
N005	Poultry, chicken, liver	1	73.20		21.57		1.11	4.08	518
N006	Poultry, chicken, gizzard	1	78.05		18.22		1.46	2.07	386
N007	Country hen, leg, with skin	1	70.02		17.01		1.20	11.73	723
N008	Country hen, thigh, with skin	1	67.46		18.29		1.23	12.82	785
N009	Country hen, breast, with skin	1	66.53		22.08		1.14	10.20	753
N010	Country hen, wing, with skin	1	68.01		18.65		1.14	12.09	764
N011	Duck, meat, with skin	1	73.49		19.07		1.22	6.03	547
N012	Emu, meat, skinless	1	71.65		22.65		0.98	4.62	556
N013	Guinea fowl, meat, with skin	1	75.21		20.52		0.92	3.24	469
N014	Pigeon, meat, with skin	1	74.61		17.94		1.32	6.03	528
N015	Quail, meat, skinless	1	71.58		20.92		1.35	5.95	576
N016	Turkey, leg, with skin	1	69.24		20.30		1.21	8.15	647
N017	Turkey, thigh, with skin	1	72.17		20.46		0.97	6.31	581
N018	Turkey, breast, with skin	1	68.44		21.96		1.01	8.04	671
N019	Turkey, wing, with skin	1	66.16		21.91		0.97	10.77	771
O ANIMAL MEAT									
O001	Goat, shoulder	6	66.39±0.40		20.33±0.50		0.90±0.02	11.94±0.78	787±33
O002	Goat, chops	6	72.46±1.10		20.39±0.83		0.99±0.01	5.98±0.37	568±26
O003	Goat, legs	6	68.85±0.86		22.07±0.63		0.97±0.03	7.94±0.62	669±26
O004	Goat, brain	5	76.74±1.02		13.82±0.80		1.29±0.07	8.06±0.46	533±23
O005	Goat, tongue	4	68.40±1.00		16.63±0.54		1.02±0.04	13.68±1.09	789±39

Table 1. Proximate Principles and Dietary Fibre

22

Food Code	Food Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		WATER	PROTCNT	ASH	FATCE	KJ
									ENERC
O006	Goat, lungs	4	79.03±1.20		16.86±0.71		0.74±0.01	3.09±0.56	401±32
O007	Goat, heart	5	75.15±1.23		19.38±0.80		0.95±0.09	4.40±0.71	492±33
O008	Goat, liver	6	73.37±1.16		20.32±0.92		1.30±0.07	4.88±0.73	526±31
O009	Goat, tripe	5	80.94±0.84		15.36±0.50		0.23±0.02	3.36±0.29	386±19
O010	Goat, spleen	4	77.93±0.50		18.45±0.15		1.15±0.09	2.37±0.36	401±14
O011	Goat, kidneys	4	80.26±1.07		15.60±1.15		1.10±0.05	2.93±0.18	374±18
O012	Goat, tube (small intestine)	3	78.12±0.63		12.92±0.54		0.54±0.01	8.26±1.08	525±32
O013	Goat, testis	2	84.29		12.32		0.87	2.39	298
O014	Sheep, shoulder	5	66.51±2.51		18.24±1.41		0.86±0.01	14.31±1.37	840±68
O015	Sheep, chops	4	75.66±2.78		18.00±1.22		1.09±0.02	5.15±2.05	496±86
O016	Sheep, leg	5	68.26±1.01		21.42±0.43		0.94±0.01	8.69±0.74	686±25
O017	Sheep, brain	1	78.36		13.05		1.19	7.29	492
O018	Sheep, tongue	1	68.70		16.61		1.06	13.53	783
O019	Sheep, lungs	2	80.41		16.12		0.97	2.41	363
O020	Sheep, heart	1	77.06		18.19		0.97	3.66	445
O021	Sheep, liver	4	69.71±1.12		22.26±1.46		1.26±0.07	4.87±0.12	559±21
O022	Sheep, tripe	2	78.81		16.76		0.26	4.05	435
O023	Sheep, spleen	1	79.66		16.02		1.17	3.02	384
O024	Sheep, kidneys	2	79.77		16.22		1.00	2.92	384
O025	Beef, shoulder	6	63.84±0.59		20.56±1.32		0.95±0.01	14.59±0.86	889±12
O026	Beef, chops	4	72.40±0.34		19.82±0.43		0.96±0.02	6.71±0.45	585±13
O027	Beef, round (leg)	6	68.04±1.36		22.64±1.03		1.19±0.01	7.38±0.71	658±37

Food Code	Food Name	No. of Regions	Moisture		Ash	Total Fat	Energy KJ			
			← g →							
			WATER	PROTCNT						
O028	Beef, brain	4	78.71±1.43	10.55±0.50	1.37±0.17	9.28±0.92	523±42			
O029	Beef, tongue	4	70.97±1.20	15.63±0.67	0.73±0.00	12.57±0.63	731±32			
O030	Beef, lungs	3	80.83±0.18	15.66±0.42	1.13±0.05	2.28±0.21	351±1			
O031	Beef, heart	5	77.77±0.72	17.68±0.51	0.87±0.01	3.57±0.46	433±20			
O032	Beef, liver	6	74.15±1.31	20.73±0.96	1.07±0.03	3.96±0.45	499±30			
O033	Beef, tripe	5	83.74±0.62	13.10±0.29	0.55±0.01	2.51±0.74	316±25			
O034	Beef, spleen	6	79.03±0.73	17.42±0.55	1.22±0.04	2.22±0.24	378±16			
O035	Beef, kidneys	3	77.59±0.66	17.09±0.30	1.22±0.04	4.01±0.36	439±17			
O036	Calf, shoulder	2	70.49	20.98	0.94	7.47	633			
O037	Calf, chops	2	72.66	22.47	0.92	3.85	524			
O038	Calf, round (leg)	2	71.13	21.10	0.74	6.92	615			
O039	Calf, brain	2	81.19	9.84	1.26	7.60	448			
O040	Calf, tongue	2	69.44	17.78	0.93	11.76	737			
O041	Calf, heart	1	73.44	18.84	0.86	3.75	459			
O042	Calf, liver	1	73.66	21.02	1.26	3.95	503			
O043	Calf, spleen	1	78.65	17.71	1.41	2.12	379			
O044	Calf, kidneys	2	80.23	15.16	1.02	3.50	387			
O045	Mithun, shoulder	1	68.86	19.05	0.84	11.14	736			
O046	Mithun, chops	1	73.81	18.19	0.79	6.12	536			
O047	Mithun, round (leg)	1	72.25	19.61	0.90	4.10	485			
O048	Pork, shoulder	6	62.92±0.74	17.41±0.71	0.75±0.12	18.83±0.88	993±28			
O049	Pork, chops	6	68.40±1.25	19.41±0.68	0.64±0.05	11.30±1.33	748±51			

Table 1. Proximate Principles and Dietary Fibre

24

Food Code	Food Name	No. of Regions	Moisture		Ash	Total Fat	Energy KJ			
			← g →							
			WATER	PROTCNT						
O050	Pork, ham	6	61.94±0.39	18.83±0.59	0.62±0.02	18.55±0.78	1006±20			
O051	Pork, lungs	4	81.12±0.72	15.13±0.52	0.93±0.01	2.74±0.23	358±16			
O052	Pork, heart	4	77.74±0.88	16.31±0.16	1.01±0.01	4.87±0.84	457±32			
O053	Pork, liver	5	74.88±1.23	19.89±1.16	1.18±0.03	3.94±0.34	484±24			
O054	Pork, stomach	1	76.51	15.36	0.23	7.81	550			
O055	Pork, spleen	3	80.93±1.08	15.13±0.79	1.13±0.05	2.71±0.71	357±31			
O056	Pork, kidneys	5	80.92±0.87	14.35±1.03	0.97±0.10	3.65±0.55	379±21			
O057	Pork, tube (small intestine)	1	75.42	14.96	0.55	8.98	587			
O058	Hare, shoulder	1	71.06	21.13	1.17	6.58	603			
O059	Hare, chops	1	75.47	20.62	1.27	2.55	445			
O060	Hare, leg	1	73.00	20.52	1.26	4.16	503			
O061	Rabbit, shoulder	1	70.75	20.01	1.19	7.96	635			
O062	Rabbit, chops	1	71.03	22.61	1.35	4.88	565			
O063	Rabbit, leg	1	70.33	21.31	1.26	5.99	584			

Food Code	Fish Name	No. of Regions	Moisture	Protein	Ash	Total Fat	Energy
			← g →			KJ	
			WATER	PROTCNT	ASH	FATCE	ENERC
P MARINE FISH							
P001	Allathi (<i>Elops machnata</i>)	1	75.91	21.77	1.06	0.98	406
P002	Aluva (<i>Parastromateus niger</i>)	3	75.71±0.06	21.63±0.28	1.39±0.08	1.80±0.51	434±17
P003	Anchovy (<i>Stolephorus indicus</i>)	2	77.77	19.88	1.62	0.78	367
P004	Ari fish (<i>Aprion virescens</i>)	1	77.09	22.01	1.34	1.11	415
P005	Betki (<i>Lates calcarifer</i>)	1	82.52	15.28	1.12	0.29	284
P006	Black snapper (<i>Macolor niger</i>)	1	78.09	19.50	1.19	1.24	377
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	83.24	13.53	1.07	1.03	287
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	76.42±0.05	22.30±0.27	1.21±0.20	2.87±0.29	485±14
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	76.22	22.18	1.32	2.13	456
P010	Chakla (<i>Rachycentron canadum</i>)	5	78.36±0.07	20.21±0.70	1.07±0.09	1.68±1.00	406±36
P011	Chappal (<i>Aluterus monoceros</i>)	1	80.61	17.17	1.23	0.67	317
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	76.36	20.02	1.28	0.70	366
P013	Chembali (<i>Lutjanus quinquelineatus</i>)	1	77.54	20.06	0.86	1.77	406
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	76.54	22.30	1.28	2.02	454
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	78.84	19.37	0.98	0.88	362
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	75.73	22.56	1.32	0.44	400
P017	Hilsa (<i>Tenuilosa ilisha</i>)	2	60.09	21.80	1.11	18.49	1083
P018	Jallal (<i>Arius sp.</i>)	1	77.50	21.55	1.17	1.46	420
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	75.66	22.45	1.26	1.92	453
P020	Kadal bral (<i>Synodus indicus</i>)	1	79.66	18.72	1.27	1.34	368
P021	Kadali (<i>Nemipterus mesopion</i>)	1	73.74	22.07	1.06	4.20	530

Table 1. Proximate Principles and Dietary Fibre

26

Food Code	Fish Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		WATER	PROTCNT	ASH	FATCE	KJ
									ENERC
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	75.50		20.89		1.08	4.54	523
P023	Kalava (<i>Epinephelus coioides</i>)	1	80.02		19.38		1.34	1.20	374
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	77.59		20.19		1.07	0.65	367
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	76.25±0.65		22.09±0.24		1.28±0.19	1.27±0.40	423±11
P026	Karimeen (<i>Etroplus suratensis</i>)	1	78.66		19.68		0.97	1.38	386
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	79.22		19.52		1.45	0.84	363
P028	Kayrai (<i>Thunnus albacores</i>)	2	72.69		20.15		1.28	3.00	454
P029	Kiriyen (<i>Atule mate</i>)	1	72.39		22.49		0.94	4.70	556
P030	Kite fish (<i>Mobula kuhlii</i>)	1	77.61		23.07		1.50	0.56	413
P031	Korka (<i>Terapon jarbua</i>)	1	72.25		23.72		1.09	3.36	528
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	73.44		21.62		1.25	3.60	501
P033	Maagaa (<i>Polynemus plebeius</i>)	1	79.23		20.11		1.01	0.67	366
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	74.55±1.14		21.51±0.34		1.20±0.43	1.53±0.93	423±40
P035	Manda clathi (<i>Naso reticulatus</i>)	1	76.32		21.27		1.48	1.00	398
P036	Matha (<i>Acanthurus mata</i>)	2	79.81		21.17		1.35	0.79	389
P037	Milk fish (<i>Chanos chanos</i>)	1	72.22		23.66		1.12	1.09	442
P038	Moon fish (<i>Mene maculata</i>)	1	74.21		20.74		1.69	4.69	526
P039	Mullet (<i>Mugil cephalus</i>)	3	76.12±0.33		20.23±1.30		1.16±0.13	1.32±0.27	393±26
P040	Mural (<i>Tylosurus crocodilus</i>)	1	78.96		19.04		1.11	0.58	345
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	75.57		22.89		1.21	0.56	410
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1	79.32		19.82		1.00	0.72	364
P043	Narba (<i>Caranx sexfasciatus</i>)	2	76.37		21.95		1.17	1.60	432

Food Code	Fish Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		PROTCNT	ASH	FATCE	ENERC	KJ
			WATER						
P044	Paarai (<i>Caranx heberi</i>)	1	75.77		21.58	1.21	1.84	435	
P045	Padayappa (<i>Canthidermis maculata</i>)	1	79.18		19.70	1.26	0.69	360	
P046	Pali kora (<i>Panna microdon</i>)	1	78.63		19.25	1.00	1.81	394	
P047	Pambada (<i>Lepturacanthus savala</i>)	2	74.67		21.95	1.41	4.44	537	
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	77.46		19.73	1.15	0.65	360	
P049	Parava (<i>Lactarius lactarius</i>)	1	77.19		21.50	1.08	2.74	467	
P050	Parcus (<i>Psettodes erumei</i>)	1	79.01		19.87	1.12	0.62	361	
P051	Parrot fish (<i>Scarus ghobban</i>)	1	76.84		20.82	1.40	0.57	375	
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	78.33		20.89	1.02	0.87	387	
P053	Phopat (<i>Coryphaena hippurus</i>)	4	76.42±0.14		22.05±0.75	1.24±0.02	1.33±0.47	424±8	
P054	Piranha (<i>Pygopritis</i> sp.)	1	76.15		20.46	0.93	5.43	549	
P055	Pomfret, black (<i>Parastromateus niger</i>)	1	74.43		18.91	0.97	4.83	515	
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	77.81		21.05	1.29	0.46	375	
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	75.91		19.02	1.01	5.12	513	
P058	Pranel (<i>Gerres</i> sp.)	1	79.54		19.69	0.76	1.89	405	
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	75.99		20.06	1.19	1.55	399	
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	76.63±0.23		20.97±0.31	1.22±0.09	1.17±0.20	400±12	
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	77.14		21.61	1.11	1.69	430	
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	79.95		19.39	0.92	2.17	410	
P063	Rani (<i>Pink perch</i>)	1	78.55		18.83	1.01	1.49	377	
P064	Ray fish, bow head, spotted (<i>Rhina aenocystoma</i>)	1	80.30		19.03	1.15	0.70	349	
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	76.28		22.79	1.26	1.34	437	

Table 1. Proximate Principles and Dietary Fibre

28

Food Code	Fish Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		WATER	PROTCNT	ASH	FATCE	KJ
									ENERC
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	76.31		21.50		1.10	2.30	451
P067	Sadaya (<i>Platax orbicularis</i>)	1	75.53		20.68		1.32	2.97	462
P068	Salmon (<i>Salmo salar</i>)	1	67.84		20.97		1.13	9.86	721
P069	Sangada (<i>Nemipterus japonicus</i>)	1	78.51		20.26		1.26	2.67	443
P070	Sankata paarai (<i>Caranx ignobilis</i>)	1	74.88		21.87		1.18	1.68	434
P071	Sardine (<i>Sardinella longiceps</i>)	1	72.29		17.91		0.84	8.99	637
P072	Shark (<i>Carcharhinus sorrah</i>)	2	72.82		21.60		1.08	0.83	398
P073	Shark, hammer head (<i>Sphyraena mokarran</i>)	1	74.61		23.40		0.92	0.80	432
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	78.83		20.95		1.04	0.75	384
P075	Shelavu (<i>Sphyraena jello</i>)	4	74.60±1.68		22.46±1.34		1.26±0.07	1.74±0.50	446±41
P076	Silan (<i>Silonia silondia</i>)	1	70.12		22.72		0.77	6.68	633
P077	Silk fish (<i>Beryx</i> sp.)	1	77.61		20.65		1.05	1.53	408
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	72.47		21.71		0.95	5.17	555
P079	Sole fish (<i>Cynoglossus arel</i>)	1	80.18		19.05		1.06	1.18	367
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	75.67		23.98		1.14	0.68	408
P081	Tarlava (<i>Drepane punctata</i>)	2	76.76		21.72		1.14	1.20	414
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2	76.20		20.78		1.06	2.13	432
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	79.57		18.48		1.18	1.08	349
P084	Tuna (<i>Euthynnus affinis</i>)	5	72.12±0.42		24.50±0.27		1.11±0.12	1.44±0.42	470±16
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	77.76		21.28		0.87	1.12	403
P086	Valava (<i>Chirocentrus nudus</i>)	1	77.25		21.80		1.27	1.06	410
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	72.30		22.28		1.33	5.18	570

Food Code	Fish Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		WATER	PROTCNT	ASH	FATCE	KJ
									ENERC
P088	Vela meen (<i>Aprion virescens</i>)	1	71.82		22.16		1.34	4.34	537
P089	Vora (<i>Siganus javus</i>)	2	76.94		20.14		1.26	2.14	422
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	77.59		21.83		1.48	0.82	401
P091	Xiphinis (<i>Xiphias gladius</i>)	1	79.22		19.82		1.15	0.88	370
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	69.34		24.68		1.57	5.28	600

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	79.77	10.23	1.74	1.41	343
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	79.67	15.36	0.92	0.60	283
Q003	Lobster, brown (<i>Thenu s orientalis</i>)	1	81.48	15.96	1.29	0.56	292
Q004	Lobster, king size (<i>Thenu s orientalis</i>)	1	77.77	18.54	1.08	0.78	375
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	83.10	10.00	2.60	0.55	190
Q006	Oyster (<i>Crassostrea sp.</i>)	1	82.50	9.51	2.47	2.44	252
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	82.41	14.85	0.94	0.56	273
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	81.48	14.25	0.83	0.74	270

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	80.07	12.14	2.44	0.98	243
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	80.27	11.82	0.85	1.34	250
R003	Octopus (<i>Octopus vulgaris</i>)	1	80.45	14.71	1.21	1.12	334
R004	Squid, black (<i>Loligo sp.</i>)	1	80.59	16.10	0.99	1.07	335
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	80.52	16.82	0.75	0.93	320

Table 1. Proximate Principles and Dietary Fibre

30

Food Code	Fish Name	No. of Regions	Moisture		Protein		Ash	Total Fat	Energy
			← g →		WATER	PROTCNT	ASH	FATCE	KJ
									ENERC
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	80.85		16.25		1.15	1.44	329
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	79.38		17.41		1.19	1.15	353
S FRESHWATER FISH AND SHELLFISH									
S001	Cat fish (<i>Tandanus tandanus</i>)	2	77.23±0.91		15.86±3.65		0.93±0.01	6.24±3.03	518±84
S002	Catla (<i>Catla catla</i>)	6	78.43±0.71		17.94±1.36		0.94±0.01	2.15±0.34	394±6
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	75.57		20.41		1.03	2.63	451
S004	Gold fish (<i>Carassius auratus</i>)	2	79.07		16.91		1.10	2.94	396
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6	68.50±1.01		17.12±1.62		1.12±0.03	16.77±0.91	852±24
S006	Rohu (<i>Labeo rohita</i>)	6	76.34±0.28		19.71±0.57		1.28±0.04	2.39±0.64	428±12
S007	Crab (<i>Pachygrapsus</i> sp.)	1	80.58		13.23		1.23	0.89	327
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1	77.43		19.24		0.84	0.52	380
S009	Prawns, small (<i>Macrobrachium</i> sp.)	3	82.58		13.07		0.86	0.78	297
S010	Tiger prawns (<i>Macrobrachium</i> sp.)	2	83.24		14.24		0.83	0.66	284

Table 2

**WATER SOLUBLE
VITAMINS**



Table 2. WATER SOLUBLE VITAMINS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			<———— mg —————>				<———— μg —————>			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
A CEREALS AND MILLETS										
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	0.04	0.04	0.45	0.24	0.50	1.92	27.44	
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	0.04±0.007	0.04±0.007	0.52±0.05	0.28±0.03	0.33±0.023	1.87±0.24	24.65±3.21	
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	0.25±0.044	0.20±0.038	0.86±0.10	0.50±0.05	0.27±0.009	0.64±0.05	36.11±5.05	
A004	Barley (<i>Hordeum vulgare</i>)	6	0.36±0.059	0.18±0.030	2.84±0.08	0.14±0.02	0.31±0.026	2.38±0.11	31.58±3.79	
A005	Jowar (<i>Sorghum vulgare</i>)	6	0.35±0.039	0.14±0.014	2.10±0.09	0.27±0.02	0.28±0.023	0.70±0.06	39.42±3.13	
A006	Maize, dry (<i>Zea mays</i>)	6	0.33±0.032	0.09±0.009	2.69±0.06	0.34±0.03	0.34±0.017	0.49±0.05	25.81±1.44	
A007	Maize, tender, local (<i>Zea mays</i>)	6	0.17±0.024	0.12±0.021	1.13±0.02	0.35±0.04	0.45±0.033	1.70±0.27	62.96±5.66	4.26±0.55
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	0.10±0.008	0.14±0.007	1.14±0.02	0.32±0.04	0.38±0.084	1.91±0.30	59.71±7.70	5.72±0.76
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	0.83	0.22	1.70	0.62	0.21	0.62	173	
A010	Ragi (<i>Eleusine coracana</i>)	5	0.37±0.041	0.17±0.008	1.34±0.02	0.29±0.19	0.05±0.007	0.88±0.05	34.66±4.97	
A011	Rice flakes (<i>Oryza sativa</i>)	6	0.12±0.020	0.04±0.006	1.60±0.09	0.48±0.06	0.02±0.002	0.39±0.09	8.46±0.93	
A012	Rice puffed (<i>Oryza sativa</i>)	6	0.11±0.018	0.04±0.017	1.87±0.10	0.38±0.03	0.07±0.005	1.26±0.08		
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	0.27±0.023	0.06±0.011	3.40±0.12	0.61±0.04	0.37±0.035	1.38±0.21	11.51±1.69	
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.17±0.023	0.06±0.018	2.51±0.49	0.55±0.06	0.22±0.017	0.31±0.02	9.75±2.10	
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	0.05±0.019	0.05±0.006	1.69±0.13	0.57±0.05	0.12±0.012	0.60±0.12	9.32±1.93	
A016	Samai (<i>Panicum miliare</i>)	6	0.26±0.042	0.05±0.008	1.29±0.02	0.60±0.07	0.04±0.005	6.03±0.57	36.20±7.04	
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	0.29±0.054	0.20±0.018	1.49±0.08	0.63±0.07	0.07±0.017	1.49±0.18	39.49±4.52	
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	0.15±0.017	0.06±0.008	0.77±0.07	0.72±0.08	0.08±0.008	0.58±0.09	16.25±2.62	

Table 2. Water Soluble Vitamins

34

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid		
			(B1)	(B2)	(B3)			(B7)				
			← mg →	← mg →	← mg →	← μg →	mg	THIA	RIBF	NIA	PANTAC	VITB6A
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	0.42±0.044	0.15±0.010	2.37±0.10	0.87±0.04	0.25±0.032	0.76±0.12	29.22±1.92			
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	0.46±0.067	0.15±0.041	2.68±0.19	1.08±0.21	0.26±0.036	1.03±0.58	30.09±3.79			
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	0.24±0.027	0.12±0.004	2.05±0.05	0.84±0.03	0.24±0.011	2.50±0.35	26.30±3.61			
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	0.29±0.025	0.04±0.004	1.13±0.10	0.75±0.08	0.11±0.010	0.44±0.04	25.68±3.64			
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	0.13±0.011	0.01±0.003	0.86±0.02	0.52±0.05	0.03±0.004	2.00±0.19	14.35±2.38			
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	0.12±0.012	0.01±0.002	0.67±0.05	0.49±0.05	0.03±0.001	1.34±0.18	13.21±2.15			

B GRAIN LEGUMES

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	0.35±0.029	0.15±0.003	1.87±0.06	1.60±0.24	0.19±0.008	0.81±0.09	182±4.5	
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	0.37±0.040	0.24±0.011	2.10±0.06	2.38±0.26	0.36±0.025	0.93±0.07	233±12.9	
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	0.21±0.005	0.09±0.003	1.76±0.09	2.95±0.26	0.22±0.029	0.81±0.13	88.75±2.35	
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	0.32±0.024	0.11±0.008	1.85±0.13	3.98±0.70	0.53±0.039	1.28±0.18	134±14.2	
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	0.33±0.087	0.09±0.009	1.64±0.03	1.47±0.31	0.30±0.033	3.97±0.12	231±27.3	
B006	Cowpea, white (<i>Vigna catjang</i>)	1	0.34	0.09	1.51	1.66	0.26	4.28	249	
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	0.35	0.07	1.88	0.85	0.35	0.66	291	
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	0.32	0.07	2.04	0.97	0.37	0.76	292	
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	0.37±0.082	0.07±0.009	1.96±0.09	0.92±0.19	0.38±0.017	0.68±0.11	289±27.0	
B010	Green gram, dal (<i>Vigna radiata</i>)	6	0.35±0.071	0.12±0.016	1.84±0.23	1.68±0.17	0.19±0.011	0.65±0.06	92.11±5.11	
B011	Green gram, whole (<i>Vigna radiata</i>)	6	0.45±0.027	0.27±0.011	2.16±0.13	2.02±0.24	0.35±0.034	1.35±0.16	145±5.4	
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	0.32±0.002	0.24±0.033	1.82±0.26	1.58±0.06	0.21±0.017	0.59±0.07	163±5.3	
B013	Lentil dal (<i>Lens culinaris</i>)	6	0.34±0.034	0.16±0.005	1.81±0.02	1.32±0.03	0.18±0.022	1.25±0.20	49.99±4.91	

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin	Total Folates	Total Ascorbic Acid
			(B1)	(B2)	(B3)			(B7)	(B9)	mg
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	0.40±0.073	0.22±0.026	2.54±0.12	1.84±0.22	0.46±0.022	1.74±0.16	132±6.7	
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	0.42	0.22	2.56	1.68	0.47	1.63	121	
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	0.45±0.070	0.09±0.005	1.87±0.08	1.41±0.06	0.16±0.009	2.12±0.21	349±10.8	
B017	Peas, dry (<i>Pisum sativum</i>)	6	0.56±0.049	0.16±0.013	2.69±0.15	1.26±0.03	0.26±0.045	0.53±0.12	110±9.3	
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	0.21	0.19	2.61	1.91	0.23	0.63	332	
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	0.26±0.035	0.21±0.005	2.37±0.12	2.06±0.05	0.21±0.016	0.77±0.13	330±29.6	
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	0.30±0.020	0.19±0.018	2.42±0.15	1.82±0.10	0.21±0.033	0.77±0.18	316±20.1	
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	0.45±0.046	0.11±0.006	2.09±0.14	1.27±0.08	0.24±0.026	0.31±0.04	108±8.7	
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	0.74±0.028	0.15±0.015	2.42±0.18	1.56±0.13	0.42±0.033	0.65±0.04	229±19.0	
B023	Ricebean (<i>Vigna umbellata</i>)	1	0.46	0.14	2.32	0.98	0.13	2.65	122	1.11
B024	Soybean, brown (<i>Glycine max</i>)	6	0.59±0.069	0.24±0.002	2.12±0.14	1.97±0.25	0.43±0.012	0.73±0.09	297±26.1	
B025	Soybean, white (<i>Glycine max</i>)	1	0.61	0.23	2.28	1.97	0.45	0.77	288	

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	0.26	0.33	1.18	0.53	0.22	7.75	120	121
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	0.01±0.000	0.19±0.028	0.71±0.06	0.41±0.09	0.21±0.010	2.46±0.25	70.33±8.10	83.54±10.54
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	0.010	0.269	0.62	0.37	0.22	2.95	81.95	86.20
C004	Amaranth leaves, red and green mix (<i>Amaranthus gangeticus</i>)	4	0.01±0.000	0.22±0.030	0.69±0.04	0.37±0.03	0.19±0.015	2.41±0.24	69.08±6.27	77.24±7.57
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	0.01±0.000	0.13±0.011	0.63±0.02	0.33±0.02	0.22±0.051	3.07±0.09	41.44±3.48	82.56±8.24
C006	Amaranth spined, leaves, red and green mix (<i>Amaranthus spinosus</i>)	2	0.01	0.15	0.72	0.31	0.20	2.91	44.23	77.30
C007	Basella leaves (<i>Basella alba</i>)	2	0.06	0.15	0.46	0.48	0.18	1.07	90.31	63.35

Table 2. Water Soluble Vitamins

36

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin	Total Folates	Total Ascorbic Acid
			(B1)	(B2)	(B3)			(B7)	(B9)	
			←	mg	→	← μg →	mg			
THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC			
C008	Bathua leaves (<i>Chenopodium album</i>)	2	0.06	0.51	0.54	0.41	0.17	1.25	42.55	41.03
C009	Beet greens (<i>Beta vulgaris</i>)	6	0.02±0.01	0.17±0.05	0.43±0.08	0.29±0.07	0.13±0.03	4.66±0.66	11.52±1.39	35.83±5.51
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	0.03±0.012	0.08±0.012	0.45±0.05	0.51±0.09	0.04±0.007	2.18±0.25	15.96±2.25	18.40±2.49
C011	Betel leaves, small (<i>Piper betle</i>)	4	0.02±0.010	0.07±0.009	0.47±0.07	0.47±0.04	0.04±0.005	1.28±0.15	16.56±2.67	24.51±8.66
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	0.06	0.16	0.50	0.47	0.19	2.45	85.01	89.45
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	0.01	0.05	0.38	0.58	0.19	1.08	54.51	19.32
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	0.03	0.05	0.26	0.49	0.24	1.38	63.46	40.76
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	0.03±0.005	0.05±0.001	0.24±0.02	0.24±0.01	0.13±0.016	1.41±0.14	46.36±4.48	33.25±4.21
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	0.04	0.05	0.27	0.25	0.17	1.43	34.81	43.49
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	0.05±0.010	0.05±0.011	0.21±0.01	0.34±0.02	0.23±0.016	1.38±0.03	42.99±3.13	52.84±0.94
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	0.08±0.013	0.07±0.015	0.80±0.07	0.27±0.07	0.29±0.031	12.10±1.25	159±18.5	40.71±7.47
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	0.06±0.006	0.45±0.042	0.82±0.09	0.39±0.04	0.87±0.074	2.26±0.09	42.89±5.31	108±16.7
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	0.11±0.015	0.22±0.023	0.70±0.05	0.49±0.03	0.38±0.106	4.82±0.62	75.26±9.18	58.25±17.08
C021	Garden cress (<i>Lepidium sativum</i>)	2	0.03	0.06	1.20	0.22	0.20	12.01	58.10	42.75
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	0.13±0.006	0.06±0.009	0.58±0.04	0.70±0.04	0.33±0.012	3.38±0.20	74.94±12.55	29.65±9.71
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	0.12	0.05	0.56	0.71	0.31	3.43	88.63	35.43
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	0.06	0.15	0.86	0.27	0.28	13.57	41.55	71.11
C025	Lettuce (<i>Lactuca sativa</i>)	3	0.05±0.013	0.09±0.008	0.17±0.02	0.11±0.01	0.08±0.016	2.15±0.09	30.69±6.48	11.91±3.07
C026	Mustard leaves (<i>Brassica juncea</i>)	3	0.08±0.011	0.18±0.015	0.58±0.07	0.26±0.01	0.16±0.007	1.70±0.21	110±6.6	60.32±1.32
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	0.02	0.22	0.66	0.31	0.96	10.25	98.50	55.60
C028	Parsley (<i>Petroselinum crispum</i>)	3	0.19±0.022	0.10±0.005	0.36±0.01	0.20±0.03	0.19±0.011	13.47±1.03	197±13.9	133±16.3

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin	Total Folates	Total Ascorbic Acid
			(B1)	(B2)	(B3)			(B7)	(B9)	
			← mg →	THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	0.02	0.10	0.32	0.21	0.19	11.18	48.42	103
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	0.07±0.010	0.13±0.025	1.49±0.09	0.36±0.01	0.17±0.022	3.40±0.29	33.82±4.70	12.33±0.17
C031	Radish leaves (<i>Raphanus sativus</i>)	6	0.06±0.005	0.13±0.024	0.47±0.06	0.14±0.01	0.16±0.032	4.39±0.12	53.14±5.32	65.76±18.69
C032	Rumex leaves (<i>Rumex patientia</i>)	2	0.03	0.14	0.33	0.25	0.09	1.30	41.01	53.76
C033	Spinach (<i>Spinacia oleracea</i>)	6	0.16±0.016	0.10±0.009	0.33±0.03	0.22±0.03	0.15±0.011	4.14±0.27	142±10.3	30.28±4.71
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	0.12±0.020	0.03±0.007	0.79±0.02	0.30±0.04	0.14±0.010	3.29±0.60	91.82±9.56	28.22±8.82

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6	0.03±0.003	0.01±0.001	0.12±0.02	0.37±0.03	0.18±0.058	2.01±0.15	14.11±1.85	11.41±1.31
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	0.06	0.06	0.25	0.22	0.13	5.93	17.05	15.74
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	0.13±0.016	0.12±0.016	0.52±0.08	0.42±0.03	0.31±0.021	12.26±1.53	45.26±0.73	6.61±1.00
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	0.05±0.005	0.04±0.009	0.27±0.03	0.33±0.09	0.05±0.009	5.76±0.52	60.28±7.22	46.53±2.81
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	0.06±0.008	0.04±0.005	0.29±0.03	0.36±0.01	0.04±0.004	5.55±1.17	51.45±6.97	50.87±3.03
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	0.06	0.04	0.30	0.28	0.05	6.85	60.03	54.30
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	0.03±0.003	0.01±0.001	0.14±0.01	0.56±0.09	0.02±0.005	2.55±0.29	41.99±3.56	4.33±1.55
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	0.03±0.004	0.01±0.001	0.14±0.01	0.50±0.06	0.02±0.006	2.33±0.14	49.59±3.82	4.54±1.78
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	0.03	0.01	0.14	0.59	0.01	2.54	46.31	3.80
D010	Brinjal-1 (<i>Solanum melongena</i>)	1	0.07	0.13	0.74	0.29	0.05	1.17	37.22	1.58
D011	Brinjal-2 (<i>Solanum melongena</i>)	1	0.09	0.11	0.56	0.27	0.05	1.83	27.22	1.03
D012	Brinjal-3 (<i>Solanum melongena</i>)	2	0.050	0.109	0.60	0.29	0.07	1.32	32.29	2.34
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	0.06±0.019	0.11±0.003	0.52±0.07	0.42±0.10	0.07±0.013	1.70±0.62	36.67±7.69	2.22±0.57

Table 2. Water Soluble Vitamins

38

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			(B1)	(B2)	(B3)			(B7)		
			← mg →	← mg →	← mg →	← μg →	mg			
THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC			
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	0.07±0.023	0.11±0.002	0.49±0.05	0.29±0.04	0.08±0.012	1.42±0.49	32.21±4.79	3.15±0.88
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	0.05	0.11	0.51	0.30	0.07	1.65	34.21	1.49
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	0.05	0.12	0.44	0.33	0.07	1.32	26.58	1.08
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	0.07±0.004	0.11±0.015	0.65±0.01	0.39±0.09	0.07±0.02	1.55±0.32	33.89±6.18	1.89±0.83
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	0.06	0.11	0.56	0.30	0.09	2.30	35.89	1.72
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	0.06	0.10	0.50	0.29	0.08	1.27	37.11	2.40
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	0.06±0.016	0.11±0.014	0.53±0.09	0.29±0.04	0.08±0.017	1.68±0.51	34.24±4.37	2.24±0.65
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	0.04	0.10	0.46	0.35	0.06	1.11	27.83	2.55
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	0.04	0.12	0.54	0.34	0.09	2.29	30.99	1.49
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	0.06±0.012	0.10±0.017	0.46±0.01	0.28±0.03	0.07±0.016	1.36±0.14	38.99±0.97	1.83±0.96
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	0.07±0.017	0.11±0.008	0.51±0.02	0.32±0.07	0.07±0.027	1.91±0.63	32.48±9.70	2.01±0.78
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	0.04	0.11	0.44	0.29	0.10	2.14	30.87	1.53
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	0.08	0.09	0.53	0.34	0.10	3.57	27.70	1.95
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	0.04±0.012	0.10±0.010	0.57±0.05	0.30±0.04	0.07±0.025	2.16±0.36	38.27±3.60	1.97±1.44
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	0.04±0.007	0.10±0.012	0.53±0.08	0.26±0.08	0.09±0.023	2.54±0.64	34.32±5.55	2.53±1.07
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	0.06±0.015	0.10±0.014	0.55±0.09	0.29±0.04	0.07±0.012	1.77±0.44	33.44±4.68	2.21±0.86
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	0.05	0.11	0.53	0.32	0.08	1.93	32.60	1.38
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	0.06±0.016	0.11±0.011	0.53±0.08	0.31±0.06	0.07±0.016	1.76±0.58	33.93±5.33	2.09±0.85
D032	Broad beans (<i>Vicia faba</i>)	3	0.12±0.01	0.10±0.03	0.76±0.00	0.45±0.03	0.23±0.01	10.03±0.75	20.46±0.04	10.98±0.97
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	0.05±0.007	0.03±0.011	0.56±0.05	0.21±0.03	0.15±0.011	4.59±0.46	51.85±3.38	123±7.8
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	0.10±0.042	0.03±0.014	0.66±0.21	0.25±0.03	0.24±0.007	5.47±0.98	62.54±2.15	112±5.5

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			← mg →				← µg →			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	0.14±0.012	0.02±0.009	0.59±0.20	0.21±0.02	0.25±0.040	6.33±0.85	66.15±2.56	127±12.5
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	0.04±0.003	0.07±0.007	0.31±0.02	0.62±0.09	0.13±0.020	2.47±0.29	45.95±2.95	47.14±7.47
D037	Celery stalk (<i>Apium graveolens</i>)	3	0.03±0.007	0.04±0.008	0.48±0.05	0.42±0.02	0.06±0.010	2.09±0.08	22.48±1.33	12.30±2.89
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	0.01±0.000	0.03±0.003	0.23±0.02	0.21±0.01	0.07±0.015	1.06±0.03	63.03±9.04	20.21±5.48
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	0.05±0.006	0.03±0.005	0.71±0.05	0.35±0.03	0.12±0.008	5.35±0.70	41.24±4.35	17.96±5.83
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	0.02	0.04	0.16	0.47	0.06	3.80	30.88	5.15
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	0.02±0.004	0.03±0.013	0.22±0.03	0.50±0.12	0.07±0.007	3.46±0.37	25.32±3.00	5.83±1.28
D042	Corn, baby (<i>Zea mays</i>)	6	0.15±0.054	0.07±0.032	0.53±0.07	0.94±0.16	0.16±0.046	0.79±0.08	45.53±11.69	8.59±1.48
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	0.02±0.003	0.01±0.000	0.35±0.04	0.45±0.04	0.06±0.013	2.82±0.47	16.84±3.17	6.11±1.49
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	0.02±0.005	0.01±0.000	0.35±0.04	0.32±0.06	0.07±0.008	2.97±0.73	14.67±1.24	6.21±2.14
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	0.02	0.01	0.36	0.34	0.04	3.13	18.77	6.24
D046	Drumstick (<i>Moringa oleifera</i>)	6	0.04±0.002	0.07±0.007	0.62±0.03	0.57±0.07	0.12±0.011	4.29±0.43	62.75±6.71	71.86±19.13
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	0.07	0.07	0.32	0.41	0.42	4.11	123	5.99
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	0.08±0.006	0.07±0.007	0.33±0.02	0.35±0.03	0.38±0.069	4.11±0.36	127±28.9	3.84±1.24
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	0.04±0.005	0.06±0.004	0.83±0.03	0.28±0.01	0.37±0.053	4.71±0.25	47.45±8.98	15.81±4.23
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	0.05	0.05	0.77	0.27	0.44	5.93	61.98	1.38
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	0.05±0.014	0.05±0.010	0.19±0.02	0.37±0.02	0.04±0.005	4.37±0.14	35.73±5.62	17.51±6.00
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	0.06±0.010	0.03±0.008	0.19±0.02	0.36±0.01	0.08±0.005	4.10±0.31	54.58±12.31	9.68±6.44
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	0.04±0.012	0.06±0.014	0.37±0.02	0.38±0.03	0.19±0.033	2.46±0.11	14.76±1.64	64.70±10.78
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	0.04±0.004	0.02±0.002	0.55±0.03	0.27±0.03	0.08±0.012	2.96±0.33	48.68±5.10	17.62±7.24
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	0.04	0.02	0.51	0.28	0.05	2.87	50.13	21.08

Table 2. Water Soluble Vitamins

40

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin	Total Folates	Total Ascorbic Acid
			(B1)	(B2)	(B3)			(B7)	(B9)	
			← mg →	← mg →	← mg →	← μg →	mg			
THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC			
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	0.04±0.005	0.07±0.009	0.61±0.01	0.28±0.04	0.27±0.027	1.58±0.33	63.68±10.76	22.51±1.60
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	0.02±0.003	0.02±0.001	0.26±0.02	0.13±0.02	0.13±0.013	1.41±0.16	25.86±7.38	90.24±10.47
D058	Onion, stalk (<i>Allium cepa</i>)	6	0.03±0.020	0.05±0.014	0.14±0.02	0.19±0.05	0.17±0.052	6.99±2.48	57.61±11.87	27.23±4.22
D059	Papaya, raw (<i>Carica papaya</i>)	6	0.02±0.004	0.03±0.007	0.12±0.01	0.24±0.04	0.03±0.008	1.24±0.20	29.79±2.21	20.73±2.35
D060	Parwar (<i>Trichosanthes dioica</i>)	6	0.05±0.007	0.05±0.011	0.67±0.04	0.25±0.05	0.20±0.019	9.86±0.74	19.96±1.76	19.24±6.61
D061	Peas, fresh (<i>Pisum sativum</i>)	6	0.27±0.027	0.03±0.004	1.28±0.03	0.68±0.13	0.19±0.020	4.04±0.33	54.77±12.01	38.40±6.42
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	0.02±0.005	0.02±0.005	0.28±0.03	0.35±0.07	0.13±0.009	2.44±0.25	49.27±7.30	6.49±1.15
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	0.01±0.001	0.05±0.005	0.33±0.04	0.26±0.02	0.10±0.006	0.60±0.05	18.96±1.29	23.28±2.40
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	0.02±0.003	0.02±0.004	0.18±0.02	0.24±0.09	0.14±0.01	4.42±0.41	12.85±2.18	3.77±2.74
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	0.03	0.02	0.44	0.16	0.05	1.41	31.60	7.29
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	0.03±0.005	0.03±0.003	0.41±0.01	0.18±0.01	0.08±0.015	1.63±0.26	24.14±3.70	8.04±0.87
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	0.23	0.09	2.14	0.71	0.30	2.91	94.21	15.13
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	0.02±0.003	0.01±0.002	0.20±0.01	0.28±0.04	0.07±0.005	2.27±0.18	29.26±3.12	5.42±1.06
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	0.02±0.004	0.01±0.001	0.21±0.01	0.25±0.02	0.09±0.007	2.22±0.29	27.36±2.98	8.10±2.67
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	0.03±0.003	0.03±0.002	0.34±0.02	0.27±0.03	0.10±0.017	2.50±0.30	18.34±1.87	2.72±1.15
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	0.03	0.03	0.33	0.27	0.07	2.43	16.52	2.85
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	0.03	0.02	0.33	0.31	0.06	2.50	17.74	2.30
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	0.02±0.000	0.03±0.005	0.56±0.02	0.39±0.03	0.06±0.008	3.26±0.72	43.23±5.74	14.20±0.88
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	0.08±0.043	0.05±0.043	0.46±0.16	0.30±0.12	0.07±0.024	4.74±1.99	12.51±4.01	16.41±2.52
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	0.04±0.004	0.02±0.007	0.51±0.02	0.18±0.01	0.08±0.006	1.09±0.10	15.41±2.70	25.27±3.52
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	0.03±0.004	0.03±0.004	0.52±0.01	0.20±0.03	0.09±0.005	1.18±0.11	19.46±2.99	27.47±1.77

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			← mg →				← µg →			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	0.05	0.09	1.03	0.99	0.25	1.02	18.85	15.78
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	0.03	0.02	0.42	0.72	0.20	1.13	21.50	16.71
E FRUITS										
E001	Apple, big (<i>Malus domestica</i>)	6	0.03±0.017	0.01±0.011	0.25±0.07	0.09±0.04	0.04±0.027	0.34±0.08	3.04±0.94	3.57±0.58
E002	Apple, green (<i>Malus domestica</i>)	6	0.01±0.023	0.02±0.016	0.21±0.06	0.12±0.04	0.08±0.016	0.41±0.09	3.43±0.68	2.90±0.32
E003	Apple, small (<i>Malus domestica</i>)	6	0.01±0.001	0.01±0.000	0.09±0.01	0.09±0.01	0.03±0.004	0.47±0.06	3.52±0.37	4.00±0.72
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	0.01	0.01	0.09	0.12	0.04	0.44	3.97	4.24
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	0.04±0.011	0.04±0.006	1.66±0.12	0.62±0.13	0.10±0.005	1.47±0.21	10.50±1.59	0.42±0.14
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	0.25±0.011	0.04±0.007	1.07±0.07	0.25±0.02	0.17±0.011	1.55±0.27	5.42±0.98	7.98±1.75
E007	Avocado fruit (<i>Persea</i> sp.)	1	0.07	0.08	0.90	1.26	0.18	1.25	67.17	9.36
E008	Bael fruit (<i>Aegle marmelos</i>)	1	0.03	0.04	0.25	1.62	0.03	1.14	55.22	7.50
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	0.01	0.04	0.48	0.35	0.51	1.54	17.93	8.06
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	0.01	0.03	0.43	0.40	0.50	1.79	19.95	6.74
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	0.01	0.02	0.46	0.41	0.45	1.35	18.92	6.74
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	0.01±0.000	0.03±0.005	0.47±0.04	0.36±0.03	0.44±0.045	1.69±0.07	16.81±1.95	4.76±1.34
E013	Black berry (<i>Rubus</i> sp.)	5	0.01±0.002	0.02±0.005	0.40±0.09	0.21±0.12	0.05±0.011	1.65±0.19	22.95±1.38	19.45±1.54
E014	Cherries, red (<i>Prunus cerasus</i>)	4	0.07±0.006	0.02±0.004	0.19±0.01	0.23±0.03	0.04±0.005	1.52±0.25	4.92±1.30	8.82±0.57
E015	Currants, black (<i>Ribes nigrum</i>)	1	0.03	0.03	0.35	0.28	0.09	2.41	8.48	182
E016	Custard apple (<i>Annona squamosa</i>)	1	0.13	0.09	0.69	0.19	0.07	0.76	7.60	21.51

Table 2. Water Soluble Vitamins

Table 2. Water Soluble Vitamins

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			(B1)	(B2)	(B3)			← μg →	mg	
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	0.03±0.012	0.03±0.008	1.47±0.07	0.51±0.07	0.14±0.009	0.82±0.11	18.65±1.39	4.42±0.54
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	0.02	0.03	1.09	0.53	0.153	0.94	12.80	3.84
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	0.05	0.02	0.51	0.52	0.06	2.50	24.53	15.51
E020	Fig (<i>Ficus carica</i>)	6	0.04±0.020	0.02±0.008	0.27±0.08	0.26±0.08	0.15±0.016	2.64±1.09	13.67±3.81	16.92±4.26
E021	Gooseberry (<i>Emblica officinalis</i>)	5	0.01±0.009	0.03±0.012	0.12±0.02	0.35±0.04	0.27±0.054	1.42±0.35	7.86±1.27	252±30.4
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	0.03±0.009	0.03±0.005	0.14±0.03	0.07±0.00	0.11±0.020	1.14±0.22	8.69±1.60	18.30±2.32
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	0.03±0.005	0.02±0.004	0.13±0.02	0.07±0.01	0.09±0.015	1.08±0.15	8.35±0.75	17.10±5.63
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	0.04±0.027	0.03±0.018	0.10±0.03	0.11±0.03	0.10±0.017	1.09±0.27	7.49±1.15	20.59±3.45
42	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	0.03±0.021	0.02±0.015	0.15±0.04	0.11±0.04	0.11±0.011	0.97±0.11	7.22±1.23	27.32±5.18
	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	0.04±0.023	0.03±0.019	0.12±0.04	0.10±0.04	0.08±0.015	1.20±0.20	8.31±1.46	16.47±2.06
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	0.03±0.019	0.03±0.029	0.13±0.05	0.11±0.03	0.08±0.011	1.27±0.23	8.89±2.54	22.79±3.45
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	0.05±0.006	0.04±0.008	0.60±0.04	0.25±0.02	0.11±0.014	0.74±0.13	29.76±0.66	214±13.6
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	0.03±0.010	0.03±0.005	0.59±0.07	0.20±0.03	0.16±0.027	1.25±0.23	32.17±2.69	222±27.0
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	0.05±0.004	0.01±0.004	0.42±0.08	0.16±0.01	0.22±0.010	4.00±0.37	32.15±2.27	6.73±1.59
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	0.02	0.02	0.14	0.31	0.03	2.57	7.63	16.47
E032	Karonda fruit (<i>Carissa carandas</i>)	1	0.01	0.02	0.25	0.67	0.08	1.55	8.72	135
E033	Lemon, juice (<i>Citrus limon</i>)	6	0.04±0.007	0.01±0.000	0.10±0.01	0.12±0.01	0.03±0.004	1.92±0.14	12.43±1.85	48.16±4.35
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	0.06±0.005	0.01±0.003	0.17±0.02	0.25±0.03	0.05±0.013	2.23±0.23	15.38±4.15	46.96±7.64
E035	Litchi (<i>Litchi chinensis</i>)	4	0.02±0.003	0.06±0.008	0.23±0.02	0.19±0.10	0.07±0.010	2.80±0.34	15.69±5.09	33.82±5.24
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	0.03±0.005	0.04±0.004	0.26±0.03	0.12±0.02	0.12±0.02	1.60±0.11	82.05±7.90	32.97±7.14

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid	
			← mg →				← µg →				
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC	
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	0.03	0.04	0.23	0.11	0.13	1.01	84.35	27.65	
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	0.03±0.005	0.03±0.004	0.27±0.04	0.11±0.00	0.10±0.030	1.46±0.02	90.98±6.12	49.09±23.24	
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	0.03±0.007	0.04±0.006	0.26±0.02	0.11±0.01	0.10±0.014	1.67±0.23	90.43±8.24	29.08±4.61	
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	0.03	0.04	0.23	0.14	0.12	1.02	68.70	29.93	
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	0.03	0.04	0.28	0.10	0.23	1.73	65.28	30.75	
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	0.02	0.05	0.27	0.13	0.12	1.64	77.69	25.26	
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	0.01	0.01	0.58	0.15	0.18	0.81	13.52	26.33	
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	0.18	0.14	0.40	0.18	0.04	0.22	4.24	55.78	
43	E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	0.01±0.000	0.01±0.003	0.41±0.05	0.13±0.02	0.05±0.005	0.75±0.18	22.31±2.48	22.76±3.42
	E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	0.01±0.018	0.02±0.013	0.43±0.08	0.11±0.03	0.06±0.015	0.80±0.08	20.23±5.16	21.32±1.19
	E047	Orange, pulp (<i>Citrus aurantium</i>)	6	0.07±0.009	0.02±0.005	0.28±0.04	0.20±0.05	0.04±0.003	2.88±0.42	19.46±1.09	42.72±4.81
	E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	0.01		0.46	0.13	0.07	2.49	24.40	0.25
	E049	Papaya, ripe (<i>Carica papaya</i>)	6	0.03±0.009	0.11±0.008	0.33±0.03	0.44±0.07	0.04±0.003	3.05±0.27	60.90±6.64	43.09±7.02
	E050	Peach (<i>Prunus communis</i>)	1	0.02	0.02	0.29	0.15	0.10	1.43	6.34	5.49
Table 2. Water Soluble Vitamins	E051	Pear (<i>Pyrus sp.</i>)	6	0.02±0.005	0.02±0.008	0.13±0.03	0.05±0.01	0.09±0.015	1.41±0.27	5.28±1.17	3.31±0.90
	E052	Phalsa (<i>Grewia asiatica</i>)	2	0.03	0.06	0.40	0.17	0.03	1.49	22.56	5.11
	E053	Pineapple (<i>Ananas comosus</i>)	6	0.05±0.007	0.03±0.011	0.12±0.02	0.13±0.02	0.13±0.015	1.05±0.23	18.21±1.65	36.37±3.65
	E054	Plum (<i>Prunus domestica</i>)	3	0.02±0.011	0.02±0.001	0.44±0.02	0.16±0.05	0.05±0.007	0.30±0.17	14.29±1.96	2.26±0.00
	E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	0.06±0.005	0.01±0.004	0.20±0.03	0.42±0.04	0.29±0.032	0.60±0.09	38.64±2.93	12.69±1.36
	E056	Pummelo (<i>Citrus maxima</i>)	3	0.06±0.045	0.02±0.011	0.23±0.08	0.05±0.03	0.04±0.011	1.81±0.30	13.44±1.47	48.89±1.52

Table 2. Water Soluble Vitamins

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			← mg →				← µg →			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	0.09±0.013	0.04±0.017	0.48±0.04	0.21±0.05	0.17±0.020	0.73±0.11	38.30±4.98	2.05±0.14
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	0.09±0.012	0.04±0.006	0.64±0.05	0.18±0.06	0.17±0.03	0.75±0.14	34.68±4.36	1.85±0.27
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	0.11	0.01	0.26	0.14	0.04	0.64	7.35	65.00
E060	Sapota (<i>Achras sapota</i>)	6	0.01±0.001	0.03±0.005	0.24±0.02	0.24±0.02	0.12±0.019	1.48±0.31	10.83±1.91	20.96±4.62
E061	Soursop (<i>Annona muricata</i>)	1	0.03	0.04	0.85	0.12	0.03	0.23	6.09	59.54
E062	Star fruit (<i>Averrhoa carambola</i>)	1	0.08	0.02	0.34	0.26	0.06	0.13	8.43	33.55
E063	Strawberry (<i>Fragaria x ananassa</i>)	1	0.06±0.063	0.01±0.003	0.48±0.11	0.18±0.06	0.09±0.026	0.07±0.04	8.91±3.84	50.20±4.97
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	0.34±0.039	0.07±0.004	1.56±0.16	0.17±0.02	0.08±0.013	0.66±0.04	9.79±0.80	3.62±0.85
44	E065 Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	0.02±0.004	0.02±0.003	0.28±0.03	0.19±0.01	0.10±0.019	0.59±0.06	5.88±0.55	13.26±2.66
	E066 Water melon, pale green (<i>Citrullus vulgaris</i>)	6	0.02±0.003	0.02±0.002	0.30±0.04	0.19±0.00	0.07±0.025	0.57±0.06	5.55±1.61	11.45±2.09
E067	Wood Apple (<i>Limonia acidissima</i>)	3	0.04±0.009	0.01±0.001	0.55±0.05	0.22±0.02	0.17±0.021	1.65±0.14	6.51±0.44	22.17±7.49
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	0.01	0.02	0.33	0.14	0.11	2.22	5.99	60.93

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	0.01±0.001	0.01±0.002	0.21±0.01	0.26±0.04	0.07±0.011	2.56±0.19	97.37±7.06	5.26±0.85
F002	Carrot, orange (<i>Daucus carota</i>)	6	0.04±0.003	0.03±0.003	0.22±0.02	0.30±0.03	0.11±0.016	1.50±0.23	24.04±2.07	6.22±1.99
F003	Carrot, red (<i>Daucus carota</i>)	4	0.04±0.017	0.03±0.016	0.25±0.05	0.27±0.04	0.07±0.012	1.30±0.14	23.67±3.25	6.76±1.56
F004	Colocasia (<i>Colocasia esculenta</i>)	6	0.06±0.007	0.03±0.002	0.51±0.09	0.12±0.02	0.17±0.038	3.69±0.22	19.91±2.90	1.83±0.64
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	0.07±0.008	0.05±0.023	0.43±0.05	0.20±0.02	0.19±0.017	2.85±0.32	26.49±6.85	26.63±7.02
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	0.06±0.004	0.01±0.001	1.04±0.14	0.38±0.06	0.10±0.008	1.35±0.17	15.51±1.66	23.15±3.98

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid	
			← mg →				← µg →				
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC	
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	0.05	0.01	1.36	0.49	0.12	1.82	13.85	26.41	
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	0.06	0.01	1.13	0.39	0.10	1.68	17.83	25.04	
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	0.03±0.007	0.02±0.004	0.31±0.02	0.13±0.01	0.07±0.002	2.65±0.07	24.65±5.84	17.63±3.89	
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	0.02±0.004	0.02±0.003	0.30±0.03	0.15±0.03	0.07±0.008	2.48±0.21	29.75±8.30	19.91±5.69	
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	0.03	0.02	0.30	0.18	0.07	2.92	24.59	15.69	
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	0.03	0.02	0.24	0.15	0.07	2.59	22.60	14.00	
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	0.07±0.085	0.04±0.012	0.67±0.09	0.89±0.10	0.12±0.006	5.19±0.78	15.62±2.13	17.94±1.40	
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	0.06±0.012	0.04±0.001	0.69±0.12	0.56±0.34	0.09±0.007	5.71±0.28	14.44±2.06	22.20±2.32	
45	F015	Tapioca (<i>Manihot esculenta</i>)	3	0.07±0.003	0.02±0.001	0.45±0.01	0.17±0.05	0.09±0.006	1.93±0.09	25.64±0.47	15.51±3.19
	F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	0.02	0.02	0.74	0.52	0.13	1.08	9.80	5.26
	F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	0.04±0.004	0.05±0.017	0.61±0.10	0.23±0.03	0.22±0.044	4.51±0.37	20.54±2.42	15.22±1.84
	F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	0.04±0.003	0.02±0.006	0.56±0.06	0.32±0.04	0.17±0.06	4.19±0.41	15.68±1.61	13.88±3.43
	F019	Yam, wild (<i>Dioscorea villosa</i>)	2	0.121	0.015	0.70	0.23	0.20	4.09	21.01	14.06

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	0.11±0.029	0.09±0.024	0.80±0.09	0.19±0.03	0.45±0.043	0.50±0.13	25.31±2.47	79.50±5.94
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	0.08±0.009	0.09±0.042	0.93±0.16	0.20±0.03	0.29±0.048	0.64±0.12	25.93±5.56	90.97±9.19
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	0.09±0.035	0.11±0.034	0.87±0.17	0.24±0.13	0.24±0.030	0.64±0.05	20.45±1.69	93.63±9.46
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	0.09±0.057	0.12±0.025	0.90±0.07	0.23±0.05	0.18±0.029	0.62±0.08	15.92±1.13	102±6.1
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	0.08±0.047	0.16±0.031	1.06±0.08	0.20±0.03	0.20±0.025	0.57±0.05	17.75±2.38	97.77±4.28

Table 2. Water Soluble Vitamins

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			← mg →				← µg →			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1	0.07	0.13	0.92	0.27	0.29	0.73	18.87	108
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1	0.08	0.11	0.80	0.24	0.22	1.21	19.39	112
G008	Chillies, green - all varieties (<i>Capsicum annuum</i>)	6	0.09±0.033	0.11±0.038	0.89±0.15	0.22±0.06	0.28±0.100	0.63±0.16	21.50±4.83	94.07±11.67
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	0.09±0.005	0.05±0.004	0.73±0.03	0.63±0.07	0.19±0.025	4.17±0.89	51.01±3.98	23.87±7.33
G010	Curry leaves (<i>Murraya koenigii</i>)	6	0.07±0.016	0.13±0.008	0.85±0.10	0.51±0.04	0.57±0.096	1.77±0.22	117±19.3	6.04±1.36
G011	Garlic, big clove (<i>Allium sativum</i>)	6	0.20±0.029	0.25±0.026	0.38±0.05	1.57±0.16	0.56±0.039	2.55±0.34	85.77±15.61	12.62±1.15
G012	Garlic, small clove (<i>Allium sativum</i>)	3	0.20±0.023	0.23±0.015	0.36±0.04	1.51±0.35	0.77±0.112	2.54±0.21	78.82±22.76	13.57±0.70
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	0.25	0.22	0.42	1.86	0.97	2.85	92.25	15.38
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	0.04±0.005	0.04±0.003	0.42±0.05	0.24±0.02	0.20±0.025	1.07±0.15	10.82±1.61	5.43±1.22
G015	Mango ginger (<i>Curcuma amada</i>)	3	0.02±0.001	0.07±0.015	0.45±0.01	0.26±0.02	0.18±0.010	1.49±0.49	22.62±0.48	1.62±0.30
G016	Mint leaves (<i>Mentha spicata</i>)	4	0.02±0.005	0.19±0.029	0.74±0.23	0.34±0.09	0.17±0.028	2.21±0.43	106±6.3	17.16±6.75
G017	Onion, big (<i>Allium cepa</i>)	6	0.04±0.005	0.01±0.001	0.34±0.10	0.30±0.05	0.10±0.014	2.61±0.19	28.88±2.85	6.69±0.63
G018	Onion, small (<i>Allium cepa</i>)	5	0.07±0.012	0.02±0.004	0.21±0.01	0.14±0.01	0.12±0.009	2.69±0.63	29.68±1.98	10.96±2.00

G CONDIMENTS AND SPICES-DRY

G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	0.82±0.037	0.01±0.006	0.43±0.05	0.14±0.03	0.02±0.003	2.27±0.34	26.28±4.12
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	0.12±0.016	0.07±0.013	1.13±0.13	0.27±0.05	0.15±0.007	4.94±0.39	2.85±1.05
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	0.05±0.015	0.13±0.047	0.52±0.11	0.27±0.08	0.20±0.021	4.76±0.88	4.96±1.62
G022	Chillies, red (<i>Capsicum annuum</i>)	6	0.46±0.036	0.83±0.009	6.94±0.55	0.57±0.09	0.42±0.009	0.92±0.04	51.50±2.87
G023	Cloves (<i>Syzygium aromaticum</i>)	6	0.53±0.122	0.22±0.022	1.15±0.12	0.36±0.03	0.03±0.003	2.41±0.23	32.81±1.90

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			← mg →				← µg →			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	0.19±0.018	0.23±0.022	1.20±0.16	0.28±0.02	0.04±0.002	1.46±0.34	22.07±4.23	
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	0.52±0.055	0.13±0.022	2.87±0.38	0.22±0.01	0.39±0.010	1.20±0.22	27.79±2.55	
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	0.28±0.029	0.14±0.026	1.19±0.10	0.27±0.03	0.77±0.128	1.54±0.29	51.11±4.69	
G027	Mace (<i>Myristica fragrans</i>)	6	0.13±0.020	0.13±0.033	0.92±0.11	0.35±0.05	0.30±0.041	1.80±0.27	32.65±2.63	
G028	Nutmeg (<i>Myristica fragrans</i>)	6	0.04±0.015	0.05±0.011	0.51±0.06	0.33±0.06	0.10±0.008	1.59±0.27	74.78±6.70	
G029	Omum (<i>Trachyspermum ammi</i>)	6	0.30±0.032	0.23±0.024	1.23±0.19	0.22±0.04	0.24±0.006	1.78±0.30	51.79±1.08	
G030	Pippali (<i>Piper longum</i>)	6	0.06±0.011	0.14±0.030	1.06±0.11	0.23±0.04	0.60±0.051	2.34±0.37	66.45±15.02	
G031	Pepper, black (<i>Piper nigrum</i>)	6	0.06±0.012	0.09±0.013	0.85±0.02	0.30±0.03	0.27±0.013	3.49±0.38	21.89±2.08	
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	0.87±0.081	0.10±0.013	0.77±0.10	0.32±0.04	0.42±0.012	3.25±0.18	78.73±7.90	
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	0.06±0.004	0.01±0.000	1.55±0.10	0.13±0.02	0.13±0.006	0.76±0.14	13.86±2.38	

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6	0.15±0.024	0.26±0.046	3.71±0.24	0.73±0.09	0.09±0.005	2.39±0.35	36.46±5.67	0.74±0.07
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	0.04±0.012	0.03±0.008	0.71±0.07	0.12±0.01	0.32±0.024	1.66±0.16	7.54±0.86	
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	0.03±0.007	0.24±0.025	0.80±0.02	0.08±0.01	0.21±0.034	2.94±0.17	8.57±0.46	
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	0.038	0.031	0.74	0.21	0.25	1.70	26.51	
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	0.61±0.042	0.03±0.017	1.03±0.06	1.40±0.19	0.16±0.010	2.58±0.33	25.20±5.11	
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	0.04±0.005	0.04±0.015	0.71±0.11	0.21±0.01	0.15±0.008	1.01±0.07	24.27±3.16	
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	0.03±0.003	0.08±0.006	0.30±0.02	0.21±0.02	0.10±0.008	0.63±0.04	25.41±2.66	0.80±0.24
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	0.52±0.023	0.15±0.004	5.67±0.06	0.28±0.03	0.05±0.008	8.66±0.62	30.92±6.34	
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	0.34±0.027	0.10±0.009	3.12±0.26	0.49±0.07	0.64±0.034	3.06±0.39	127±11.8	

Table 2. Water Soluble Vitamins

Food code	Food Name	No. of Regions	Thiamine	Riboflavin	Niacin	Pantothenic Acid (B5)	Total B6	Biotin	Total Folates	Total Ascorbic Acid
			(B1)	(B2)	(B3)			(B7)	(B9)	
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
	H010 Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	0.27±0.025	0.08±0.009	3.05±0.45	0.49±0.04	0.49±0.033	3.48±0.24	92.63±5.90	
	H011 Gingelly seeds, white (<i>Sesamum indicum</i>)	5	0.36±0.047	0.07±0.009	3.94±0.14	0.48±0.04	0.62±0.029	3.46±0.46	131±4.3	
	H012 Ground nut (<i>Arachis hypogaea</i>)	6	0.57±0.052	0.12±0.017	11.35±0.36	1.01±0.03	0.23±0.023	1.61±0.22	90.87±4.80	
	H013 Mustard seeds (<i>Brassica nigra</i>)	6	0.55±0.065	0.33±0.010	3.80±0.41	0.48±0.04	0.24±0.019	1.45±0.36	94.88±4.67	
	H014 Linseeds (<i>Linum usitatissimum</i>)	6	0.28±0.018	0.05±0.001	1.09±0.05	0.37±0.03	0.35±0.020	21.25±0.49	86.50±2.75	
	H015 Niger seeds, black (<i>Guizotia abyssinica</i>)	4	0.46±0.043	0.23±0.031	1.14±0.09	0.49±0.03	0.45±0.061	2.37±0.11	140±29.3	
	H016 Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	0.38±0.064	0.35±0.042	0.88±0.15	0.46±0.03	0.34±0.025	2.40±0.29	73.13±4.56	
	H017 Pine seed (<i>Pinus</i> sp.)	5	0.36±0.051	0.08±0.004	3.52±0.05	0.50±0.03	0.11±0.004	18.46±0.62	31.64±2.70	
	H018 Pistachio nuts (<i>Pistacia vera</i>)	6	0.98±0.144	0.04±0.002	0.86±0.01	0.58±0.03	0.96±0.029	11.82±2.20	64.90±7.22	
48	H019 Safflower seeds (<i>Carthamus tinctorius</i>)	5	0.85±0.019	0.15±0.006	1.12±0.02	0.89±0.05	0.93±0.072	17.37±2.17	82.41±1.80	
	H020 Sunflower seeds (<i>Helianthus annuus</i>)	5	0.59±0.064	0.13±0.027	1.60±0.27	0.97±0.05	0.94±0.150	2.44±0.18	81.79±21.37	
	H021 Walnut (<i>Juglans regia</i>)	6	0.40±0.020	0.12±0.006	0.86±0.03	0.84±0.03	0.80±0.072	13.05±1.48	57.95±9.72	0.88±0.10
	I SUGARS									
	I001 Jaggery, cane (<i>Saccharum officinarum</i>)	6	0.04±0.006	0.01±0.000	0.02±0.00	0.23±0.01	0.71±0.084	0.58±0.06	14.40±2.40	
	I002 Sugarcane, juice (<i>Saccharum officinarum</i>)	6	0.03±0.003	0.04±0.004	0.14±0.02	0.07±0.01	0.40±0.089	0.59±0.06	44.53±4.14	6.73±1.56
	J MUSHROOMS									
	J001 Button mushroom, fresh (<i>Agaricus</i> sp.)	1	0.01	0.03	0.68	0.43	0.12	9.23	8.28	
	J002 Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1	0.37	0.06	1.45	1.48	0.11	8.94	11.13	0.45
	J003 Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	0.05	0.16	1.92	2.04	0.45	10.60	10.92	
	J004 Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	0.24	0.17	3.77	2.33	0.85	22.51	10.40	

Food code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	Total Ascorbic Acid
			← mg →				← μg →			
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	VITC
K MISCELLANEOUS FOODS										
K001	Toddy (<i>Borassus flabellifer</i>)	10	0.01±0.002	0.27±0.048	0.35±0.05	0.08±0.02	0.03±0.014	1.96±0.28	0.73±0.11	0.92±0.25
K002	Coconut Water (<i>Cocos nucifera</i>)	6	0.01±0.000	0.01±0.000	0.04±0.01	0.26±0.02	0.06±0.006	0.21±0.02	10.88±1.86	0.64±0.11
L MILK AND MILK PRODUCTS										
L001	Milk, whole, Buffalo	6	0.05±0.006	0.13±0.031	0.07±0.01	0.38±0.03	0.04±0.004	2.16±0.19	8.57±0.44	2.37±0.19
L002	Milk, whole, Cow	6	0.03±0.006	0.11±0.019	0.08±0.01	0.34±0.01	0.04±0.007	1.98±0.13	7.03±0.39	2.01±0.28
L003	Paneer	6	0.02±0.000	0.10±0.019	0.13±0.03	0.49±0.01	0.04±0.006	21.04±0.57	93.31±14.37	
L004	Khoa	6	0.11±0.013	0.11±0.005	0.43±0.03	0.33±0.01	0.06±0.006	20.39±0.86	94.25±8.57	

Table 2. Water Soluble Vitamins

Food Code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	
			< mg >		< µg >		< µg >		< µg >	
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	
M EGG AND EGG PRODUCTS										
M001	Egg, poultry, whole, raw	6	0.06±0.01	0.19±0.01	0.11±0.01	1.47±0.04	0.16±0.02	18.24±1.33	49.32±2.35	
M002	Egg, poultry, white, raw	6	0.02±0.01	0.16±0.01	0.01±0.00	1.35±0.17		4.36±0.84	4.96±0.39	
M003	Egg, poultry, yolk, raw	6	0.11±0.01	0.16±0.01	0.69±0.03	2.78±0.05	0.29±0.02	65.22±5.01	112±6.1	
M004	Egg, poultry, whole, boiled	6	0.06±0.01	0.18±0.01	0.21±0.01	1.42±0.03	0.14±0.01	15.36±1.41	48.25±2.37	
M005	Egg, poultry, white, boiled	6	0.02±0.01	0.18±0.01	0.01±0.00	0.18±0.00		4.37±0.27	4.10±0.21	
M006	Egg, poultry, yolk, boiled	6	0.17±0.01	0.15±0.01	0.45±0.02	2.57±0.10	0.27±0.02	58.43±6.73	110±6.1	
M007	Egg, poultry, omlet	3	0.11±0.02	0.20±0.00	0.33±0.01	2.06±0.04	0.14±0.01	17.13±2.25	37.66±1.03	
M008	Egg, country hen, whole, raw	1	0.14	0.08	0.14	1.03	0.18	19.35	54.60	
M009	Egg, country hen, whole, boiled	1	0.11	0.08	0.12	0.96	0.18	20.15	59.98	
M010	Egg, country hen, omlet	1	0.14	0.07	0.14	0.94	0.18	18.55	58.79	
M011	Egg, duck, whole, boiled	1	0.21	0.07	0.18	1.14	0.15	13.87	73.32	
M012	Egg, duck, whole, raw	1	0.18	0.07	0.13	0.51	0.15	14.52	75.48	
M013	Egg, duck, whole, omlet	1	0.31	0.09	0.14	1.05	0.15	13.81	67.95	
M014	Egg, quail, whole, raw	1	0.15	0.11	0.12	0.93	0.17	18.82	54.86	
M015	Egg, quail, whole, boiled	1	0.11	0.08	0.15	0.81	0.15	16.53	51.72	
N POULTRY										
N001	Chicken, poultry, leg, skinless	4	0.17±0.04	0.13±0.02	5.60±0.96	1.28±0.24	0.33±0.01	4.58±0.71	7.47±0.19	
N002	Chicken, poultry, thigh, skinless	6	0.13±0.01	0.10±0.01	5.62±1.05	1.06±0.46	0.38±0.07	3.86±0.74	9.00±0.62	

Food Code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Biotin (B7)	Total Folates (B9)	
			< mg >		< µg >		< µg >		< µg >	
			THIA	RIBF	NIA	PANTAC	VITB6A	BIOT	FOLSUM	
N003	Chicken, poultry, breast, skinless	5	0.10±0.04	0.06±0.01	8.06±0.87	1.15±0.18	0.53±0.05	4.11±0.49	10.44±0.55	
N004	Chicken, poultry, wing, skinless	5	0.08±0.02	0.07±0.01	6.66±1.00	1.28±0.14	0.39±0.06	3.61±0.55	7.87±0.45	
N005	Poultry, chicken, liver	1	0.28	0.20	4.44	6.39	0.92	4.07	1032	
N006	Poultry, chicken, gizzard	1	0.01	0.11	2.87	0.70	0.14	5.12	8.72	
N007	Country hen, leg, with skin	1	0.17	0.10	2.44	0.73	0.36	4.60	8.10	
N008	Country hen, thigh, with skin	1	0.11	0.13	3.62	0.89	0.42	2.91	10.42	
N009	Country hen, breast, with skin	1	0.11	0.04	5.62	0.81	0.59	3.06	12.98	
N010	Country hen, wing, with skin	1	0.07	0.03	3.19	0.85	0.43	5.13	9.19	
N011	Duck, meat, with skin	1	0.22	0.13	2.24	0.74	0.31	4.27	27.98	
N012	Emu, meat, skinless	1	0.10	0.17	3.26	2.21	0.35	NA	7.07	
N013	Guinea fowl, meat, with skin	1	0.02	0.18	3.64	0.71	0.58	NA	5.69	
N014	Pigeon, meat, with skin	1	0.18	0.39	3.45	0.79	0.48	NA	8.41	
N015	Quail, meat, skinless	1	0.05	0.24	4.69	0.81	0.56	NA	9.33	
N016	Turkey, leg, with skin	1	0.05	0.11	4.92	1.59	0.48	NA	8.55	
N017	Turkey, thigh, with skin	1	0.04	0.12	1.94	1.54	0.51	NA	10.91	
N018	Turkey, breast, with skin	1	0.06	0.10	4.49	1.53	0.56	NA	14.67	
N019	Turkey, wing, with skin	1	0.03	0.09	4.38	1.36	0.45	NA	10.41	

NA-Not Analysed

Table 2. Water Soluble Vitamins

52

Food Code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
			< mg >					
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM
O ANIMAL MEAT								
O001	Goat, shoulder	6	0.07±0.01	0.17±0.01	5.14±0.56	1.07±0.10	0.26±0.03	2.08±0.44
O002	Goat, chops	6	0.05±0.01	0.13±0.01	5.51±0.57	0.98±0.09	0.30±0.02	1.53±0.10
O003	Goat, legs	6	0.07±0.01	0.15±0.04	5.15±0.36	0.99±0.04	0.31±0.02	2.25±0.59
O004	Goat, brain	5	0.13±0.02	0.17±0.02	2.04±0.19	1.52±0.42	0.28±0.04	1.30±0.18
O005	Goat, tongue	4	0.14±0.00	0.22±0.03	3.04±0.24	0.88±0.06	0.17±0.04	2.54±0.18
O006	Goat, lungs	4	0.08±0.01	0.32±0.02	2.79±0.15	0.83±0.11	0.14±0.03	1.80±0.44
O007	Goat, heart	5	0.36±0.02	0.33±0.05	5.97±0.25	1.72±0.20	0.23±0.08	1.63±0.38
O008	Goat, liver	6	0.20±0.04	0.37±0.04	12.88±0.44	7.01±0.11	0.65±0.27	178±34.9
O009	Goat, tripe	5	0.02±0.01	0.10±0.01	0.81±0.14	0.21±0.03	0.20±0.05	2.36±0.30
O010	Goat, spleen	4	0.06±0.01	0.16±0.02	5.20±0.39	6.58±0.12	0.33±0.07	3.30±0.36
O011	Goat, kidneys	4	0.34±0.03	0.34±0.05	5.50±0.17	6.54±0.34	0.40±0.07	68.76±2.10
O012	Goat, tube (small intestine)	3	0.01±0.00	0.11±0.01	0.64±0.14	0.53±0.13	0.21±0.05	1.87±0.10
O013	Goat, testis	2	0.15	0.11	1.72	1.58	0.24	2.01
O014	Sheep, shoulder	5	0.05±0.01	0.18±0.03	4.53±0.41	0.96±0.10	0.15±0.04	3.16±0.17
O015	Sheep, chops	4	0.07±0.01	0.16±0.03	4.94±0.15	1.01±0.10	0.18±0.02	1.61±0.24
O016	Sheep, leg	5	0.08±0.02	0.16±0.02	5.25±0.32	1.04±0.11	0.24±0.04	1.81±0.25
O017	Sheep, brain	1	0.12	0.21	2.66	1.73	0.33	1.86
O018	Sheep, tongue	1	0.15	0.20	2.78	0.35	0.16	2.40
O019	Sheep, lungs	2	0.07	0.23	2.75	0.88	0.02	13.89
O020	Sheep, heart	1	0.34	0.30	5.43	1.66	0.30	2.17

Food Code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
			<	mg	→			μg
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM
O021	Sheep, liver	4	0.17±0.04	0.35±0.02	15.66±0.44	6.95±0.18	0.26±0.05	206±26.8
O022	Sheep, tripe	2	0.02	0.08	0.63	0.20	0.22	1.87
O023	Sheep, spleen	1	0.07	0.23	5.42	6.07	0.27	3.19
O024	Sheep, kidneys	2	0.35	0.31	5.51	6.22	0.51	46.21
O025	Beef, shoulder	6	0.03±0.01	0.12±0.02	5.18±0.21	1.14±0.09	0.48±0.04	8.06±1.30
O026	Beef, chops	4	0.02±0.01	0.06±0.01	4.36±0.17	1.27±0.08	0.34±0.03	5.69±0.82
O027	Beef, round (leg)	6	0.04±0.01	0.06±0.01	6.30±0.26	0.84±0.12	0.44±0.11	2.11±0.28
O028	Beef, brain	4	0.12±0.01	0.13±0.01	1.91±0.48	1.76±0.09	0.25±0.01	5.39±2.10
O029	Beef, tongue	4	0.05±0.01	0.13±0.01	2.93±0.05	0.72±0.03	0.19±0.04	10.81±1.33
O030	Beef, lungs	3	0.09±0.01	0.12±0.02	3.13±0.05	0.85±0.06	0.23±0.01	6.98±0.78
O031	Beef, heart	5	0.24±0.04	0.30±0.05	5.38±0.45	1.55±0.06	0.25±0.07	8.50±1.25
O032	Beef, liver	6	0.17±0.03	0.34±0.05	14.01±0.44	9.32±0.03	0.30±0.05	1744±71.2
O033	Beef, tripe	5	0.03±0.01	0.08±0.03	1.31±0.12	1.09±0.09	0.23±0.07	1.45±0.19
O034	Beef, spleen	6	0.31±0.02	0.25±0.03	7.45±0.43	7.30±0.21	0.26±0.03	3.40±0.88
O035	Beef, kidneys	3	0.26±0.04	0.27±0.05	6.52±0.25	2.05±0.18	0.22±0.02	53.68±4.93
O036	Calf, shoulder	2	0.10	0.20	6.11	0.98	0.50	9.25
O037	Calf, chops	2	0.07	0.17	5.11	0.94	0.37	2.13
O038	Calf, round (leg)	2	0.03	0.17	5.97	0.87	0.41	7.81
O039	Calf, brain	2	0.07	0.19	3.19	1.61	0.30	1.50
O040	Calf, tongue	2	0.11	0.22	4.31	0.79	0.17	5.20
O041	Calf, heart	1	0.26	0.29	5.30	2.29	0.41	9.41

Table 2. Water Soluble Vitamins

54

Food Code	Food Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
			<	mg	→			μg
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM
O042	Calf, liver	1	0.17	0.31	12.98	8.95	0.59	1473
O043	Calf, spleen	1	0.09	0.28	7.61	6.83	0.44	3.58
O044	Calf, kidneys	2	0.32	0.35	4.16	2.49	0.30	33.48
O045	Mithun, shoulder	1	0.04	0.06	6.29	1.31	0.37	1.86
O046	Mithun, chops	1	0.20	0.18	4.76	1.62	0.34	1.90
O047	Mithun, round (leg)	1	0.02	0.05	5.30	1.36	0.29	1.86
O048	Pork, shoulder	6	0.18±0.01	0.10±0.02	4.22±0.43	0.86±0.06	0.41±0.08	6.70±1.09
O049	Pork, chops	6	0.30±0.02	0.11±0.02	4.49±0.30	0.72±0.13	0.36±0.10	7.74±1.03
O050	Pork, ham	6	0.24±0.02	0.10±0.01	4.59±0.68	0.79±0.06	0.25±0.06	1.51±0.21
O051	Pork, lungs	4	0.08±0.02	0.14±0.02	3.11±0.19	1.79±0.20	0.19±0.02	6.36±0.75
O052	Pork, heart	4	0.28±0.03	0.30±0.04	5.13±0.18	1.49±0.15	0.30±0.05	4.73±0.80
O053	Pork, liver	5	0.16±0.02	0.31±0.05	13.76±0.76	7.93±0.20	0.37±0.16	954±88.6
O054	Pork, stomach	1	0.10	0.06	1.90	3.10	0.19	6.87
O055	Pork, spleen	3	0.13±0.02	0.27±0.12	7.80±0.43	4.87±0.34	0.22±0.04	5.92±0.49
O056	Pork, kidneys	5	0.24±0.14	0.37±0.05	6.46±0.38	2.52±0.27	0.16±0.04	59.61±10.30
O057	Pork, tube (small intestine)	1	0.08	0.10	0.90	3.02	0.19	7.84
O058	Hare, shoulder	1	0.07	0.27	5.04	0.70	0.28	2.20
O059	Hare, chops	1	0.07	0.28	4.85	0.61	0.22	3.85
O060	Hare, leg	1	0.08	0.22	5.63	0.64	0.24	1.95
O061	Rabbit, shoulder	1	0.03	0.14	4.38	0.69	0.30	1.80
O062	Rabbit, chops	1	0.02	0.08	7.54	0.73	0.24	2.10
O063	Rabbit, leg	1	0.03	0.10	5.02	0.70	0.26	1.80

Food Code	Fish Name	No. of Regions	Thiamine (B1)	Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)	
			← mg →					μg	
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM	
P MARINE FISH									
P001	Allathi (<i>Elops machnata</i>)	1	0.08	0.04	3.67	0.72	0.19	12.30	
P002	Aluva (<i>Parastromateus niger</i>)	3	0.05±0.01	0.02±0.00	2.35±0.50	0.74±0.12	0.16±0.01	11.32±1.59	
P003	Anchovy (<i>Stolephorus indicus</i>)	2	0.03	0.04	0.91	1.21	0.06	11.70	
P004	Ari fish (<i>Apion virescens</i>)	1	0.06	0.03	3.65	0.23	0.22	6.02	
P005	Betki (<i>Lates calcarifer</i>)	1	0.01	0.04	1.54	0.40	0.09	20.79	
P006	Black snapper (<i>Macolor niger</i>)	1		0.02	2.89	0.54	0.11	17.72	
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	0.03	0.02	0.64	1.48	0.10	27.84	
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	0.05±0.02	0.02±0.00	1.34±1.09	0.64±0.08	0.07±0.02	10.04±0.91	
55	P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	0.05	0.05	1.38	1.24	0.22	11.36
	P010	Chakla (<i>Rachycentron canadum</i>)	5	0.06±0.01	0.04±0.02	2.37±0.75	0.67±0.03	0.10±0.01	5.72±1.07
	P011	Chappal (<i>Aluterus monoceros</i>)	1	0.06	0.02	3.95	0.18	0.18	7.76
	P012	Chelu (<i>Elagatis bipinnulata</i>)	2	0.06	0.02	2.19	1.07	0.16	6.77
	P013	Chembali (<i>Lutjanus quinquelineatus</i>)	1	0.03	0.06	1.80	0.27	0.15	12.21
	P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	0.04	0.03	2.88	0.57	0.19	5.79
	P015	Gobro (<i>Epinephelus diacanthus</i>)	2	0.07	0.02	1.27	0.24	0.04	3.02
	P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	0.03	0.02	2.01	0.15	0.14	15.32
	P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	0.01	0.04	2.85	2.33	0.12	28.75
	P018	Jallal (<i>Arius sp.</i>)	1	0.02	0.02	3.24	0.91	0.09	6.27
	P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	0.12	0.02	2.82	0.29	0.07	8.28
	P020	Kadal bral (<i>Synodus indicus</i>)	1	0.01	0.06	1.76	0.19	0.09	11.78
	P021	Kadali (<i>Nemipterus mesoprion</i>)	1	0.04	0.01	1.86	0.32	0.18	13.17

Table 2. Water Soluble Vitamins

Table 2. Water Soluble Vitamins

Food Code	Fish Name	No. of Regions	Thiamine (B1)		Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
					← mg →				
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM	
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	0.06	0.03	2.22	0.65	0.16	6.57	
P023	Kalava (<i>Epinephelus coioides</i>)	1	0.06	0.05	2.24	0.22	0.13	11.94	
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	0.06	0.01	1.22	1.46	0.08	11.67	
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	0.04±0.02	0.03±0.00	1.81±0.27	1.07±0.07	0.07±0.01	5.61±1.15	
P026	Karimeen (<i>Etorplus suratensis</i>)	1	0.08	0.05	1.15	0.23	0.09	11.99	
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	0.07	0.01	0.98	1.39	0.06	3.77	
P028	Kayrai (<i>Thunnus albacores</i>)	2	0.08	0.07	5.18	1.29	0.26	8.84	
P029	Kirian (<i>Atule mate</i>)	1	0.04	0.13	2.75	1.36	0.12	6.04	
P030	Kite fish (<i>Mobula kuhlii</i>)	1	0.04	0.07	2.50	0.45	0.13	13.34	
P031	Korka (<i>Terapon jarbua</i>)	1	0.03	0.17	3.42	0.40	0.32	7.51	
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	0.06	0.01	1.97	0.57	0.22	6.99	
P033	Maagaa (<i>Polynemus plebeius</i>)	1	0.02	0.01	0.73	0.40	0.11	6.95	
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	0.07±0.02	0.10±0.03	2.67±2.00	1.35±0.08	0.10±0.01	7.13±1.12	
P035	Manda clathi (<i>Naso reticulatus</i>)	1	0.03	0.02	2.77	1.02	0.09	7.38	
P036	Matha (<i>Acanthurus mata</i>)	2	0.05	0.05	2.37	1.40	0.04	11.57	
P037	Milk fish (<i>Chanos chanos</i>)	1	0.05	0.07	5.21	1.03	0.08	11.32	
P038	Moon fish (<i>Mene maculata</i>)	1	0.07	0.07	1.83	1.72	0.14	7.72	
P039	Mullet (<i>Mugil cephalus</i>)	3	0.05±0.02	0.09±0.11	2.52±2.20	1.11±0.06	0.14±0.01	11.89±2.67	
P040	Mural (<i>Tylosurus crocodilus</i>)	1	0.06	0.03	2.65	0.37	0.07	11.46	
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	0.04	0.04	4.41	0.71	0.12	8.08	
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1	0.04	0.01	0.56	0.22	0.08	17.14	
P043	Narba (<i>Caranx sexfasciatus</i>)	2	0.05	0.04	1.51	0.75	0.02	13.03	

Food Code	Fish Name	No. of Regions	Thiamine (B1)		Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
					← mg →				μg
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM	
P044	Paarai (<i>Caranx heberi</i>)	1	0.03	0.02	2.86	0.27	0.17	16.12	
P045	Padayappa (<i>Canthidermis maculata</i>)	1	0.03	0.05	4.53	0.68	0.07	13.37	
P046	Pali kora (<i>Panna microdon</i>)	1	0.03	0.05	0.78	0.43	0.13	8.87	
P047	Pambada (<i>Lepturacanthus savala</i>)	2	0.04	0.03	1.96	0.64	0.08	11.63	
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	0.04	0.02	0.54	0.42	0.26	16.51	
P049	Parava (<i>Lactarius lactarius</i>)	1	0.03	0.03	0.98	0.09	0.15	7.96	
P050	Parcus (<i>Psettodes erumei</i>)	1	0.04	0.02	0.88	0.21	0.20	4.88	
P051	Parrot fish (<i>Scarus ghobban</i>)	1	0.06	0.02	1.89	1.15	0.13	5.56	
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	0.08	0.01	1.48	0.43	0.12	5.11	
57	P053 Phopat (<i>Coryphaena hippurus</i>)	4	0.06±0.02	0.04±0.02	4.28±1.13	1.13±0.06	0.13±0.01	5.02±1.63	
	P054 Piranha (<i>Pygopristis sp.</i>)	1	0.04	0.05	0.97	1.04	0.07	7.74	
	P055 Pomfret, black (<i>Parastromateus niger</i>)	1	0.06	0.02	2.61	0.75	0.08	20.56	
	P056 Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	0.08	0.05	1.94	0.61	0.08	6.51	
	P057 Pomfret, white (<i>Pampus argenteus</i>)	2	0.05	0.03	1.38	1.11	0.13	9.61	
	P058 Pranel (<i>Gerres sp.</i>)	1	0.04	0.13	3.37	0.76	0.12	12.51	
	P059 Pulli paarai (<i>Gnathanodon speciosus</i>)	1	0.05	0.04	1.94	1.13	0.10	13.87	
	P060 Queen fish (<i>Scomberoides commersonianus</i>)	3	0.06±0.02	0.04±0.03	3.24±1.34	0.63±0.04	0.12±0.00	10.73±1.77	
	P061 Raai fish (<i>Lobotes surinamensis</i>)	2	0.07	0.02	1.63	0.31	0.11	16.38	
	P062 Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	0.03	0.01	0.72	0.31	0.11	15.62	
	P063 Rani (Pink perch)	1		0.01	1.33	0.53	0.08	12.17	
	P064 Ray fish, bow head, spotted (<i>Rhina aequipinnata</i>)	1	0.05	0.03	1.99	0.23	0.12	12.44	
	P065 Red snapper (<i>Lutjanus argentimaculatus</i>)	1	0.02	0.02	3.14	0.52	0.07	13.86	

Table 2. Water Soluble Vitamins

Table 2. Water Soluble Vitamins

Food Code	Fish Name	No. of Regions	Thiamine (B1)		Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
					← mg →				
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM	
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	0.06	0.03	3.43	0.96	0.17	9.06	
P067	Sadaya (<i>Platax orbicularis</i>)	1	0.07	0.38	2.45	1.07	0.13	4.59	
P068	Salmon (<i>Salmo salar</i>)	1	0.07	0.06	4.45	1.15	0.15	11.36	
P069	Sangada (<i>Nemipterus japonicus</i>)	1	0.01	0.02	0.68	0.22	0.10	16.75	
P070	Sankata paarai (<i>Caranx ignobilis</i>)	1	0.03	0.06	3.70	1.19	0.18	10.76	
P071	Sardine (<i>Sardinella longiceps</i>)	1	0.01	0.06	0.91	0.77	0.14	22.66	
P072	Shark (<i>Carcharhinus sorrah</i>)	2	0.03	0.04	2.68	1.15	0.11	8.57	
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	0.02	0.04	2.72	0.66	0.07	20.06	
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	0.05	0.05	1.02	0.67	0.08	13.23	
58	P075 Shelavu (<i>Sphyraena jello</i>)	4	0.05±0.01	0.06±0.03	2.10±0.71	0.44±0.05	0.11±0.01	7.90±1.01	
	P076 Silan (<i>Silonia silondia</i>)	1	0.02	0.07	1.27	0.90	0.12	24.38	
	P077 Silk fish (<i>Beryx</i> sp.)	1	0.03	0.04	2.24	0.17	0.17	8.02	
	P078 Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	0.02	0.02	1.87	1.33	0.14	24.62	
	P079 Sole fish (<i>Cynoglossus arel</i>)	1	0.01	0.02	0.47	0.91	0.07	13.93	
	P080 Stingray (<i>Dasyatis pastinaca</i>)	1	0.03	0.02	2.74	0.98	0.22	25.59	
	P081 Tarlava (<i>Drepane punctata</i>)	2	0.04	0.04	2.13	0.25	0.15	13.80	
	P082 Tholam (<i>Plectorhinchus schotaf</i>)	2	0.04	0.03	2.74	1.22	0.16	8.24	
	P083 Tilapia (<i>Oreochromis niloticus</i>)	1	0.02	0.18	1.40	0.78	0.18	8.29	
	P084 Tuna (<i>Euthynnus affinis</i>)	5	0.06±0.02	0.07±0.03	4.73±1.83	1.34±0.13	0.07±0.01	13.74±2.04	
	P085 Tuna, striped (<i>Katsuwonus pelamis</i>)	1	0.07	0.15	5.04	1.27	0.12	7.89	
	P086 Valava (<i>Chirocentrus nudus</i>)	1	0.13	0.02	0.86	0.61	0.10	14.38	
	P087 Vanjaram (<i>Scomberomorus commerson</i>)	2	0.03	0.07	3.46	1.22	0.16	15.45	

Food Code	Fish Name	No. of Regions	Thiamine (B1)		Riboflavin (B2)	Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
					← mg →				μg
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM	
P088	Vela meen (<i>Aprion virescens</i>)	1	0.05	0.04	5.15	0.22	0.10	16.32	
P089	Vora (<i>Siganus javus</i>)	2	0.06	0.07	3.72	0.28	0.12	14.80	
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	0.06	0.04	2.90	0.84	0.12	16.05	
P091	Xiphinis (<i>Xiphias gladius</i>)	1	0.06	0.05	3.24	0.21	0.07	8.20	
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1		0.19	1.09	0.83	0.15	20.59	

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	0.01	0.10	1.66	0.71	0.12	23.04
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	0.05	0.06	0.97	1.53	0.12	7.74
Q003	Lobster, brown (<i>Thenus orientalis</i>)	1	0.01	0.01	0.63	1.44	0.22	11.29
Q004	Lobster, king size (<i>Thenus orientalis</i>)	1	0.01	0.02	1.87	1.25	0.16	19.97
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	0.06	0.14	0.60	1.30	0.18	13.83
Q006	Oyster (<i>Crassostrea</i> sp.)	1	0.06	0.07	0.71	1.18	0.15	16.12
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	0.01	0.03	1.03	1.68	0.10	15.37
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	0.03	0.03	1.18	1.47	0.11	8.07

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	0.06	0.10	0.96	1.14	0.10	9.07
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	0.06	0.11	0.90	0.97	0.11	9.00
R003	Octopus (<i>Octopus vulgaris</i>)	1	0.05	0.05	1.18	0.94	0.09	20.87
R004	Squid, black (<i>Loligo</i> sp.)	1	0.02	0.04	1.04	0.72	0.24	12.33
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	0.02	0.02	0.65	1.22	0.04	6.22

Table 2. Water Soluble Vitamins

Food Code	Fish Name	No. of Regions	Thiamine (B1)		Riboflavin (B2)		Niacin (B3)	Pantothenic Acid (B5)	Total B6	Total Folates (B9)
					← mg →					μg
			THIA	RIBF	NIA	PANTAC	VITB6A	FOLSUM		
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	0.03	0.02	0.71	0.95	0.10		13.00	
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	0.01	0.03	0.71	0.77	0.12		18.33	

S FRESHWATER FISH AND SHELLFISH

S001	Cat fish (<i>Tandanus tandanus</i>)	2	0.01±0.00	0.07±0.03	1.74±0.26	1.12±0.12	0.12±0.01	13.95±1.68		
S002	Catla (<i>Catla catla</i>)	6	0.01±0.00	0.03±0.01	2.21±0.19	1.00±0.05	0.12±0.01	19.26±2.77		
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1		0.31	2.30	1.52	0.11	12.94		
S004	Gold fish (<i>Carassius auratus</i>)	2		0.05	1.86	1.13	0.23	24.57		
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6		0.05±0.01	1.28±0.21	0.66±0.06	0.23±0.02	13.23±3.05		
S006	Rohu (<i>Labeo rohita</i>)	6		0.04±0.01	2.33±0.43	1.18±0.07	0.24±0.02	12.63±1.01		
S007	Crab (<i>Pachygrapsus sp.</i>)	1	0.01	0.11	1.54	0.79	0.20	17.83		
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1		0.02	1.31	1.74	0.19	18.26		
S009	Prawns, small (<i>Macrobrachium sp.</i>)	3	0.01	0.03	0.54	1.74	0.21	13.06		
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	0.01	0.04	1.28	1.87	0.22	18.75		

Table 3

FAT SOLUBLE VITAMINS



Table 3. FAT SOLUBLE VITAMINS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Ergocalciferol (D2) μg	Tocopherols				Tocotrienols				α-Tocopherol Equivalent VITE	Phylloquinones (K1) VITK1
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE	VITK1
A CEREALS AND MILLETS													
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	58.67	0.05	0.28	0.04						0.17	1.80
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	53.98±3.38	0.06±0.00	0.22±0.10	0.03±0.01						0.15±0.03	2.50±0.87
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	5.65±0.27	0.10±0.01		1.42±0.20						0.24±0.02	2.85±0.63
A004	Barley (<i>Hordeum vulgare</i>)	6		0.01±0.01								0.01±0.01	1.85±0.79
A005	Jowar (<i>Sorghum vulgare</i>)	6	3.96±0.30	0.04±0.01		0.27±0.03						0.06±0.01	43.82±4.84
63	A006 Maize, dry (<i>Zea mays</i>)	6	33.60±2.82	0.21±0.04		1.29±0.17	0.38±0.05	0.05±0.00				0.36±0.03	2.50±0.76
	A007 Maize, tender, local (<i>Zea mays</i>)	6	42.34±4.28	0.05±0.01		0.40±0.03	0.03±0.01					0.09±0.01	2.00±0.13
	A008 Maize, tender, sweet (<i>Zea mays</i>)	4	16.94±2.13	0.07±0.00		0.30±0.06	0.03±0.01					0.10±0.01	1.80±0.32
	A009 Quinoa (<i>Chenopodium quinoa</i>)	1		2.08	0.06	2.85						2.39	2.00
	A010 Ragi (<i>Eleusine coracana</i>)	5	41.46±3.12	0.09±0.01		0.66±0.06						0.16±0.01	3.00±0.44
	A011 Rice flakes (<i>Oryza sativa</i>)	6		0.05±0.01								0.05±0.01	1.00±0.53
Table 3. Fat Soluble Vitamins	A012 Rice puffed (<i>Oryza sativa</i>)	6		0.04±0.01								0.04±0.01	1.00±0.42
	A013 Rice, raw, brown (<i>Oryza sativa</i>)	6		0.62±0.08	0.05±0.02	0.42±0.57		0.03±0.02		0.05±0.02	0.02±0.01	0.69±0.12	2.00±0.83
	A014 Rice, parboiled, milled (<i>Oryza sativa</i>)	6		0.06±0.04		0.13±0.12		0.05±0.02				0.09±0.04	1.50±0.50
	A015 Rice, raw, milled (<i>Oryza sativa</i>)	6		0.04±0.03		0.06±0.02		0.03±0.02		0.05±0.02		0.06±0.03	1.50±0.40
	A016 Samai (<i>Panicum miliare</i>)	6	3.75±0.80	0.28±0.14	0.67±0.40					0.28±0.09		0.55±0.16	4.47±0.38
	A017 Varagu (<i>Paspalum scrobiculatum</i>)	5		0.03±0.01		0.43±0.12				0.19±0.05		0.07±0.02	3.75±0.63
	A018 Wheat flour, refined (<i>Triticum aestivum</i>)	6	6.73±0.96	0.05±0.01			0.02±0.01					0.05±0.01	1.00±0.46

Table 3. Fat Soluble Vitamins

64

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)			
				←		mg →										
				μg	ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1	
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	13.43±1.77	0.21±0.09	0.06±0.01					0.06±0.03					0.26±0.09	1.50±0.47
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	17.49±3.51	0.60±0.33	0.37±0.12					0.07±0.03					0.77±0.35	1.75±0.26
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	6.27±0.31	0.20±0.01									0.05±0.02		0.21±0.01	1.50±0.41
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	8.19±0.81	0.16±0.02	0.07±0.02					0.05±0.03					0.20±0.01	1.20±0.48
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	4.06±0.35	0.03±0.01									0.03±0.02		0.03±0.01	1.00±0.51
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	3.21±0.21	0.01±0.01									0.02±0.01		0.01±0.01	1.00±0.52

B GRAIN LEGUMES

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	1.75±0.17	0.08±0.01	1.13±0.10	0.03±0.01									0.19±0.01	1.50±0.62
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	1.93±0.17	1.59±0.07	1.33±0.17	0.08±0.01									1.72±0.07	2.10±0.71
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	8.42±0.19	0.04±0.01	1.29±0.12	0.05±0.01									0.17±0.02	8.30±1.51
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	16.84±2.79	0.09±0.02	1.35±0.10	0.08±0.01									0.23±0.02	10.80±0.92
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	0.92±0.02	0.33±0.02	3.50±0.21	2.44±0.22									0.70±0.03	1.75±0.14
B006	Cowpea, white (<i>Vigna catjang</i>)	1	0.93	0.32	3.06	2.70									0.65	1.70
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	4.35	0.24	2.69	0.07									0.51	21.50
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	4.24	0.25	2.74	0.06									0.53	20.70
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	4.26±0.10	0.25±0.02	2.65±0.59	0.07±0.00									0.52±0.06	22.65±1.15
B010	Green gram, dal (<i>Vigna radiata</i>)	6	2.05±0.08	0.06±0.01	1.66±0.15									0.23±0.02		8.30±0.85
B011	Green gram, whole (<i>Vigna radiata</i>)	6	3.15±0.33	0.13±0.02	2.08±0.22									0.26±0.04	0.33±0.02	12.63±1.23
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	1.80±0.06	0.06±0.01	2.06±0.16									0.27±0.02		10.24±1.40
B013	Lentil dal (<i>Lens culinaris</i>)	6	1.31±0.12	0.02±0.01	1.37±0.11	0.23±0.05									0.16±0.01	3.75±0.79
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	14.52±1.68	0.03±0.00	1.64±0.18	0.30±0.03									0.19±0.02	7.27±0.69

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	← mg →				μg					
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRД	VITE	VITK1			
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	17.68	0.03		1.58	0.30					0.19	5.25
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	9.77±0.17	0.29±0.02		5.04±0.44	0.26±0.02					0.79±0.05	22.75±1.22
B017	Peas, dry (<i>Pisum sativum</i>)	6	15.21±0.77	0.07±0.01		2.50±0.24						0.32±0.02	11.45±1.24
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	27.98	0.05		1.62						0.21	5.05
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	25.82±3.22	0.08±0.02		1.58±0.13						0.23±0.03	5.50±0.85
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	26.73±3.93	0.07±0.02		1.56±0.13						0.23±0.01	4.90±0.85
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	2.12±0.08	0.13±0.02		0.63±0.09	0.06±0.01					0.19±0.02	42.25±7.70
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	2.78±0.05	0.65±0.07		1.53±0.31	0.11±0.02					0.80±0.06	91.83±7.96
B023	Ricebean (<i>Vigna umbellata</i>)	1	8.26	0.90		1.43		0.05		0.18		1.06	21.85
B024	Soybean, brown (<i>Glycine max</i>)	6	66.22±5.10	1.04±0.04		2.28±0.18	0.58±0.10	0.05±0.01				1.29±0.04	45.80±8.48
B025	Soybean, white (<i>Glycine max</i>)	1	69.81	1.06		2.50	0.30	0.04				1.33	46.20

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	4.02	1.48	0.22	0.18		0.60	0.18		1.77	269
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	16.01±2.74	0.41±0.05		0.26±0.10					0.44±0.05	280±15.0
C003	Amaranth leaves, red mix (<i>Amaranthus gangeticus</i>)	1	15.10	0.44		0.21					0.46	312
C004	Amaranth leaves, red and green mix (<i>Amaranthus gangeticus</i>)	4	15.25±1.37	0.42±0.10		0.25±0.05					0.45±0.10	284±9.4
C005	Amaranth spined, leaves, green mix (<i>Amaranthus spinosus</i>)	4	15.23±0.28	0.28±0.02		0.03±0.01					0.28±0.02	443±3.6
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	15.04	0.28		0.04					0.28	448
C007	Basella leaves (<i>Basella alba</i>)	2	9.18	0.15		0.04		0.03			0.16	236
C008	Bathua leaves (<i>Chenopodium album</i>)	2	1.01	0.25							0.25	224

Table 3. Fat Soluble Vitamins

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	←				mg	→				μg
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1			
C009	Beet greens (<i>Beta vulgaris</i>)	6	1.65±0.52	0.15±0.03	0.17±0.05							0.21±0.03	69.45±5.24
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	3.78±0.40	0.04±0.01		0.05±0.01		0.02±0.01				0.05±0.01	207±10.9
C011	Betel leaves, small (<i>Piper betle</i>)	4	2.27±0.25	0.02±0.01		0.05±0.00		0.02±0.00				0.03±0.01	204±4.9
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	0.26	0.21								0.21	23.60
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	0.39	0.25								0.25	111
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	0.18	0.20								0.20	125
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	0.21±0.02	0.05±0.03								0.05±0.03	113±0.5
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	0.19	0.03								0.03	117
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	4.15±0.46	0.08±0.03		0.11±0.02						0.08±0.03	144±29.6
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	1.70±0.31	0.07±0.01								0.07±0.01	318±37.3
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	14.33±0.19	0.30±0.01		0.05±0.01		0.02±0.01				0.31±0.01	479±26.6
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	2.36±0.30	0.36±0.14								0.36±0.14	428±32.3
C021	Garden cress (<i>Lepidium sativum</i>)	2	0.55	0.74								0.74	458
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	4.28±0.14	0.46±0.16		0.43±0.17						0.50±0.15	433±1.6
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	4.27	0.47		0.32						0.50	438
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	0.59	0.53								0.53	295
C025	Lettuce (<i>Lactuca sativa</i>)	3	0.10±0.04	0.01±0.01								0.01±0.01	91.08±2.20
C026	Mustard leaves (<i>Brassica juncea</i>)	3	5.40±0.33	0.56±0.06		0.02±0.00						0.57±0.06	192±4.1
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	0.10	0.03								0.03	39.85
C028	Parsley (<i>Petroselinum crispum</i>)	3	5.55±0.18	0.35±0.05								0.35±0.05	322±3.3
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	0.65	0.52	0.02		0.04					0.54	574

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)	
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta			
			µg	← mg →				µg						
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE	VITK1				
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	3.19±0.18	1.24±0.04	0.28±0.01	3.25±0.10	0.02±0.01	0.03±0.01	1.69±0.05	243±11.1				
C031	Radish leaves (<i>Raphanus sativus</i>)	6	1.39±0.08	0.06±0.02	0.04±0.03						0.08±0.03	185±3.3		
C032	Rumex leaves (<i>Rumex patientia</i>)	2	0.10	0.46	0.03	0.45	0.18				0.51	126		
C033	Spinach (<i>Spinacia oleracea</i>)	6	0.26±0.03	1.27±0.03	0.01±0.01	0.06±0.00	0.03±0.00				1.29±0.02	325±2.3		
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	2.62±0.00	0.69±0.03		1.18±0.25					0.81±0.01	249±6.6		

D OTHER VEGETABLES

67	D001	Ash gourd (<i>Benincasa hispida</i>)	6	1.35±0.18	0.01±0.00	0.13±0.02					0.02±0.01	27.15±0.45			
	D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	0.41		0.01	0.05					1.13			
	D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	1.40±0.17	0.15±0.03						0.15±0.03	60.10±3.36			
	D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	1.92±0.28	0.01±0.01	0.03±0.01			0.11±0.01		0.07±0.03	0.03±0.01	4.55±0.36		
	D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	1.90±0.15	0.01±0.00	0.04±0.01			0.11±0.02		0.08±0.03	0.03±0.00	4.85±0.35		
	D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	1.83	0.01	0.03			0.09		0.10	0.03	4.70		
	D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	0.74±0.02	0.01±0.01			0.02±0.01			0.02±0.01	2.10±0.23			
	D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	0.70±0.04	0.01±0.00			0.03±0.01			0.01±0.00	2.06±0.36			
	D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	0.60	0.01			0.02			0.02	1.80			
	D010	Brinjal-1 (<i>Solanum melongena</i>)	1	0.85	0.08						0.08	10.30			
	D011	Brinjal-2 (<i>Solanum melongena</i>)	1	1.01	0.11						0.11	11.45			
	D012	Brinjal-3 (<i>Solanum melongena</i>)	2	1.19	0.09						0.09	12.25			
	D013	Brinjal-4 (<i>Solanum melongena</i>)	4	1.05±0.18	0.09±0.02						0.09±0.02	12.75±0.33			

Table 3. Fat Soluble Vitamins

68

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	←				mg	→				μg
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1			
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	1.61±0.26	0.10±0.02								0.10±0.02	13.05±0.64
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	1.14	0.08								0.08	21.45
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	0.84	0.03								0.03	13.14
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	0.97±0.17	0.08±0.02								0.08±0.02	13.94±2.56
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	1.02	0.09								0.09	14.05
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	0.88	0.05								0.05	14.25
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	1.01±0.24	0.07±0.03								0.07±0.03	14.46±1.91
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	0.87	0.09								0.09	14.32
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	1.06	0.07								0.07	14.29
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	0.89±0.05	0.06±0.01								0.06±0.01	14.58±1.77
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	1.12±0.22	0.08±0.01								0.08±0.01	14.04±2.02
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	0.76	0.09								0.09	13.37
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	1.33	0.07								0.07	12.75
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	1.01±0.15	0.04±0.01								0.04±0.01	13.67±0.92
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	1.06±0.46	0.07±0.03								0.07±0.03	11.48±1.05
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	1.02±0.33	0.07±0.03								0.07±0.03	10.94±1.17
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	0.84	0.08								0.08	10.50
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	1.04±0.27	0.07±0.03								0.07±0.03	13.53±2.62
D032	Broad beans (<i>Vicia faba</i>)	3	11.58±1.55	0.05±0.04	0.02±0.01							0.06±0.03	93.20±0.50
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	0.70±0.21	0.07±0.03								0.07±0.03	24.66±2.89
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	0.52±0.11	0.19±0.02								0.19±0.02	28.42±8.83
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	0.89±0.18	0.18±0.03								0.18±0.03	35.25±12.82

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	← mg →				μg					
			ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	1.32±0.16	0.02±0.00			0.09±0.01					0.02±0.00	14.33±0.34
D037	Celery stalk (<i>Apium graveolens</i>)	3	1.39±0.07	0.03±0.03			0.02±0.00	0.01±0.00				0.03±0.03	25.87±3.13
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	5.46±0.18	0.01±0.01		0.57±0.02		0.06±0.01				0.09±0.01	1.78±0.21
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	13.72±0.29	0.77±0.04		0.31±0.04	0.04±0.00			0.06±0.01		0.81±0.04	23.70±0.30
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	0.21	0.06								0.06	35.75
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	0.14±0.03	0.09±0.03								0.09±0.03	33.68±6.36
D042	Corn, baby (<i>Zea mays</i>)	6	31.20±3.77	0.13±0.02								0.13±0.02	75.05±3.66
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	1.26±0.22	0.02±0.01								0.02±0.01	8.20±1.25
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	1.36±0.19	0.02±0.01								0.02±0.01	8.00±1.51
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	1.59	0.02								0.02	7.50
D046	Drumstick (<i>Moringa oleifera</i>)	6	1.67±0.25	0.31±0.07								0.31±0.07	358±3.4
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	7.14	0.08	0.25	0.06		0.04		0.11		26.45	
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	7.20±0.10	0.08±0.01	0.25±0.03	0.06±0.01		0.04±0.01		0.10±0.01		26.35±1.83	
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	1.82±0.14	0.06±0.02	0.12±0.01	0.09±0.01		0.03±0.00		0.07±0.03		15.12±1.18	
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	1.85	0.08	0.13	0.08		0.08		0.09		15.14	
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	6.84±0.48	0.05±0.02		0.06±0.01		0.08±0.01		0.05±0.02		22.30±0.71	
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	1.40±0.19	0.05±0.03		0.06±0.01		0.07±0.01		0.06±0.03		13.56±0.22	
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	0.32±0.03	0.01±0.01	1.61±0.10	0.05±0.02						0.17±0.01	8.90±0.77
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	6.25±0.20	0.70±0.11	0.14±0.01							0.72±0.11	19.15±0.40
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	6.06	0.68	0.13							0.70	19.10
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	7.46±0.41	0.48±0.01	0.12±0.00							0.50±0.01	21.52±0.29

Table 3. Fat Soluble Vitamins

Table 3. Fat Soluble Vitamins

70

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)	
				←		mg →								
				μg	ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	7.68±0.24	0.90±0.14	0.17±0.02								0.91±0.14	14.42±0.29
D058	Onion, stalk (<i>Allium cepa</i>)	6	6.81±0.31	0.81±0.01									0.81±0.01	44.33±1.52
D059	Papaya, raw (<i>Carica papaya</i>)	6	7.80±0.65	0.04±0.01					0.11±0.01				0.07±0.01	2.45±0.28
D060	Parwar (<i>Trichosanthes dioica</i>)	6	0.69±0.11	0.04±0.01									0.04±0.01	8.37±1.48
D061	Peas, fresh (<i>Pisum sativum</i>)	6	12.91±0.28	0.05±0.01	1.59±0.10								0.21±0.01	44.22±3.85
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	1.29±0.13	0.19±0.01									0.19±0.01	3.38±0.26
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	0.27±0.02	0.08±0.01									0.08±0.01	17.42±1.83
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	0.32±0.06	0.02±0.01									0.02±0.01	2.50±1.19
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	1.07	0.86	0.02				0.01				0.87	80.80
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	1.40±0.14	0.59±0.13	0.02±0.00				0.06±0.04				0.60±0.13	83.70±1.92
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	28.96	0.89	0.46				0.43				0.94	14.90
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	0.37±0.03	0.02±0.00					0.05±0.01				0.02±0.00	11.23±0.31
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	0.34±0.04	0.02±0.01					0.04±0.01				0.02±0.01	11.57±0.15
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	2.67±0.31	0.01±0.00					0.04±0.00				0.01±0.00	8.35±0.28
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	3.08	0.01					0.05				0.01	8.40
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	3.12	0.01					0.05				0.01	8.30
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	2.76±0.09	0.05±0.03	0.03±0.01								0.05±0.03	2.73±0.77
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	1.10±0.22	0.37±0.27	0.11±0.03				0.04±0.01				0.39±0.27	16.10±1.51
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	11.83±1.41	0.14±0.03	0.67±0.07				0.02±0.01				0.22±0.03	24.12±2.96
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	12.24±1.05	0.19±0.02	0.75±0.05				0.02±0.01				0.27±0.02	17.18±1.73
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	0.40	3.90	0.05								3.90	41.05

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	←				mg	→				μg
			ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	0.38	1.47		0.15						1.48	53.28

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6	1.46±0.51	0.15±0.04								0.15±0.04	3.65±0.47
E002	Apple, green (<i>Malus domestica</i>)	6	2.45±0.40	0.10±0.04								0.10±0.04	2.13±0.09
E003	Apple, small (<i>Malus domestica</i>)	6	1.86±0.19	0.07±0.01								0.07±0.01	2.18±0.40
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	2.04	0.05								0.05	2.55
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	3.98±0.06	0.07±0.01	0.07±0.02	0.29±0.04	0.09±0.01					0.11±0.01	5.17±1.17
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	4.31±0.14	0.01±0.01	0.01±0.01	0.07±0.00	0.01±0.00					0.01±0.01	6.14±0.76
E007	Avocado fruit (<i>Persea</i> sp.)	1	2.10	0.02								0.02	38.74
E008	Bael fruit (<i>Aegle marmelos</i>)	1	1.60	0.60								0.60	4.50
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	0.20	0.08	0.07							0.09	2.20
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	0.24	0.07	0.08							0.08	2.60
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	0.21	0.09	0.06							0.09	1.90
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	0.22±0.03	0.08±0.01	0.05±0.01							0.09±0.01	2.80±1.11
E013	Black berry (<i>Rubus</i> sp.)	5	14.65±0.40	0.49±0.04				0.07±0.02	0.05±0.01			0.52±0.04	1.82±0.04
E014	Cherries, red (<i>Prunus cerasus</i>)	4	4.30±0.44	0.07±0.02								0.06±0.04	5.56±1.10
E015	Currants, black (<i>Ribes nigrum</i>)	1	3.01	0.45								0.45	27.52
E016	Custard apple (<i>Annona squamosa</i>)	1	0.18	0.19	0.01							0.19	58.00
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	2.60±0.23	0.02±0.00				0.03±0.00				0.03±0.00	3.34±0.26
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	0.68	0.01				0.06				0.03	4.53
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	0.83	0.02				0.04				0.03	4.93

Table 3. Fat Soluble Vitamins

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	← mg →				μg					
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1			
E020	Fig (<i>Ficus carica</i>)	6	1.47±0.15	0.42±0.16		1.17±0.08						0.54±0.17	5.75±1.51
E021	Gooseberry (<i>Emblica officinalis</i>)	5	0.27±0.02	0.11±0.01		0.01±0.00	0.06±0.01	0.05±0.01				0.12±0.02	1.64±0.31
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	6.19±0.19	0.05±0.02		0.02±0.00			0.01±0.00			0.05±0.02	3.65±0.40
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	3.59±0.15	0.07±0.02		0.03±0.01			0.02±0.01			0.07±0.02	7.26±0.43
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	6.87±0.22	0.07±0.02		0.04±0.02			0.01±0.00			0.07±0.02	5.20±0.59
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	6.42±0.33	0.05±0.03		0.04±0.03			0.04±0.02			0.05±0.03	3.40±0.66
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	3.54±0.25	0.08±0.01		0.02±0.01			0.01±0.00			0.08±0.01	7.15±0.76
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	6.23±0.45	0.06±0.02		0.04±0.01			0.02±0.01			0.06±0.02	3.00±1.16
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	1.68±0.23	0.06±0.01	0.02±0.01		0.04±0.01		0.03±0.01	0.74±0.03		0.09±0.01	3.68±0.38
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	0.93±0.06	0.07±0.02	0.03±0.01		0.09±0.01		0.01±0.01	0.25±0.04		0.11±0.01	5.35±0.61
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	7.49±0.25	0.06±0.01		0.06±0.01		0.09±0.01				0.07±0.01	37.00±3.73
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	0.82	0.04								0.04	7.94
E032	Karonda fruit (<i>Carissa carandas</i>)	1	1.43	0.04								0.04	2.50
E033	Lemon, juice (<i>Citrus limon</i>)	6	0.39±0.04	0.06±0.01								0.06±0.01	1.80±0.63
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	0.30±0.09	0.07±0.02								0.07±0.02	2.20±1.01
E035	Litchi (<i>Litchi chinensis</i>)	4	0.33±0.09	0.06±0.01								0.06±0.01	7.81±2.06
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	3.71±0.21	0.26±0.06		0.20±0.04						0.28±0.06	4.77±0.20
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	3.91	0.19		0.16						0.20	4.80
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	3.73±0.11	0.29±0.08		0.20±0.07						0.31±0.09	4.40±0.26
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	3.68±0.38	0.24±0.01		0.20±0.05						0.26±0.02	4.75±0.33
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	3.72	0.24		0.19						0.29	5.00

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	←				mg	→				μg
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1			
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	3.62	0.35		0.20						0.37	4.80
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	3.77	0.27		0.26						0.30	4.60
E043	Mangosteen (<i>Garcinia mangostana</i>)	1		0.05								0.05	5.50
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1		0.38								0.38	33.18
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	4.41±0.57	0.01±0.00								0.01±0.00	5.70±0.27
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	2.33±0.23	0.02±0.01								0.02±0.01	1.74±0.44
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	0.34±0.08	0.03±0.01			0.02±0.01					0.04±0.01	2.50±0.75
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1		0.01			0.03					0.02	3.60
E049	Papaya, ripe (<i>Carica papaya</i>)	6	11.47±1.00	0.03±0.01			0.02±0.00					0.04±0.01	2.59±0.35
E050	Peach (<i>Prunus communis</i>)	1	2.41	0.02								0.02	4.40
E051	Pear (<i>Pyrus</i> sp.)	6	1.48±0.19	0.29±0.10			0.04±0.02					0.30±0.10	12.57±1.55
E052	Phalsa (<i>Grewia asiatica</i>)	2	1.34	0.87		0.58						0.93	5.36
E053	Pineapple (<i>Ananas comosus</i>)	6	0.21±0.01	0.36±0.09			0.31±0.01					0.45±0.09	2.40±0.29
E054	Plum (<i>Prunus domestica</i>)	3	3.32±0.42	0.50±0.04								0.50±0.04	8.50±0.74
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	109±2.1	0.01±0.01			0.05±0.00					0.03±0.01	18.50±2.35
E056	Pummelo (<i>Citrus maxima</i>)	3	0.98±0.11	0.46±0.10	0.03±0.02							0.47±0.09	4.88±0.82
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	1.76±0.17	0.01±0.01			0.02±0.01					0.02±0.01	1.63±0.32
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	11.87±1.10	0.01±0.00			0.03±0.00					0.02±0.00	1.71±0.20
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	2.40	0.08								0.08	19.70
E060	Sapota (<i>Achras sapota</i>)	6	0.65±0.03	0.25±0.02								0.25±0.02	4.30±0.26
E061	Soursop (<i>Annona muricata</i>)	1	3.24	0.06								0.06	2.60
E062	Star fruit (<i>Averrhoa carambola</i>)	1	0.96	0.40								0.40	2.00

Table 3. Fat Soluble Vitamins

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	← mg →				μg					
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1			
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	3.95±0.18	0.26±0.05								0.26±0.05	19.81±1.60
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	25.65±1.86	0.10±0.01								0.10±0.01	1.67±0.33
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	0.56±0.03	0.04±0.00								0.04±0.00	2.10±1.22
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	0.56±0.03	0.05±0.01								0.05±0.01	2.80±0.87
E067	Wood Apple (<i>Limonia acidissima</i>)	3	28.71±2.87	0.01±0.00	0.15±0.01							0.07±0.01	6.80±0.58
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	16.70	0.02								0.02	2.50

F ROOTS AND TUBERS

74

F001	Beet root (<i>Beta vulgaris</i>)	6	0.18±0.01	0.09±0.01								0.09±0.01	2.98±0.94
F002	Carrot, orange (<i>Daucus carota</i>)	6	1.36±0.13	0.19±0.01	0.18±0.01	0.03±0.00						0.21±0.01	18.35±0.19
F003	Carrot, red (<i>Daucus carota</i>)	4	1.39±0.09	0.19±0.03	0.20±0.03	0.03±0.01						0.22±0.03	18.75±0.81
F004	Colocasia (<i>Colocasia esculenta</i>)	6	0.27±0.01	0.32±0.02	0.08±0.01	0.12±0.01						0.33±0.02	3.15±0.90
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	0.27±0.06	0.73±0.11								0.73±0.11	44.45±4.37
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	0.19±0.02	0.06±0.01								0.06±0.01	2.12±0.31
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	0.22	0.07								0.07	1.80
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	0.20	0.06								0.06	2.30
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	0.04±0.02	0.01±0.01								0.01±0.01	2.10±0.12
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	0.05±0.02	0.01±0.00								0.01±0.00	2.50±0.19
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	0.05	0.01								0.01	2.60
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	0.04	0.01								0.01	1.90
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	1.26±0.31	0.01±0.01								0.01±0.01	3.00±0.84

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)	
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta			
			µg	← mg →				µg						
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1				
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	1.64±0.25	0.01±0.01								0.01±0.01	3.50±0.95	
F015	Tapioca (<i>Manihot esculenta</i>)	3	0.13±0.01	0.19±0.02								0.19±0.02	2.80±0.83	
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	1.20	0.09								0.09	3.50	
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	1.30±0.23	0.06±0.01	0.69±0.04			0.03±0.01		0.17±0.02		0.34±0.02	4.80±1.46	
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	0.23±0.00	0.23±0.01	0.35±0.11			0.04±0.00		0.43±0.03		0.39±0.04	5.50±1.02	
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	1.18	0.40	0.28			0.05		0.13		0.53	6.00	

G CONDIMENTS AND SPICES-FRESH

75	G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	3.14±1.19	0.07±0.02		1.93±0.05					0.26±0.02	20.12±3.87
	G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	3.49±0.84	0.06±0.02		2.10±0.16					0.27±0.02	19.51±3.43
	G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	3.17±0.79	0.06±0.02		2.03±0.25					0.26±0.02	18.05±3.76
	G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	2.87±0.60	0.07±0.02		2.27±0.24					0.30±0.03	22.16±3.48
	G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	3.26±0.51	0.08±0.01		1.73±0.25					0.25±0.03	15.70±1.86
	G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1	2.19	0.07		2.46					0.31	18.00
	G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1	2.43	0.04		1.80					0.22	19.50
	G008	Chillies, green - all varieties (<i>Capsicum annuum</i>)	6	3.11±0.81	0.06±0.02		2.04±0.28					0.27±0.03	19.18±3.42
	G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	3.55±0.21	0.42±0.03			0.12±0.00		0.07±0.02		0.46±0.03	274±23.4
	G010	Curry leaves (<i>Murraya koenigii</i>)	6	117±4.5	1.71±0.27			0.82±0.07	0.34±0.12			1.82±0.30	275±14.8
	G011	Garlic, big clove (<i>Allium sativum</i>)	6	1.88±0.37	0.07±0.01							0.07±0.01	2.80±1.70
	G012	Garlic, small clove (<i>Allium sativum</i>)	3	1.97±0.19	0.06±0.01							0.06±0.01	3.20±1.22
	G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	2.89	0.05							0.05	4.50

Table 3. Fat Soluble Vitamins

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)	
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta			
			µg	← mg →				µg						
ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRД	VITE	VITK1				
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	4.09±0.35	0.28±0.03		0.47±0.08						0.32±0.03	25.55±2.45	
G015	Mango ginger (<i>Curcuma amada</i>)	3	3.10±0.39	0.35±0.07				0.79±0.09				0.59±0.10	27.71±0.70	
G016	Mint leaves (<i>Mentha spicata</i>)	4	3.37±0.16	0.45±0.07		0.07±0.02						0.46±0.07	164±37.2	
G017	Onion, big (<i>Allium cepa</i>)	6	0.73±0.19	0.05±0.01								0.05±0.01	4.50±1.47	
G018	Onion, small (<i>Allium cepa</i>)	5	0.12±0.03	0.06±0.02								0.06±0.02	5.30±1.46	

G CONDIMENTS AND SPICES-DRY

G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	12.59±1.40	0.73±0.08				0.12±0.01				0.77±0.08	46.56±2.21	
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	43.72±2.28	0.14±0.02	1.13±0.09			0.59±0.09				0.77±0.06	6.81±0.55	
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	43.55±3.33	0.36±0.07	0.83±0.26			1.38±0.06				1.10±0.08	5.74±0.43	
G022	Chillies, red (<i>Capsicum annum</i>)	6	24.36±2.56	0.69±0.21		2.91±1.02						0.98±0.30	274±6.6	
G023	Cloves (<i>Syzygium aromaticum</i>)	6	45.07±2.37	0.46±0.04	0.77±0.07			0.01±0.00				0.77±0.04	161±36.7	
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	1.31±0.01	0.91±0.07				0.32±0.02	0.47±0.02	0.24±0.02	1.01±0.06	35.70±2.52		
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	12.10±0.07	1.49±0.05								1.49±0.05	146±2.2	
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	1.98±0.08	0.02±0.00				0.02±0.00				0.02±0.00	1.50±0.84	
G027	Mace (<i>Myristica fragrans</i>)	6	44.92±2.28	1.05±0.05				10.36±0.16				4.16±0.08	70.44±4.62	
G028	Nutmeg (<i>Myristica fragrans</i>)	6	46.67±0.45	1.18±0.07				0.09±0.00				1.21±0.07	60.92±1.42	
G029	Omum (<i>Trachyspermum ammi</i>)	6	2.62±0.19	0.01±0.00				0.41±0.02				0.11±0.01	0.01±0.00	30.36±3.99
G030	Pippali (<i>Piper longum</i>)	6	118±1.6	0.01±0.00		0.26±0.03						0.03±0.00	93.45±1.89	
G031	Pepper, black (<i>Piper nigrum</i>)	6	25.68±0.51	0.59±0.15	1.58±0.15	0.45±0.05		0.01±0.00				1.27±0.16	171±31.5	
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	33.92±1.81	1.66±0.15		0.10±0.01						1.67±0.15	95.18±2.16	
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	18.67±1.38	2.63±0.67	0.28±0.10			0.60±0.06				2.92±0.70	12.80±1.26	

Food code	Food Name	No. of Regions	Ergocaliferol (D2)	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Phylloquinones (K1)
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			μg	← mg →				μg					
H NUTS AND OIL SEEDS													
H001	Almond (<i>Prunus amygdalus</i>)	6	1.61±0.16	24.88±3.55	1.87±0.06	1.68±0.19	0.08±0.01	0.21±0.02				25.86±3.54	8.40±0.93
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	12.77±1.10	0.06±0.00	0.22±0.10	0.03±0.01						0.15±0.03	3.78±0.57
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	12.60±1.17	0.04±0.01	0.27±0.01	0.04±0.00						0.15±0.01	3.90±0.55
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	11.03	0.01	0.13	0.02						0.06	3.71
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	3.85±0.23	1.05±0.05	0.05±0.01	5.26±0.05						1.60±0.06	1.83±0.21
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6		6.02±0.54		0.44±0.01						6.06±0.54	2.88±0.57
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6		2.39±1.11	0.05±0.02	3.19±0.45						2.72±1.09	23.22±1.76
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	1.92±0.11	1.07±0.01								1.07±0.01	24.66±3.01
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	67.83±4.18	1.08±0.01				0.03±0.01				1.09±0.01	110±6.1
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	76.51±2.78	1.22±0.08				0.04±0.01				1.23±0.08	113±7.6
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	62.74±3.34	1.24±0.17				0.07±0.02				1.26±0.17	106±2.4
H012	Ground nut (<i>Arachis hypogaea</i>)	6	7.10±0.72	4.26±0.10				0.04±0.01				4.28±0.10	2.50±0.75
H013	Mustard seeds (<i>Brassica nigra</i>)	6	31.79±1.56	1.44±0.08				0.04±0.01				1.45±0.08	8.20±1.27
H014	Linseeds (<i>Linum usitatissimum</i>)	6	0.55±0.13	7.79±0.81		1.51±0.13		1.12±0.01				8.28±0.81	19.17±0.70
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	2.52±0.41	2.59±0.09		7.79±1.04	1.05±0.03		1.08±0.02			3.44±0.17	110±13.5
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	2.70±0.18	2.18±0.10		4.18±0.33	1.25±0.21		1.12±0.02			2.66±0.11	105±14.3
H017	Pine seed (<i>Pinus sp.</i>)	5	0.61±0.08	4.01±0.00								4.01±0.00	44.55±2.44
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	1.80±0.34	31.41±5.46	4.10±0.67	8.48±1.38	1.55±0.23	0.02±0.01				33.92±5.53	18.65±0.70
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	1.91±0.17	31.74±6.84	5.88±0.69	9.62±3.19	1.98±0.15	0.06±0.01				35.09±7.13	8.80±1.13
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	1.54±0.18	21.39±0.37	3.42±0.67	3.41±0.32						23.10±1.24	9.20±0.89

Table 3. Fat Soluble Vitamins

Food code	Food Name	No. of Regions	Ergocaliferol (D2) μg	Tocopherols				Tocotrienols				α-Tocopherol Equivalent Phylloquinones (K1) μg	
				Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			ERGCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK1
H021	Walnut (<i>Juglans regia</i>)	6	46.31±2.64	2.65±1.09	3.50±0.44	0.43±0.15	0.16±0.03	0.10±0.00				4.12±1.14	84.92±1.55
I SUGARS													
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	0.47±0.06	0.04±0.01								0.04±0.01	
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	0.41±0.01	0.02±0.01								0.02±0.01	
J MUSHROOMS													
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1	20.54	0.01								0.01	12.50
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1	27.58	0.02								0.02	16.29
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	36.40	0.01								0.01	12.50
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	109	0.01								0.01	11.80
K MISCELLANEOUS FOODS													
K001	Toddy (<i>Borassus flabellifer</i>)	10						0.02±0.01				0.01±0.00	
K002	Coconut Water (<i>Cocos nucifera</i>)	6	0.45±0.03									0.45±0.03	2.69±0.18
L MILK AND MILK PRODUCTS													
L001	Milk, whole, Buffalo ^{a,b,c}	6	0.12±0.02	0.09±0.02				0.10±0.02	0.08±0.02			0.19±0.02	
L002	Milk, whole, Cow ^{a,b,c}	6	0.14±0.02	0.11±0.01				0.15±0.02	0.08±0.01			0.22±0.02	
L003	Paneer ^a	6	0.13±0.04	0.02±0.01								0.02±0.01	
L004	Khoa ^a	6	0.12±0.03	0.03±0.02								0.03±0.02	

a. Retinol (μg): L001- 49.78±4.42; L002-58.25±4.09; L003-20.58±10.20; L004-30.12±8.78 b. Cholecalciferol (μg): L001-0.16±0.013; L002-0.12±0.02; c. 25-OH-D3 (μg): L001-0.004±0.002; L002-0.003±0.000

Food Code	Food Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols				α -Tocopherol Equivalent	Menaquinones (K2)
						Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
			← μg →		← mg →										
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK2
M EGG AND EGG PRODUCTS															
M001	Egg, poultry, whole, raw	6	198±6.7	0.84±0.13		1.47±0.41	0.05±0.01	0.02±0.01	0.03±0.02	0.07±0.01	0.01±0.01	0.02±0.01		1.51±0.41	14.61±0.27
M002	Egg, poultry, white, raw	6		1.05±0.09											
M003	Egg, poultry, yolk, raw	6	539±26.2	3.25±0.47	0.04±0.04	2.94±0.37	0.02±0.01	0.01±0.01	0.04±0.02	0.06±0.02	0.01±0.01	0.01±0.01		2.97±0.36	45.14±3.21
M004	Egg, poultry, whole, boiled	6	180±10.5	0.74±0.10		1.31±0.11	0.04±0.01	0.02±0.01		0.03±0.02	0.01±0.01			1.34±0.10	13.02±1.35
M005	Egg, poultry, white, boiled	6		0.18±0.02											
M006	Egg, poultry, yolk, boiled	6	456±31.2	3.04±0.33		2.77±0.27	0.02±0.01	0.01±0.00	0.03±0.01	0.05±0.02	0.01±0.01			2.80±0.28	40.29±6.52
M007	Egg, poultry, omlet	3	181±18.0	2.98±0.27		1.82±0.17	0.06±0.01	0.03±0.01	0.25±0.10	0.11±0.02	0.01±0.01			1.88±0.17	16.62±1.49
M008	Egg, country hen, whole, raw	1	206	4.46		2.05	0.06	0.03		0.08	0.01			2.10	64.00
M009	Egg, country hen, whole, boiled	1	195	2.99		2.00	0.05	0.03		0.08	0.01			2.05	60.00
M010	Egg, country hen, omlet	1	202	3.44		2.70	0.07	0.04		0.18	0.01			2.79	66.00
M011	Egg, duck, whole, boiled	1	171	1.90		2.04		0.04		0.04				2.06	117
M012	Egg, duck, whole, raw	1	181	2.67		2.45		0.04		0.05				2.47	118
M013	Egg, duck, whole, omlet	1	166	2.10		2.62		0.06		0.11				2.66	111
M014	Egg, quail, whole, raw	1	151	5.72		0.98		0.01		0.05				0.99	8.19
M015	Egg, quail, whole, boiled	1	140	4.91		0.82		0.01		0.04				0.84	4.46
N POULTRY															
N001	Chicken, poultry, leg, skinless	4	10.95±2.21	1.12	0.02±0.00	0.60±0.10		0.10±0.00		0.02±0.01	0.01±0.01			0.61±0.10	10.78±1.41
N002	Chicken, poultry, thigh, skinless	6	16.48±2.85	1.22	0.02±0.00	0.65±0.13		0.10±0.00		0.01±0.01	0.02±0.01			0.66±0.13	16.17±1.12

Table 3. Fat Soluble Vitamins

Food Code	Food Name	No. of Regions	Retinol ← μg →	Cholecalciferol (D3) ← μg →	25-OH-D3 ← mg →	Tocopherols				Tocotrienols				α-Tocopherol Menaquinones Equivalent (K2) → μg	
						Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
						RETOL	CHOCAL	TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD
N003	Chicken, poultry, breast, skinless	5	6.96±1.36	1.38		0.29±0.10		0.05±0.00		0.01±0.01		0.02±0.01		0.29±0.10	27.80±5.84
N004	Chicken, poultry, wing, skinless	5	31.21±4.75	1.11±0.12		0.57±0.14		0.08±0.00		0.01±0.01		0.02±0.01		0.58±0.14	28.17±3.06
N005	Poultry, chicken, liver	1	3486	2.62	0.02	0.72		0.10						0.73	14.30
N006	Poultry, chicken, gizzard	1	46.78	1.60		0.63								0.63	28.58
N007	Country hen, leg, with skin	1	17.44	1.12		0.69		0.10		0.01	0.01	0.01		0.70	11.31
N008	Country hen, thigh, with skin	1	27.00	1.05		0.54		0.10		0.01	0.02			0.55	18.50
N009	Country hen, breast, with skin	1	8.52	0.80		0.35		0.06		0.01	0.02			0.36	28.88
N010	Country hen, wing, with skin	1	27.52	0.61		0.57		0.08		0.01		0.02		0.58	31.65
N011	Duck, meat, with skin	1	48.86	0.91		0.70				0.01				0.70	7.88
N012	Emu, meat, skinless	1	2.84	0.67		0.40		0.15		0.02				0.42	8.06
N013	Guinea fowl, meat, with skin	1	2.26	1.02		1.75		1.30				0.01		1.88	11.05
N014	Pigeon, meat, with skin	1	15.25	1.20		1.52		0.15			0.01			1.54	7.10
N015	Quail, meat, skinless	1	12.84	1.53		1.59		0.81		0.01				1.67	7.30
N016	Turkey, leg, with skin	1	8.15	0.50		0.72		0.01		0.01				0.72	18.46
N017	Turkey, thigh, with skin	1	13.11	0.36		0.62		0.02		0.01				0.63	25.36
N018	Turkey, breast, with skin	1	8.97	0.52		0.56		0.03		0.02				0.57	26.43
N019	Turkey, wing, with skin	1	18.07	0.52		0.43		0.02		0.01				0.44	18.43
O ANIMAL MEAT															
O001	Goat, shoulder	6	7.57±1.04	0.80		0.35±0.04								0.35±0.04	5.80±1.29

Food Code	Food Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols				α-Tocopherol Equivalent	Menaquinones (K2)
						Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta		
						← μg →	← mg →								
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK2
O002	Goat, chops	6	2.55±0.50	0.40		0.15±0.03								0.15±0.03	6.50±1.06
O003	Goat, legs	6	8.51±1.19	0.28	0.04±0.00	0.09±0.03								0.09±0.03	9.50±1.86
O004	Goat, brain	5	1.98±0.92	0.30±0.30		0.08±0.01								0.07±0.04	3.80±1.23
O005	Goat, tongue	4	8.95±2.16	0.02	0.33±0.00	0.08±0.01								0.08±0.01	1.70±0.16
O006	Goat, lungs	4	2.75±0.59	0.09	1.31±0.00	0.08±0.01								0.08±0.01	4.60±0.91
O007	Goat, heart	5	5.90±0.36	0.60		0.09±0.01								0.09±0.01	10.60±0.97
O008	Goat, liver	6	15655±972	0.56	0.18±0.00	0.61±0.08								0.61±0.08	12.64±2.43
O009	Goat, tripe	5	2.17±0.52			0.10±0.02								0.10±0.02	11.50±2.06
O010	Goat, spleen	4	7.85±0.84	0.10	0.36±0.00	0.08±0.02								0.08±0.02	9.00±0.74
O011	Goat, kidneys	4	68.56±3.91			0.09±0.01								0.09±0.01	3.50±1.46
O012	Goat, tube (small intestine)	3	2.62±1.01			0.19±0.02								0.13±0.12	11.00±0.99
O013	Goat, testis	2	2.48	0.55	0.07	0.09								0.09	2.50
O014	Sheep, shoulder	5	8.71±1.66	0.07±0.04		0.31±0.06								0.31±0.06	6.80±0.57
O015	Sheep, chops	4	3.49±0.44	0.47		0.10±0.02								0.10±0.02	7.30±0.45
O016	Sheep, leg	5	9.93±1.67	2.14	0.65±0.00	0.08±0.02								0.08±0.02	8.90±1.38
O017	Sheep, brain	1	1.55	1.06		0.09								0.09	2.80
O018	Sheep, tongue	1	7.33			0.07								0.07	1.50
O019	Sheep, lungs	2	2.45	0.12	0.19	0.08								0.08	4.90
O020	Sheep, heart	1	4.64	0.80		0.15								0.15	9.70
O021	Sheep, liver	4	14106±866	0.31	0.36±0.00	0.60±0.04								0.60±0.04	14.70±1.24
O022	Sheep, tripe	2	2.72			0.20								0.20	10.90

Table 3. Fat Soluble Vitamins

82

Food Code	Food Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols				α-Tocopherol Equivalent	Menaquinones (K2)
			← μg →			Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta	mg	μg
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK2
O023	Sheep, spleen	1	6.61			0.10								0.10	7.50
O024	Sheep, kidneys	2	68.68	0.37	0.07	0.10								0.10	2.90
O025	Beef, shoulder	6	15.51±2.43	0.46	0.14±0.00	0.40±0.12								0.40±0.12	2.90±1.12
O026	Beef, chops	4	2.43±0.40	0.47	0.05±0.00	0.30±0.03								0.30±0.03	2.80±1.07
O027	Beef, round (leg)	6	2.52±0.64	0.43	0.11±0.00	0.40±0.09								0.40±0.09	5.80±1.29
O028	Beef, brain	4	2.18±0.22	0.69	0.05±0.00	0.10±0.02								0.10±0.02	2.70±0.85
O029	Beef, tongue	4	5.56±0.53	0.61	0.15±0.00	0.11±0.02								0.11±0.02	1.90±0.26
O030	Beef, lungs	3	1.89±0.16			0.11±0.04								0.11±0.04	3.70±1.05
O031	Beef, heart	5	10.13±1.52	5.71	0.27±0.00	0.10±0.02								0.10±0.02	2.50±1.02
O032	Beef, liver	6	9119±707		4.00±0.00	0.60±0.06								0.60±0.06	4.00±1.31
O033	Beef, tripe	5	4.29±0.30	4.00	0.06±0.00	0.41±0.08								0.41±0.08	3.50±0.64
O034	Beef, spleen	6	8.71±1.00	0.33		0.10±0.01								0.10±0.01	2.50±1.00
O035	Beef, kidneys	3	98.04±9.31	0.53	0.11±0.00	0.08±0.03								0.08±0.03	2.50±0.92
O036	Calf, shoulder	2	13.17			0.30								0.30	3.50
O037	Calf, chops	2	2.10	0.74		0.30								0.30	3.20
O038	Calf, round (leg)	2	2.42	0.97		0.20								0.20	6.20
O039	Calf, brain	2	1.41	0.61	7.98	0.10								0.10	3.00
O040	Calf, tongue	2	4.63			0.10								0.10	1.70
O041	Calf, heart	1	4.83			0.10								0.10	1.90
O042	Calf, liver	1	9664			0.50								0.50	5.00
O043	Calf, spleen	1	6.32	0.29		0.10								0.10	2.50

Food Code	Food Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols				α -Tocopherol Equivalent Menaquinones (K2) μg		
						Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	Delta			
			← μg →		← mg →				mg		mg		mg			
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK2	
O044	Calf, kidneys	2	95.73			0.10								0.10	3.10	
O045	Mithun, shoulder	1	12.68	0.06		0.30								0.30	3.80	
O046	Mithun, chops	1	2.62	0.08		0.20								0.20	4.20	
O047	Mithun, round (leg)	1	2.47	0.04		0.30								0.30	8.50	
O048	Pork, shoulder	6	5.12±0.89	9.03	0.35±0.00	0.30±0.18								0.30±0.18	1.80±0.34	
O049	Pork, chops	6	1.51±0.26	4.83±0.60	2.27±1.00	0.11±0.02								0.11±0.02	2.20±0.73	
O050	Pork, ham	6	2.98±0.30	5.85		0.20±0.04								0.20±0.04	5.30±1.39	
O051	Pork, lungs	4	5.14±0.40	1.91	0.14±0.00	0.11±0.03								0.11±0.03	3.80±0.68	
O052	Pork, heart	4	7.16±0.88			0.10±0.02								0.10±0.02	3.50±0.93	
O053	Pork, liver	5	8759±798	2.97	0.23±0.00	0.85±0.08								0.85±0.08	4.50±0.92	
O054	Pork, stomach	1	3.34	0.42	0.13	0.30								0.30	3.50	
O055	Pork, spleen	3	8.44±0.81			0.17±0.06								0.17±0.06	2.50±0.83	
O056	Pork, kidneys	5	72.53±6.91	2.92	0.24±0.00	0.19±0.06								0.19±0.06	1.50±0.19	
O057	Pork, tube (small intestine)	1	1.13	1.01		0.20								0.20	3.50	
O058	Hare, shoulder	1	8.88	0.06		1.46								0.58	1.46	25.59
O059	Hare, chops	1	2.84	0.09		1.73								0.69	1.73	23.65
O060	Hare, leg	1	1.26	0.08		1.44								0.58	1.44	22.18
O061	Rabbit, shoulder	1	5.90	0.57		1.22								0.49	1.22	24.68
O062	Rabbit, chops	1	3.88	0.70		0.83								0.33	0.83	25.88
O063	Rabbit, leg	1	8.49	0.43		0.72								0.29	0.72	23.85

Table 3. Fat Soluble Vitamins

84

Food Code	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α-Tocopherol Equivalent	Menaquinones (K2)
			← μg →		← mg →				← mg →			← μg →		
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE
P MARINE FISH														
P001	Allathi (<i>Elops machnata</i>)	1	9.60	1.03	0.25	1.02							1.02	1.98
P002	Aluva (<i>Parastromateus niger</i>)	3	14.30±1.94	0.79±0.02	0.34±0.08	1.00±0.56							1.00±0.56	8.88±0.03
P003	Anchovy (<i>Stolephorus indicus</i>)	2	12.18	2.76	0.11	0.73							0.73	0.60
P004	Ari fish (<i>Apriion virescens</i>)	1	1.56	1.02	0.02	0.10							0.10	0.88
P005	Betki (<i>Lates calcarifer</i>)	1	5.58	1.05	0.06	0.38							0.38	0.63
P006	Black snapper (<i>Macolor niger</i>)	1	14.55	1.31	0.18	0.51							0.51	115
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	3.38	0.96	0.29	0.75							0.75	1.04
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	3.28±1.70	3.19±0.09	0.08±0.04	0.54±0.46							0.54±0.46	0.94±0.04
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	14.08	1.42	0.47	0.38							0.38	0.96
P010	Chakla (<i>Rachycentron canadum</i>)	5	1.39±0.37	2.07±0.04	0.08±0.02	0.72±0.43							0.72±0.43	0.62±0.03
P011	Chappal (<i>Aluterus monoceros</i>)	1	1.37	0.21	0.04	1.09							1.09	0.77
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	1.49	0.86	0.17	0.41							0.41	1.06
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	1.59	0.72	0.16	1.20							1.20	1.44
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	13.24	0.33	0.01	0.10							0.10	0.92
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	1.82	0.15		0.89							0.89	1.58
P016	Guitar fish (<i>Rhinobatus prahlii</i>)	1	1.27	0.12	0.30	0.34							0.34	3.43
P017	Hilsa (<i>Tenualosa ilisha</i>)	2	7.42	4.96	1.02	1.35							1.35	0.94
P018	Jallal (<i>Arius sp.</i>)	1	8.49	0.94	0.03	0.62							0.62	0.64
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	3.16	0.93	0.10	1.49							1.49	1.06

Food Code	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α-Tocopherol Equivalent	Menaquinones (K2)	
			← μg →			← mg →									
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK2
P020	Kadal bral (<i>Synodus indicus</i>)	1	10.63	1.20	0.42	0.12								0.12	0.55
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	25.61	0.84	0.20	0.58								0.58	1.02
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	9.04	1.45	0.05	0.82								0.82	0.85
P023	Kalava (<i>Epinephelus cooides</i>)	1	1.29	1.86	0.07	0.33								0.33	1.63
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	16.42	0.82	0.34	0.59								0.59	2.15
P025	Kannadi paari (<i>Alectis indicus</i>)	3	12.37±5.10	0.10±0.03	0.19±0.03	0.70±0.24								0.70±0.24	0.92±0.05
P026	Karimeen (<i>Etroplus suratensis</i>)	1	1.29	0.87	0.13	0.37								0.37	12.04
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	1.82	1.24	0.04	0.12								0.12	0.85
P028	Kayrai (<i>Thunnus albacores</i>)	2	10.19	3.12	0.13	0.75								0.75	1.70
P029	Kiriyana (<i>Atule mate</i>)	1	1.62	0.38	0.38	0.35								0.35	0.93
P030	Kite fish (<i>Mobula kuhlii</i>)	1	1.52	0.03	0.01	0.24								0.24	1.54
P031	Korka (<i>Terapon jarbua</i>)	1	6.55	0.34	0.02	0.63								0.63	1.31
P032	Kulam paari (<i>Carangoides fulvoguttatus</i>)	1	3.64	2.45	0.31	1.05								1.05	0.88
P033	Maagaa (<i>Polynemus plebeius</i>)	1	1.76	1.18	0.09	1.03								1.03	0.75
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	16.34±16.88	0.22±0.02	0.23±0.02	0.71±0.29								0.71±0.29	5.25±0.01
P035	Manda clathi (<i>Naso reticulatus</i>)	1	1.99	1.46	0.45	0.16								0.16	0.46
P036	Matha (<i>Acanthurus mata</i>)	2	4.99	1.95	0.11	0.61								0.61	0.78
P037	Milk fish (<i>Chanos chanos</i>)	1	3.29	1.20	0.02	1.86								1.86	1.18
P038	Moon fish (<i>Mene maculata</i>)	1	8.94	0.48	0.09	1.20								1.20	4.20
P039	Mullet (<i>Mugil cephalus</i>)	3	18.38±15.27	0.31±0.07	0.19±0.02	0.53±0.63								0.53±0.63	0.83±0.03

Table 3. Fat Soluble Vitamins

86

Food Code	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α-Tocopherol Equivalent	Menaquinones (K2)	
			← μg →			← mg →									
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE	VITK2
P040	Mural (<i>Tylosurus crocodilus</i>)	1	1.61	0.86	0.01	0.44								0.44	1.34
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	21.51	0.18	0.22	0.53								0.53	0.89
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1	2.40	0.54	0.01	0.11								0.11	1.20
P043	Narba (<i>Caranx sexfasciatus</i>)	2	2.93	0.19	0.20	0.90								0.90	1.11
P044	Paarai (<i>Caranx heberi</i>)	1	3.23	1.40	0.38	0.30								0.30	0.97
P045	Padayappa (<i>Canthidermis maculata</i>)	1	1.46	0.62	0.08	0.25								0.25	0.63
P046	Pali kora (<i>Panna microdon</i>)	1	1.89	0.11	0.02	0.44								0.44	1.92
P047	Pambada (<i>Lepturacanthus savala</i>)	2	2.88	1.15	0.20	0.55								0.55	0.98
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	1.33	0.20	0.10	0.47								0.47	0.62
P049	Parava (<i>Lactarius lactarius</i>)	1	2.56	1.12	0.01	0.55								0.55	0.66
P050	Parcus (<i>Psettodes erumei</i>)	1	1.72	0.57	0.20	0.30								0.30	1.84
P051	Parrot fish (<i>Scarus ghobban</i>)	1	2.47	0.67	0.01	0.26								0.26	2.83
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	1.62	0.36	0.08	1.10								1.10	0.95
P053	Phopat (<i>Coryphaena hippurus</i>)	4	3.52±3.27	0.43±0.24	0.25±0.16	0.58±0.60								0.58±0.60	0.75±0.11
P054	Piranha (<i>Pygopristis</i> sp.)	1	1.05	1.06	0.09	0.37								0.37	3.15
P055	Pomfret, black (<i>Parastromateus niger</i>)	1	10.55	2.28	0.66	0.60								0.60	102
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	3.91	0.51	0.08	1.54								1.54	0.84
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	30.31	0.61	0.10	1.26								1.26	0.99
P058	Pranel (<i>Gerres</i> sp.)	1	1.84	0.54	0.01	0.42								0.42	0.69
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	1.75	1.60	0.01	0.82								0.82	1.24

Food Code	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α -Tocopherol Equivalent	Menaquinones (K2)	
			$\leftarrow \text{ } \mu\text{g} \rightarrow$			$\leftarrow \text{ } \text{mg} \rightarrow$									
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE	VITK2
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	1.52±0.47	0.19±0.01		0.40±0.26								0.40±0.26	0.79±0.01
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	1.15	2.99	0.14	0.52								0.52	1.05
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	2.87	1.23		0.02								0.02	1.21
P063	Rani (Pink perch)	1	1.78	1.84	0.06	1.65								1.65	0.71
P064	Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1	1.97	0.81	0.02	0.33								0.33	1.51
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	4.77	2.32	0.05	0.41								0.41	98.48
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	20.87	3.05	0.13	0.85								0.85	0.97
P067	Sadaya (<i>Platax orbicularis</i>)	1	64.20	1.56	0.05	0.52								0.52	1.77
P068	Salmon (<i>Salmo salar</i>)	1	15.63	0.86	0.08	0.58								0.58	0.75
P069	Sangada (<i>Nemipterus japonicus</i>)	1	3.07	0.92	0.13	0.36								0.36	0.71
P070	Sankata paarai (<i>Caranx ignobilis</i>)	1	2.58	0.58	0.14	1.07								1.07	1.17
P071	Sardine (<i>Sardinella longiceps</i>)	1	12.66	3.51		0.38								0.38	2.65
P072	Shark (<i>Carcharhinus sorrah</i>)	2	1.11	0.18	0.18	0.22								0.22	0.78
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	20.55	0.58	0.14	0.78								0.78	1.16
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	12.43	1.23	0.14	0.19								0.19	0.86
P075	Shelavu (<i>Sphyraena jello</i>)	4	24.82±22.75	1.77±0.10	0.10±0.01	0.36±0.21								0.36±0.21	1.72±0.01
P076	Silan (<i>Silonia silondia</i>)	1	3.07	0.18		0.48								0.48	1.74
P077	Silk fish (<i>Beryx sp.</i>)	1	1.69	0.68	0.04	0.72								0.72	0.98
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	6.74	0.69	0.17	0.60								0.60	0.83
P079	Sole fish (<i>Cynoglossus arel</i>)	1	9.53	1.12	0.01	0.18								0.18	0.74

Table 3. Fat Soluble Vitamins

88

Food Code	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α-Tocopherol Equivalent	Menaquinones (K2)	
			$\leftarrow \text{ } \mu\text{g} \rightarrow$			$\leftarrow \text{ } \text{mg} \rightarrow$									
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE	VITK2
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	7.55	0.67	0.23	0.28								0.28	0.90
P081	Tarlava (<i>Drepane punctata</i>)	2	5.32	2.35	0.01	0.52								0.52	0.76
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2	250	2.80	0.75	0.60								0.60	1.33
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	17.14	0.85	0.08	1.86								1.86	3.65
P084	Tuna (<i>Euthynnus affinis</i>)	5	16.65±8.35	0.11±0.03	0.63±0.18	0.57±0.17								0.57±0.17	11.63±0.28
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	21.01	0.65	0.05	0.14								0.14	1.23
P086	Valava (<i>Chirocentrus nudus</i>)	1	1.25	0.25	0.01	0.31								0.31	0.84
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	81.90	1.57	0.07	0.67								0.67	0.65
P088	Vela meen (<i>Aprion virescens</i>)	1	3.03	0.92		0.44								0.44	0.81
P089	Vora (<i>Siganus javus</i>)	2	3.20	0.60	0.16	0.65								0.65	1.97
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	1.97	1.82	0.35	0.17								0.17	0.81
P091	Xiphinis (<i>Xiphias gladius</i>)	1	1.14	0.02	0.07	0.76								0.76	0.78
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	2.55	2.80	0.47	0.28								0.28	0.53

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	1.55	0.21	0.68	6.33								6.33	1.04
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	5.02	0.63	0.10	2.06								2.06	1.11
Q003	Lobster, brown (<i>Thenuss orientalis</i>)	1	1.83	0.78	0.06	1.35								1.35	1.06
Q004	Lobster, king size (<i>Thenuss orientalis</i>)	1	15.02	0.19	0.09	0.52								0.52	1.25
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	8.33	0.94	0.14	2.34								2.34	1.03

Food Code	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α-Tocopherol Equivalent	Menaquinones (K2)	
			← μg →			← mg →									
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRIB	TOCTRG	TOCTRD	VITE	VITK2
Q006	Oyster (<i>Crassostrea</i> sp.)	1	25.36	0.82	0.04	1.11								1.11	1.72
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	1.24	1.18	0.35	3.04								3.04	297
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	6.55	1.62	0.63	2.87								2.87	2.32

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	29.04	0.86	0.07	2.70								2.70	1.48
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	8.50	2.08	0.10	1.21								1.21	1.53
R003	Octopus (<i>Octopus vulgaris</i>)	1	28.00	0.43	0.24	0.66								0.66	0.84
R004	Squid, black (<i>Loligo</i> sp.)	1	2.55	0.57	0.32	0.68								0.68	1.14
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	1.93	0.78	0.22	0.55								0.55	2.26
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	4.72	1.05	0.18	0.47								0.47	1.14
R007	Squid, white, small (<i>Uroteuthis duvaucelii</i>)	1	8.55	0.55	0.16	0.66								0.66	1.84

S FRESHWATER FISH AND SHELLFISH

S001	Cat fish (<i>Tandanus tandanus</i>)	2	13.59	1.37	0.11	0.38								0.38	0.96
S002	Catla (<i>Catla catla</i>)	6	4.32±0.78	1.90±0.19	0.16±0.04	2.35±0.41								2.35±0.41	1.12±0.02
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	866	3.81	0.57	1.80								1.80	1.23
S004	Gold fish (<i>Carassius auratus</i>)	2	22.95	0.21	0.07	2.10								2.10	1.26
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6	14.59±0.00	0.20±0.04	0.08±0.04	2.80±0.75								2.80±0.75	0.92±0.07
S006	Rohu (<i>Labeo rohita</i>)	6	3.87±0.94	0.84±0.11	0.17±0.03	2.40±0.82								2.40±0.82	1.03±0.24

Table 3. Fat Soluble Vitamins

Food Code spp	Fish Name	No. of Regions	Retinol	Cholecalciferol (D3)	25-OH-D3	Tocopherols				Tocotrienols			α-Tocopherol Equivalent	Menaquinones (K2)	
			$\leftarrow \text{ } \mu\text{g} \rightarrow$			$\leftarrow \text{ } \text{mg} \rightarrow$									
			RETOL	CHOCAL		TOCPHA	TOCPHB	TOCPHG	TOCPHD	TOCTRA	TOCTRB	TOCTRG	TOCTRD	VITE	VITK2
S007	Crab (<i>Pachygrapsus sp.</i>)	1	12.55	1.20	0.17	4.85								4.85	0.91
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1	3.56	0.35	0.10	2.85									0.84
S009	Prawns, small (<i>Macrobrachium sp.</i>)	3	2.78	0.95	0.15	1.75								1.75	0.80
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	0.55	1.34	0.27	1.65								1.65	1.02



91

Table 4
CAROTENOIDS

Table 4. CAROTENOIDS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXN	CARTG	CARTA	CARTB	CARTOID
A CEREALS AND MILLETS										
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	10.25							121
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	4.11±1.16							59.68±3.09
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	29.69±8.72	9.30±1.23					28.23±9.42	293±55.7
A004	Barley (<i>Hordeum vulgare</i>)	6	5.39±2.77	1.90±0.35						69.87±28.88
A005	Jowar (<i>Sorghum vulgare</i>)	6	9.08±1.77	7.48±2.41					8.29±1.30	212±48.9
A006	Maize, dry (<i>Zea mays</i>)	6	186±19.4	42.4±15.7		110±10.1			186±19.2	893±154
A007	Maize, tender, local (<i>Zea mays</i>)	6	110±28.1	26.53±3.59		37.26±4.60			36.27±11.33	1428±225
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	108±25.0	28.19±4.22		58.41±4.60			47.01±6.23	1035±154
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	11.88	10.05					5.12	153
A010	Ragi (<i>Eleusine coracana</i>)	5	25.53±5.82	1.45±0.23					1.53±0.25	154±25.6
A011	Rice flakes (<i>Oryza sativa</i>)	6	1.46±0.25							33.61±4.26
A012	Rice puffed (<i>Oryza sativa</i>)	6	1.51±0.31							50.46±4.52
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	13.15±4.03							159±13.9
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	1.46±0.72							46.90±8.29
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	1.49±0.46							16.87±5.61
A016	Samai (<i>Panicum miliare</i>)	6	7.82±1.76	5.24±1.66					1.91±0.89	120±9.0
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	59.40±7.01	3.91±1.08					1.41±0.29	272±25.1
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	24.41±9.21	1.30±0.72					1.97±0.80	270±69.0

Table 4. Carotenoids

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXN	CARTG	CARTA	CARTB	CARTOID
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	42.12 \pm 11.27	1.31 \pm 0.69					2.67 \pm 1.29	284 \pm 31.9
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	52.56 \pm 5.67	1.47 \pm 0.68					3.03 \pm 2.13	287 \pm 40.5
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	47.67 \pm 13.64	1.06 \pm 0.80					2.55 \pm 0.85	191 \pm 15.1
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	29.94 \pm 7.39	1.13 \pm 0.66					1.60 \pm 0.59	276 \pm 29.9
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	19.31 \pm 5.80	0.89 \pm 0.57					1.68 \pm 0.31	39.54 \pm 5.33
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	12.89 \pm 4.12	1.08 \pm 0.42					0.92 \pm 0.58	21.33 \pm 5.71

B GRAIN LEGUMES

94	B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	314 \pm 82.4	1.05 \pm 0.44				165 \pm 22.8	1018 \pm 16.9
	B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	385 \pm 39.4	24.74 \pm 12.0				172 \pm 21.0	999 \pm 240
	B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	83.87 \pm 22.87					10.11 \pm 2.10	279 \pm 54.8
	B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	95.42 \pm 2.13					12.80 \pm 0.50	463 \pm 34.2
	B005	Cowpea, brown (<i>Vigna catjang</i>)	6	83.34 \pm 26.30					7.08 \pm 1.58	218 \pm 16.8
	B006	Cowpea, white (<i>Vigna catjang</i>)	1	78.52					8.21	250
	B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	48.99						207
	B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	53.18						254
	B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	58.47 \pm 4.55						256 \pm 33.2
	B010	Green gram, dal (<i>Vigna radiata</i>)	6	113 \pm 22.6	2.98 \pm 1.73				122 \pm 2.7	619 \pm 61.9
	B011	Green gram, whole (<i>Vigna radiata</i>)	6	187 \pm 20.7	5.63 \pm 2.50				137 \pm 33.5	889 \pm 106
	B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	67.26 \pm 9.84	2.92 \pm 1.81				58.57 \pm 9.13	267 \pm 42.8
	B013	Lentil dal (<i>Lens culinaris</i>)	6	5.92 \pm 3.05					6.34 \pm 0.82	812 \pm 93.3

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXN	CARTG	CARTA	CARTB	CARTOID
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	6.85 \pm 2.24						10.29 \pm 1.09	924 \pm 89.0
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	7.76						12.64	939
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	148 \pm 21.2						3.57 \pm 1.03	622 \pm 72.9
B017	Peas, dry (<i>Pisum sativum</i>)	6	474 \pm 35.6	23.41 \pm 7.12					65.71 \pm 8.07	933 \pm 94.1
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	6.38						1.95	86.67
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	7.18 \pm 1.82						2.16 \pm 0.50	90.26 \pm 14.96
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	6.76 \pm 2.55						1.60 \pm 0.24	103 \pm 29.2
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	11.69 \pm 1.31						127 \pm 26.3	484 \pm 90.6
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	25.25 \pm 6.15						149 \pm 21.0	579 \pm 44.8
B023	Ricebean (<i>Vigna umbellata</i>)	1	6.88							29.02
B024	Soybean, brown (<i>Glycine max</i>)	6	35.47 \pm 13.69						3.50 \pm 1.01	262 \pm 22.4
B025	Soybean, white (<i>Glycine max</i>)	1	28.50						2.82	282
C GREEN LEAFY VEGETABLES										
C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	12941	559					12582	36087
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	8397 \pm 1005	164 \pm 32.3					8553 \pm 1813	20473 \pm 1060
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	7439	118					8457	21449
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	7390 \pm 1361	148 \pm 30.0					8464 \pm 1753	20181 \pm 1961
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	1861 \pm 203	126 \pm 16.3					1594 \pm 315	4174 \pm 815
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	1748	160					1487	4540
C007	Basella leaves (<i>Basella alba</i>)	2	2962	241					2473	5824

Table 4. Carotenoids

69

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXN	CARTG	CARTA	CARTB	CARTOID
C008	Bathua leaves (<i>Chenopodium album</i>)	2	1795	132					1075	3469
C009	Beet greens (<i>Beta vulgaris</i>)	6	1495±329.1	146±53.2					1703±146	3340.97±143.39
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	4253±1026	60.31±18.37				191±39.0	4186±524	13735±1594
C011	Betel leaves, small (<i>Piper betle</i>)	4	5783±460	79.80±13.41				427±64.0	4676±622	16563±1292
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	1653	35.64					360	2564
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	58.00	1.50					5.50	103
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	143	2.68					104	358
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	3.98±1.34						20.48±2.21	273±7.3
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	44.50	2.20					31.17	339
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	152±21.2	1.97±0.39					146±15.6	1742±9.4
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	5222±1363	136±28.9					5758±1836	26820±3413
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	15580±3760	235±19.4					17542±1425	38765±7172
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	2275±754	28.28±9.53					9245±974	12755±1221
C021	Garden cress (<i>Lepidium sativum</i>)	2	1354	16.63					88.72	5048
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	5276±985	18.72±10.90					5285±856	16088±3497
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	4782	20.50					5143	15934
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	15.62	2.77					12.04	154
C025	Lettuce (<i>Lactuca sativa</i>)	3	1858±322	5.64±2.79					1285±167	7532±1363
C026	Mustard leaves (<i>Brassica juncea</i>)	3	2939±562	8.13±3.96					2619±372	6397±1014
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	2655	5.50					2450	5111
C028	Parsley (<i>Petroselinum crispum</i>)	3	3574±455	11.92±7.28					2710±349	6558±578

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	5201	105					5288	24206
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	6139±982	45.28±17.23					1455±146	8247±720
C031	Radish leaves (<i>Raphanus sativus</i>)	6	1741±190	22.71±10.72					2591±572	9339±854
C032	Rumex leaves (<i>Rumex patientia</i>)	2	2370	18.98					2754	8290
C033	Spinach (<i>Spinacia oleracea</i>)	6	3850±926	17.23±5.40					2605±521	9553±1491
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	58.83±10.16	1.88±0.26					168±21.2	4002±389

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6	18.29±4.23	5.76±2.93						66.67±10.19
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	2.50							11.60
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	98.51±21.39	2.67±0.33					35.52±3.88	1055±156
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	282±101	5.83±2.55					122±10.9	717±179
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	244±82.0	6.96±2.53					126±7.10	505±86
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	313	7.20					130	481
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	28.88±8.19						44.05±11.68	95.12±13.56
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	29.64±2.98	8.60±2.23					47.13±3.49	92.56±17.23
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	28.98	2.50					44.82	97.02
D010	Brinjal-1 (<i>Solanum melongena</i>)	1	126	1.90					126	186
D011	Brinjal-2 (<i>Solanum melongena</i>)	1	130	2.80					130	167
D012	Brinjal-3 (<i>Solanum melongena</i>)	2	131	3.29					138	155
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	142±18.5	3.90±1.39					140±15.0	138±34.2

Table 4. Carotenoids

89

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	122±10.1	2.78±1.52					123±12.7	136±3.9
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	126	4.16					129	168
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	155	4.50					155	166
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	162±19.2	3.77±1.89					162±16.1	190±12.3
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	160	2.89					158	232
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	161	2.39					161	162
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	152±11.5	2.02±0.63					162±22.2	227±28.0
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	147	2.89					144	217
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	138	3.90					138	116
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	137±12.2	4.12±2.23					134±21.4	493±142
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	169±24.2	4.35±1.76					162±41.9	346±84.4
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	155	1.80					155	364
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	146	1.90					146	564
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	128±15.1	2.88±1.48					130±11.4	364±94.2
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	119±14.7	3.68±1.70					119±16.8	552±90.6
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	139±12.6	4.08±1.72					139±18.5	651±37.7
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	156	4.44					155	670
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	144±18.7	3.21±1.55					146±24.0	309±188
D032	Broad beans (<i>Vicia faba</i>)	3	106±33.5	24.25±8.69					6.38±0.62	574±5.14
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	164±43.9	21.41±8.02					328±61.7	2511±776
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	165±33.2	18.28±6.66					246±47.2	3047±785
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	280±57.2	17.95±5.26					166±15.0	2717±203

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Crypto-xanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPX _B	CARTG	CARTA	CARTB	CARTOID
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	31.3±7.69	5.77±2.61					1.59±0.66	50.48±4.22
D037	Celery stalk (<i>Apium graveolens</i>)	3	161±15.4	2.61±1.56					465±57.3	2439±280
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	8.56±1.67	1.80±1.29					1.57±0.31	24.53±9.12
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	538±164	21.49±8.50					241±32.8	1192±250
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	97.12	5.30					4.97	631
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	99.6±19.5	1.96±0.90					2.30±1.25	597±153
D042	Corn, baby (<i>Zea mays</i>)	6	5.79±3.45	1.90±0.84					1.52±0.33	72.89±13.79
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	2.22±1.12						5.33±0.93	171±46.8
66	Cucumber, green, short (<i>Cucumis sativus</i>)	6	4.86±1.82						4.80±1.45	172±44.8
	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	3.19						5.55	134
	Drumstick (<i>Moringa oleifera</i>)	6	145±18.8	5.52±3.79					17.28±1.85	350±62.0
	Field beans, tender, broad (<i>Vicia faba</i>)	2	467	21.54				83.48	555	1738
	Field beans, tender, lean (<i>Vicia faba</i>)	6	297±55.7	2.79±2.18				74.32±6.96	556±6.0	1837±86.5
	French beans, country (<i>Phaseolus vulgaris</i>)	5	235±71.8	21.21±10.10				3.57±0.71	413±10.4	1501±171
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	228	13.35				3.18	388	1449
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	4.86±2.54	2.92±1.65						17.66±1.17
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	2.13±0.82	1.56±1.11						19.63±2.17
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	2.51±0.83	1.55±1.24						28.82±2.36
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	170±14.3	5.74±2.43					134±9.8	498±66.2
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	157	4.50					147	586
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	798±83.0	3.53±1.91					69.10±10.41	1223±118

Table 4. Carotenoids

Table 4. Carotenoids

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	122 \pm 13.7	1.52 \pm 1.18		11.94 \pm 0.73			72.37 \pm 6.60	517 \pm 53.6
D058	Onion, stalk (<i>Allium cepa</i>)	6	575 \pm 175	2.43 \pm 0.68					700 \pm 2.6	3488 \pm 11.1
D059	Papaya, raw (<i>Carica papaya</i>)	6	266 \pm 55.8	7.88 \pm 0.32		76.80 \pm 18.04			164 \pm 60.8	548 \pm 67.5
D060	Parwar (<i>Trichosanthes dioica</i>)	6	322 \pm 102	10.77 \pm 3.25					13.10 \pm 1.50	965 \pm 15.0
D061	Peas, fresh (<i>Pisum sativum</i>)	6	68.6 \pm 19.1	11.40 \pm 2.54					121 \pm 12.5	1286 \pm 259
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	75.7 \pm 5.0	5.90 \pm 2.93					35.36 \pm 7.72	149 \pm 19.5
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	28.9 \pm 9.85	3.45 \pm 1.94					3.01 \pm 1.65	224 \pm 29.8
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	26.3 \pm 6.75	3.68 \pm 1.72					2.39 \pm 1.25	69.31 \pm 6.73
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	394	26.60			63.91	363	1319	
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	161 \pm 17.5	34.91 \pm 4.73			90.74 \pm 12.40	149 \pm 16.8	1449 \pm 167	
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	190						165	495
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	129 \pm 20.5	19.50 \pm 3.17					348 \pm 31.4	838 \pm 101
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	127 \pm 25.8	18.83 \pm 2.68					349 \pm 23.4	851 \pm 84.6
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	38.9 \pm 8.68	3.67 \pm 2.30					61.29 \pm 2.40	190 \pm 18.8
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	39.60	5.41					61.64	188
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	32.75	4.50					62.84	188
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	8.19 \pm 2.71	2.22 \pm 1.62					7.96 \pm 1.10	49.81 \pm 2.51
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	38.9 \pm 8.90	2.48 \pm 1.34	35.97 \pm 13.4		5.80 \pm 0.79		32.33 \pm 3.91	546 \pm 59.3
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	1568 \pm 530	10.96 \pm 2.17	2481 \pm 495		7.32 \pm 1.16		1513 \pm 146	5826 \pm 828
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	965 \pm 167	17.52 \pm 6.44	1736 \pm 278		9.37 \pm 0.53		905 \pm 58.4	4656 \pm 636
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	87.86	16.23					85.79	963

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	294	25.60					69.90	1177

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6	36.4±5.19	1.90±0.95				2.41±2.13	229±98.5
E002	Apple, green (<i>Malus domestica</i>)	6	40.2±18.8	1.91±0.77				2.20±0.93	196±47.5
E003	Apple, small (<i>Malus domestica</i>)	6	38.8±2.95	1.71±0.48				2.08±0.82	198±25.6
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	46.26	1.98				2.11	344
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	4.98±2.79	2.33±1.08				1806±106	4313±123
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	3.07±1.49	1.98±0.62				1372±198	3357±748
E007	Avocado fruit (<i>Persea sp.</i>)	1	25.13	2.50				12.00	321
E008	Bael fruit (<i>Aegle marmelos</i>)	1	36.12	2.20				2.50	172
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	47.32	1.90			3.57	53.06	260
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	34.67	2.75			1.71	57.33	252
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	47.08	2.50			2.12	51.52	261
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	26.9±6.18	2.33±0.87			3.57±1.67	56.78±11.56	314±64.8
E013	Black berry (<i>Rubus sp.</i>)	5	105±17.5	2.37±0.98				52.32±2.65	166±2.4
E014	Cherries, red (<i>Prunus cerasus</i>)	4	92.9±12.4	5.69±2.12				40.78±1.15	259±36.4
E015	Currants, black (<i>Ribes nigrum</i>)	1	242	12.90				62.48	453
E016	Custard apple (<i>Annona squamosa</i>)	1	12.45	1.80					142
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	281±77.8	8.95±1.88				2700±345	3483±551
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	285	4.83				2705	3280
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	305	86.34				2781	3288

Table 4. Carotenoids

100

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
E020	Fig (<i>Ficus carica</i>)	6	19.0 \pm 2.27	2.01 \pm 0.64					2.40 \pm 0.59	454 \pm 51.3
E021	Gooseberry (<i>Emblica officinalis</i>)	5	38.7 \pm 9.78	2.86 \pm 1.61					1.58 \pm 0.09	62.01 \pm 6.45
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	27.8 \pm 8.85	3.59 \pm 2.20					29.36 \pm 8.37	213 \pm 29.4
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	31.3 \pm 8.77	4.06 \pm 1.60					30.77 \pm 11.10	208 \pm 28.8
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	17.2 \pm 3.04	7.58 \pm 2.28					19.94 \pm 1.29	314 \pm 99.9
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	19.4 \pm 3.07	8.14 \pm 1.73					19.73 \pm 1.76	321 \pm 50.6
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	25.8 \pm 7.90	6.82 \pm 3.77					25.46 \pm 6.66	216 \pm 31.3
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	16.1 \pm 2.90	7.95 \pm 1.73					20.58 \pm 2.36	232 \pm 27.9
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	19.7 \pm 4.59	5.92 \pm 3.06					298 \pm 32.8	996 \pm 108
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	90.3 \pm 11.5	8.94 \pm 2.21	2843 \pm 340				267 \pm 88.2	4078 \pm 477
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	19.3 \pm 6.91	2.42 \pm 1.27					23.53 \pm 1.24	59.61 \pm 4.90
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	18.49	5.68					1.55	66.50
E032	Karonda fruit (<i>Carissa carandas</i>)	1	6.12	1.14					15.64	55.89
E033	Lemon, juice (<i>Citrus limon</i>)	6	9.68 \pm 2.22	1.72 \pm 0.50					2.62 \pm 0.34	85.99 \pm 3.36
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	13.2 \pm 3.54	1.89 \pm 0.44					2.54 \pm 0.30	85.13 \pm 10.71
E035	Litchi (<i>Litchi chinensis</i>)	4	27.33 \pm 9.81	1.61 \pm 0.62					1.47 \pm 0.21	129 \pm 15.1
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	3.19 \pm 1.51	1.62 \pm 0.22	2.72 \pm 1.31				1168 \pm 141	1424 \pm 308
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	4.18	1.64	4.58				666	1350
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	6.26 \pm 2.09	1.19 \pm 0.14	5.60 \pm 3.84				1181 \pm 136	1423 \pm 201
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	3.71 \pm 2.21	2.33 \pm 0.17	6.96 \pm 3.31				1264 \pm 172	1438 \pm 314
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	2.95	1.67	2.51				1291	1376
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	2.51	7.19	2.49				1061	1210

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPX _B	CARTG	CARTA	CARTB	CARTOID
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	13.27	2.86		4.56			602	1632
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	16.81	5.40					1.80	181
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	36.50	10.50					2.20	154
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	20.17 \pm 3.03	2.52 \pm 0.84					771 \pm 96.4	925 \pm 43.6
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	22.48 \pm 9.44	2.69 \pm 1.16					6.87 \pm 0.36	92.15 \pm 6.04
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	13.8 \pm 1.83	31.88 \pm 6.66		44.02 \pm 13.91		5.76 \pm 1.79	31.94 \pm 2.12	675 \pm 11.0
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	5.80	1.50						50.00
E049	Papaya, ripe (<i>Carica papaya</i>)	6	5.43 \pm 0.87	280 \pm 43.9	833 \pm 82.9	648 \pm 85.2			694 \pm 84.5	2472 \pm 81.1
E050	Peach (<i>Prunus communis</i>)	1	5.80	1.50						50.00
E051	Pear (<i>Pyrus</i> sp.)	6	14.7 \pm 1.34	2.77 \pm 1.18		1.44 \pm 0.28			13.16 \pm 1.78	92.30 \pm 8.23
E052	Phalsa (<i>Grewia asiatica</i>)	2	157	3.11				5.68	1.71	396
E053	Pineapple (<i>Ananas comosus</i>)	6	8.11 \pm 1.14	1.80 \pm 1.23					31.21 \pm 4.33	86.31 \pm 10.74
E054	Plum (<i>Prunus domestica</i>)	3	5.67 \pm 0.98	2.39 \pm 1.04					1.32 \pm 0.22	430 \pm 82.9
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	27.8 \pm 7.62	2.51 \pm 0.82					2.05 \pm 0.58	47.28 \pm 7.09
E056	Pummelo (<i>Citrus maxima</i>)	3	22.5 \pm 8.14	5.90 \pm 1.56		10.43 \pm 1.83			1.55 \pm 0.35	337 \pm 83.6
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	9.13 \pm 1.70	2.18 \pm 0.95					3.71 \pm 1.08	207 \pm 44.7
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	28.3 \pm 4.93	3.53 \pm 1.13					2.53 \pm 0.63	272 \pm 38.6
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	16.80	2.50					2.90	175
E060	Sapota (<i>Achras sapota</i>)	6	22.6 \pm 7.22	2.09 \pm 0.64					80.70 \pm 5.96	229 \pm 17.3
E061	Soursop (<i>Annona muricata</i>)	1	29.80	5.30					2.20	78.00
E062	Star fruit (<i>Averrhoa carambola</i>)	1	26.80	2.60					1.40	152
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	19.3 \pm 4.86	1.45 \pm 0.22					2.19 \pm 0.17	218 \pm 71.1

Table 4. Carotenoids

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	28.4±2.99	11.61±5.64					1.54±0.42	188±21.3
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	914±211	25.95±11.73	1477±347				605±121	4176±537
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	981±124	23.40±8.65	1257±408				576±119	4300±379
E067	Wood Apple (<i>Limonia acidissima</i>)	3	11.0±1.56	2.57±0.83					3.81±1.28	77.06±7.46
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	10.70	1.60					1.50	76.80

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	28.6±10.9	4.57±2.69					10.14±2.52	12.88±1.58
F002	Carrot, orange (<i>Dacus carota</i>)	6	257±63.1	13.93±4.31	157±44.9				2654±524	5423±450
F003	Carrot, red (<i>Dacus carota</i>)	4	224±45.1	15.49±4.61	871±95.9				1128±179	2706±298
F004	Colocasia (<i>Colocasia esculenta</i>)	6	5.87±1.78	2.07±0.69					6.50±1.16	21.72±2.75
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	13.0±1.58							156±19.5
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	8.07±0.98	122±4.9						208±19.3
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	7.86	125						224
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	8.12	123						226
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	8.68±1.90	2.38±0.93					1.62±0.37	17.61±5.77
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	5.34±0.84	2.08±0.84						10.60±1.22
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	7.80	2.50					1.20	13.07
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	6.36	1.66						23.69
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	282±56.1	146±22.7					5376±816	8653±749
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	208±54.2	133±11.7					11.12±1.45	695±83.95

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
F015	Tapioca (<i>Manihot esculenta</i>)	3	5.93±1.86	2.38±0.95						60.90±8.50
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	8.12	2.50						93.08
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	168±14.8	10.43±2.76				32.32±3.56	176±19.3	599±70.0
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	273±51.3	8.69±3.43					158±31.8	51.04±7.68
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	11.39	1.20				8.95	230	94.53

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5	255±44.6	18.92±3.74				31.69±9.15	1135±403
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3	283±66.7	24.48±6.29				232±91.3	1336±100
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5	285±79.9	34.74±11.55				158±45.8	1107±317
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3	207±56.1	45.64±13.89				67.84±5.44	1761±178
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2	278±93.3	41.40±25.80				45.41±11.38	1539±477
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1	234	35.50				508	1478
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1	294	28.50				44.00	1891
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6	261±60.9	31.47±13.46				125±122	1347±382
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	6351±1069	28.30±14.89				3808±891	13808±2107
G010	Curry leaves (<i>Murraya koenigii</i>)	6	2945±381	36.13±12.13			144±14.5	7663±704	21862±2168
G011	Garlic, big clove (<i>Allium sativum</i>)	6	4.02±1.61	1.55±0.28					33.91±6.10
G012	Garlic, small clove (<i>Allium sativum</i>)	3	5.09±1.50	1.57±0.37					30.48±6.94
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	2.52	1.36					26.58

105

Table 4. Carotenoids

Table 4. Carotenoids

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	15.0 \pm 4.48	5.97 \pm 3.00					88.85 \pm 0.92	329 \pm 53.7
G015	Mango ginger (<i>Curcuma amada</i>)	3	23.6 \pm 3.99	3.09 \pm 1.50					76.62 \pm 13.12	250 \pm 5.3
G016	Mint leaves (<i>Mentha spicata</i>)	4	2526 \pm 730	300 \pm 51.2					4602 \pm 553	18693 \pm 1938
G017	Onion, big (<i>Allium cepa</i>)	6	1.77 \pm 0.64	1.81 \pm 0.69					1.08 \pm 0.28	89.10 \pm 6.38
G018	Onion, small (<i>Allium cepa</i>)	5	15.3 \pm 0.92	1.69 \pm 0.09					1.10 \pm 0.06	31.04 \pm 12.49
G CONDIMENTS AND SPICES-DRY										
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	23.8 \pm 6.80	1.52 \pm 0.29					6.42 \pm 0.75	168 \pm 24.7
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	37.0 \pm 10.0	32.85 \pm 4.78					21.91 \pm 2.31	366 \pm 22.6
106	G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	56.9 \pm 17.6	10.31 \pm 2.62				77.48 \pm 13.27	1137 \pm 95.2
	G022	Chillies, red (<i>Capsicum annum</i>)	6	1843 \pm 342	2712 \pm 789	36.44 \pm 10.4	1599 \pm 203		1542 \pm 288	101812 \pm 5619
	G023	Cloves (<i>Syzygium aromaticum</i>)	6	16.9 \pm 3.39	1.55 \pm 0.23			8.55 \pm 0.71	73.51 \pm 2.74	356 \pm 38.2
	G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	225 \pm 34.0	10.96 \pm 2.23				122 \pm 13.5	996 \pm 50.0
	G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	170 \pm 10.8	42.60 \pm 6.86				89.19 \pm 19.24	553 \pm 32.5
	G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	586 \pm 91.3	201 \pm 12.0				142 \pm 1.5	1210 \pm 162
	G027	Mace (<i>Myristica fragrans</i>)	6	135 \pm 26.7	196 \pm 22.4				2322 \pm 157	9203 \pm 880
	G028	Nutmeg (<i>Myristica fragrans</i>)	6	4.01 \pm 1.18	1.33 \pm 0.26				15.37 \pm 1.11	80.91 \pm 9.87
	G029	Omum (<i>Trachyspermum ammi</i>)	6	494 \pm 61.2	8.30 \pm 2.99	51.37 \pm 9.37			746 \pm 17.7	1836 \pm 22.1
	G030	Pippali (<i>Piper longum</i>)	6	666 \pm 92.3	479 \pm 54.8	110 \pm 10.5		278 \pm 28.4	545 \pm 50.4	2401 \pm 205
	G031	Pepper, black (<i>Piper nigrum</i>)	6	650 \pm 62.3	158 \pm 15.4	165 \pm 11.6		157 \pm 10.1	767 \pm 65.5	2219 \pm 56
	G032	Poppy seeds (<i>Papaver somniferum</i>)	6	23.5 \pm 15.0	1.76 \pm 0.79				3.51 \pm 0.66	34.45 \pm 10.70

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxyanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXB	CARTG	CARTA	CARTB	CARTOID
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	99.8±16.0	3.56±1.60				55.20±1.77		427±85.8

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6	5.93±1.89	1.79±0.12						11.31±1.57
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	21.3±6.13	3.83±2.00						41.96±3.23
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	27.5±7.24	3.12±1.66						63.72±3.91
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	31.65	6.23						47.78
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	5.87±1.91	3.21±1.77						16.94±3.30
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	62.5±9.59	3.12±1.03						176±9.4
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	122±15.4	4.84±1.66				2.66±0.28		204±11.3
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	22.5±7.41	33.93±10.2						559±34.6
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	22.9±11.0	2.67±1.21				13.09±2.67		60.78±13.60
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	17.0±4.46	2.40±0.61				5.41±0.57		86.72±3.90
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	19.7±5.45	1.88±0.33				12.94±1.55		57.06±19.48
H012	Ground nut (<i>Arachis hypogaea</i>)	6	4.42±1.04	8.07±2.32				22.75±2.13		82.80±6.06
H013	Mustard seeds (<i>Brassica nigra</i>)	6	192±16.3	6.54±2.42				36.72±7.07		675±77.0
H014	Linseeds (<i>Linum usitatissimum</i>)	6	5.67±0.81	7.22±0.70				1.05±0.03		92±22.8
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	22.1±4.41	9.61±1.59				2.15±0.81		295±39.1
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	6.00±0.54	2.38±1.13	2.73±0.91			8.49±0.83		187±21.6
H017	Pine seed (<i>Pinus sp.</i>)	5	97.0±17.4	11.55±1.53				1.98±0.52		297±40.4
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	171±6.8					110±10.4		519±31.3
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	27.6±7.88	11.04±2.45				2.07±0.58		142±13.8

Table 4. Carotenoids

Food code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β -Cryptoxanthin	γ -Carotene	α -Carotene	β -Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPXN	CARTG	CARTA	CARTB	CARTOID
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	20.0 \pm 2.52	2.48 \pm 0.71					8.15 \pm 1.18	249 \pm 12.0
H021	Walnut (<i>Juglans regia</i>)	6	21.7 \pm 10.05	2.30 \pm 0.82		4.94 \pm 0.79			9.53 \pm 0.91	122 \pm 5.8
I SUGARS										
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	5.90 \pm 1.83							18.49 \pm 2.26
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	8.36 \pm 2.40						7.87 \pm 0.37	41.23 \pm 4.16
J MUSHROOMS										
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1								
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1								
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1								
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1								
K MISCELLANEOUS FOODS										
K001	Toddy (<i>Borassus flabellifer</i>)	10								
K002	Coconut Water (<i>Cocos nucifera</i>)	6	4.53 \pm 2.12							46.12 \pm 7.32
L MILK AND MILK PRODUCTS										
L001	Milk, whole, Buffalo	6	8.78 \pm 2.21						8.42 \pm 0.40	80.87 \pm 1.41
L002	Milk, whole, Cow	6	9.62 \pm 1.51	5.01 \pm 1.15					13.67 \pm 3.79	200 \pm 55.9
L003	Paneer	6	7.58 \pm 0.97						4.39 \pm 1.44	194 \pm 1.7
L004	Khoa	6	2.70 \pm 0.69						3.52 \pm 1.16	190 \pm 8.0

Food Code	Food Name	No. of Regions	Lutein	Zeaxanthin	Lycopene	β - Cryptoxanthin	γ - Carotene	α - Carotene	β - Carotene	Total Carotenoids
			μg							
			LUTN	ZEA	LYCPN	CRYPX _B	CARTG	CARTA	CARTB	CARTOID
M EGG AND EGG PRODUCTS										
M001	Egg, poultry, whole, raw	6	17.61 \pm 2.89	37.23 \pm 7.16		0.97 \pm 0.44			13.60 \pm 2.04	135 \pm 2.6
M002	Egg, poultry, white, raw	6								
M003	Egg, poultry, yolk, raw	6	27.29 \pm 1.29	56.60 \pm 15.23		2.09 \pm 0.78			88.87 \pm 0.94	241 \pm 6.7
M004	Egg, poultry, whole, boiled	6	14.69 \pm 3.40	26.29 \pm 11.09		1.07 \pm 0.53			13.19 \pm 0.49	136 \pm 7.3
M005	Egg, poultry, white, boiled	6								5.30 \pm 0.31
M006	Egg, poultry, yolk, boiled	6	19.36 \pm 3.98	54.75 \pm 12.66		1.69 \pm 0.77			68.59 \pm 2.93	218 \pm 9.8
M007	Egg, poultry, omlet	3	14.47 \pm 0.35	19.03 \pm 0.96		0.75 \pm 0.10			11.36 \pm 0.84	111 \pm 1.0
M008	Egg, country hen, whole, raw	1	26.86	47.26		1.56			18.55	191
M009	Egg, country hen, whole, boiled	1	23.61	37.85		1.06			17.45	166
M010	Egg, country hen, omlet	1	20.55	30.85		0.95			14.75	161
M011	Egg, duck, whole, boiled	1	22.21	10.16		9.25			34.59	228
M012	Egg, duck, whole, raw	1	29.50	17.96		11.08			35.66	249
M013	Egg, duck, whole, omlet	1	20.05	9.55		8.98			30.08	213
M014	Egg, quail, whole, raw	1	14.83	28.48		3.57			12.96	242
M015	Egg, quail, whole, boiled	1	12.55	14.75		1.86			10.55	230

Table 5

**MINERALS
AND
TRACE ELEMENTS**



Table 5. MINERALS AND TRACE ELEMENTS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
A CEREALS AND MILLETS												
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	3.32			181	1.227	0.059	0.81	9.33	0.013	0.028
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	2.73±0.47		0.001±0.000	162±15.7	0.092±0.045	0.021±0.005	0.56±0.09	8.02±0.93	0.018±0.012	0.008±0.008
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	2.21±0.78	0.97±0.24	0.003±0.001	27.35±2.16	0.025±0.006	0.030±0.015	0.54±0.11	6.42±1.04	0.008±0.002	0.003±0.001
A004	Barley (<i>Hordeum vulgare</i>)	6				28.64±3.49	0.029±0.009	0.027±0.010	0.43±0.17	1.56±0.15		
A005	Jowar (<i>Sorghum vulgare</i>)	6	2.56±0.59	1.53±0.04	0.002±0.002	27.60±3.71	0.010±0.003	0.012±0.007	0.45±0.11	3.95±0.94	0.008±0.003	0.001±0.001
A006	Maize, dry (<i>Zea mays</i>)	6	2.82±0.16			8.91±0.61	0.010±0.006	0.010±0.003	0.45±0.23	2.49±0.32		0.002±0.001
A007	Maize, tender, local (<i>Zea mays</i>)	6	0.12±0.05			6.35±0.89	0.004±0.003		0.18±0.06	0.71±0.06	0.001±0.000	
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	0.11±0.02			6.37±1.07	0.002±0.001	0.001±0.000	0.11±0.02	0.54±0.07		
A009	Quinoa (<i>Chenopodium quinoa</i>)	1		0.03	0.002	198	0.004		0.48	7.51		
A010	Ragi (<i>Eleusine coracana</i>)	5	3.64±0.69		0.004±0.004	364±58.0	0.032±0.019	0.022±0.009	0.67±0.22	4.62±0.36	0.005±0.002	0.003±0.003
A011	Rice flakes (<i>Oryza sativa</i>)	6	2.44±0.60		0.002±0.001	9.19±1.33	0.050±0.027	0.007±0.003	0.26±0.05	4.46±0.81	0.005±0.003	0.002±0.002
A012	Rice puffed (<i>Oryza sativa</i>)	6	2.41±0.61		0.004±0.003	15.09±2.92	0.028±0.007	0.007±0.002	0.25±0.05	4.55±1.03	0.013±0.006	0.004±0.002
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	0.60±0.18		0.002±0.001	10.93±1.79	0.005±0.002	0.011±0.003	0.37±0.14	1.02±0.35	0.002±0.001	
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.20±0.06		0.002±0.003	8.11±1.01	0.005±0.002	0.003±0.001	0.27±0.12	0.72±0.20	0.006±0.002	0.005±0.002
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	0.44±0.30		0.002±0.002	7.49±1.26	0.005±0.003	0.003±0.002	0.23±0.06	0.65±0.11	0.005±0.004	0.002±0.002
A016	Samai (<i>Panicum miliare</i>)	6		0.49±0.15	0.001±0.000	16.06±1.54	0.016±0.006	0.001±0.000	0.34±0.08	1.26±0.44		
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	1.07±0.83			15.27±1.28	0.021±0.027	0.005±0.003	0.26±0.05	2.34±0.46		0.027±0.003
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	0.94±0.33		0.001±0.000	20.40±2.46	0.005±0.002	0.001±0.001	0.17±0.02	1.77±0.38	0.004±0.002	0.003±0.003

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
A CEREALS AND MILLETS												
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	325	5.29		0.016	0.345	374	433	16.46	2.70	2.66
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	270±33.2	4.44±0.27		0.049±0.014	0.048±0.017	412±22.0	413±45.9	21.41±6.15	2.81±0.22	2.52±0.20
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	124±19.5	1.12±0.17	0.77±1.48	0.050±0.025	0.056±0.022	289±25.3	365±18.0	30.40±5.22	4.11±0.09	2.76±0.36
A004	Barley (<i>Hordeum vulgare</i>)	6	48.97±6.1	1.24±0.11	1.84±0.50	0.032±0.005		178±26.8	268±20.4	18.61±1.32	7.56±1.52	1.50±0.27
A005	Jowar (<i>Sorghum vulgare</i>)	6	133±14.8	1.19±0.11	2.62±2.15	0.042±0.021	0.059±0.021	274±35.7	328±25.1	26.29±11.08	5.42±0.21	1.96±0.31
A006	Maize, dry (<i>Zea mays</i>)	6	145±12.4	0.71±0.08	3.19±2.64	0.035±0.014	0.035±0.013	279±35.3	291±27.7	8.69±1.81	4.44±0.18	2.27±0.23
A007	Maize, tender, local (<i>Zea mays</i>)	6	47.62±5.32	0.36±0.07		0.009±0.009	0.016±0.007	163±25.7	167±36.8	3.83±2.28	2.24±0.07	0.97±0.14
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	36.51±1.87	0.32±0.04		0.006±0.001	0.009±0.004	121±13.6	297±4.1	2.17±1.11	2.23±0.06	0.77±0.09
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	119	1.77			0.004	212	474	7.81	4.50	3.31
A010	Ragi (<i>Eleusine coracana</i>)	5	146±10.7	3.19±0.88	3.96±1.41	0.011±0.008	0.078±0.020	210±58.4	443±59.6	15.30±6.23	4.75±0.14	2.53±0.51
A011	Rice flakes (<i>Oryza sativa</i>)	6	77.92±12.75	0.89±0.13		0.049±0.011	0.043±0.015	195±20.5	148±13.8		2.58±0.06	1.49±0.21
A012	Rice puffed (<i>Oryza sativa</i>)	6	64.59±6.01	0.91±0.15		0.034±0.024	0.048±0.014	152±20.6	140±14.0		3.69±0.87	1.45±0.29
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	93.91±9.11	1.70±0.45		0.053±0.026	0.038±0.024	267±64.9	199±40.9	2.26±0.43	3.64±0.08	1.68±0.33
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	26.72±8.52	0.79±0.25		0.055±0.017	0.027±0.009	140±25.0	142±20.3	1.19±0.14	3.16±1.33	1.08±0.20
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	19.30±6.99	0.73±0.21		0.056±0.037	0.022±0.012	96±16.30	108±10.9	1.01±0.13	2.34±0.28	1.21±0.17
A016	Samai (<i>Panicum miliare</i>)	6	91.41±12.63	0.23±0.08		0.020±0.010	0.086±0.029	130±27.5	105±15.7	40.41±24.09	4.77±0.14	1.82±0.14
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	122±5.85	0.33±0.05	0.74±0.15	0.020±0.007	0.074±0.019	101±5.2	94±10.7	14.12±2.26	3.35±0.04	1.65±0.18
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	30.69±2.77	0.63±0.09		0.013±0.003	0.005±0.003	110±9.8	148±7.0		1.54±0.48	0.88±0.07

Food code	Food Name	No. of Regions	Aluminium	Arsenic	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
			(Al)	(As)	(Cd)	(Ca)	(Cr)	(Co)	(Cu)	(Fe)	(Pb)	(Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
AL	AS	CD	CA	CR	CO	CU	FE	PB	LI			
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	1.54±0.53		0.001±0.001	30.94±3.65	0.006±0.005	0.006±0.003	0.48±0.11	4.10±0.67	0.006±0.003	0.002±0.001
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	0.55±0.23		0.002±0.001	39.36±5.65	0.006±0.003	0.003±0.002	0.49±0.12	3.97±0.78		0.005±0.004
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	0.43±0.16	0.40±0.18	0.001±0.001	27.09±1.62	0.007±0.002	0.001±0.000	0.40±0.07	3.86±0.34	0.008±0.011	
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	0.64±0.19		0.002±0.001	29.38±2.11	0.006±0.003	0.003±0.002	0.46±0.11	2.98±0.34	0.004±0.000	0.002±0.002
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	1.15±0.38		0.001±0.001	19.42±1.74	0.006±0.005	0.002±0.001	0.19±0.03	2.02±0.41	0.008±0.002	0.001±0.001
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	1.20±0.16		0.001±0.000	22.63±3.46	0.007±0.002	0.003±0.002	0.22±0.05	2.09±0.42	0.009±0.008	0.001±0.000

B GRAIN LEGUMES

115	B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	0.65±0.19		46.32±5.12	0.008±0.006	0.024±0.006	0.82±0.12	6.08±0.27	0.011±0.013	0.003±0.001
	B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	2.10±0.19		150±18.3	0.015±0.003	0.021±0.005	0.85±0.12	6.78±0.75	0.006±0.002	0.006±0.002
	B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	1.19±0.33		55.67±6.10	0.011±0.004	0.014±0.004	0.64±0.08	4.67±0.55	0.004±0.000	0.002±0.001
	B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	2.25±0.63		86.18±8.99	0.019±0.007	0.018±0.004	0.76±0.12	5.97±0.56	0.008±0.006	0.005±0.002
	B005	Cowpea, brown (<i>Vigna catjang</i>)	6	1.36±0.61		81.73±7.63	0.010±0.002	0.013±0.002	0.81±0.16	5.90±1.26		0.006±0.002
	B006	Cowpea, white (<i>Vigna catjang</i>)	1	0.40		84.10	0.004	0.017	0.68	5.04		0.007
	B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	0.53		78.16	0.010	0.021	1.03	4.50		0.001
	B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	0.73		75.20	0.010	0.018	0.90	4.99		0.001
	B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	0.52±0.24		77.24±10.17	0.019±0.014	0.014±0.005	0.94±0.09	5.50±0.72		0.001±0.001
	B010	Green gram, dal (<i>Vigna radiata</i>)	6	2.47±0.24		43.13±5.14	0.002±0.001	0.006±0.001	0.97±0.11	3.93±0.30	0.002±0.001	0.002±0.001
	B011	Green gram, whole (<i>Vigna radiata</i>)	6	3.24±0.39		92.43±10.68	0.012±0.006	0.021±0.009	1.00±0.14	4.89±0.46		0.002±0.002
	B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	4.69±1.04	0.001±0.001	269±34.9	0.027±0.010	0.054±0.024	1.29±0.09	8.76±1.16	0.007±0.002	0.005±0.008
	B013	Lentil dal (<i>Lens culinaris</i>)	6	1.60±0.14	1.19±0.76	44.32±4.74	0.006±0.002	0.009±0.003	0.96±0.11	7.06±0.55		0.003±0.003
	B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	2.60±0.43	0.46±0.47	76.13±7.23	0.022±0.013	0.015±0.004	0.98±0.07	7.57±0.67	0.016±0.013	0.004±0.002

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	125±11.5	2.98±0.36		0.022±0.009	0.021±0.015	315±41.4	311±38.3	53.12±5.47	2.04±0.31	2.85±0.32
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	125±14.8	3.19±0.59		0.073±0.030	0.014±0.005	315±41.8	366±59.6	47.76±5.96	2.50±0.20	2.85±0.65
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	116±14.0	1.95±0.13	2.01±0.12	0.029±0.013	0.018±0.016	245±27.9	330±33.4	10.54±2.23	2.09±0.34	1.97±0.25
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	37.89±3.71	1.98±0.18	2.67±3.69	0.018±0.011	0.008±0.006	119±8.5	284±26.5	10.93±5.06	2.31±0.61	2.13±0.32
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	34.18±5.28	0.67±0.11		0.031±0.016	0.008±0.002	99±12.94	163±26.7	15.33±3.25	2.71±0.79	0.83±0.12
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	39.03±7.18	0.75±0.15		0.019±0.004	0.010±0.005	107±21.6	177±30.3	14.29±3.11	3.43±0.14	0.88±0.22

B GRAIN LEGUMES

116	B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	118±12.9	1.68±0.16	1.78±0.12	0.047±0.034	0.141±0.031	325±14.0	957±23.7	50.97±22.01	20.83±0.15	3.65±0.37
	B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	160±17.5	2.71±0.33	1.77±0.12	0.064±0.031	0.081±0.023	267±21.9	935±37.9	41.23±11.67	26.56±0.12	3.37±0.26
	B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	173±3.1	1.46±0.06	2.11±0.44	0.054±0.032	0.249±0.070	375±43.7	1157±38.0	23.99±2.15	18.88±2.27	3.00±0.18
	B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	190±19.1	1.83±0.34	2.43±1.06	0.099±0.053	0.241±0.077	345±36.5	1093±24.5	27.98±7.08	26.80±3.77	3.05±0.24
	B005	Cowpea, brown (<i>Vigna catjang</i>)	6	213±20.3	1.51±0.29		0.108±0.052	0.233±0.071	372±32.9	1241±116	23.95±4.40	13.68±0.07	3.41±0.41
	B006	Cowpea, white (<i>Vigna catjang</i>)	1	213	1.35		0.226	0.228	378	1243	26.55	12.52	3.57
	B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	197	2.38		0.073	0.184	457	1272	32.55	1.35	2.42
	B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	173	2.38		0.057	0.283	429	1245	22.82	1.41	2.44
	B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	190±15.1	2.41±0.33		0.034±0.020	0.261±0.100	448±71.4	1360±33.0	21.52±1.34	1.70±0.04	2.80±0.18
	B010	Green gram, dal (<i>Vigna radiata</i>)	6	155±17.2	0.98±0.06	2.03±2.80	0.162±0.140	0.129±0.045	416±22.4	1268±85.3	50.14±8.92	10.14±0.33	2.49±0.12
	B011	Green gram, whole (<i>Vigna radiata</i>)	6	198±39.2	1.05±0.08	2.96±4.83	0.174±0.058	0.103±0.014	353±33.6	1177±74.3	23.32±6.03	12.48±0.07	2.67±0.13
	B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	152±18.1	3.13±0.41	6.72±3.83	0.124±0.056	0.273±0.077	298±22.5	1065±42.4	29.49±6.79	12.14±0.17	2.71±0.21
	B013	Lentil dal (<i>Lens culinaris</i>)	6	74.69±7.78	1.16±0.12	0.34±0.39	0.079±0.036	0.101±0.015	310±5.3	786±55.3	49.50±18.40	10.27±0.07	3.61±0.26
	B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	101±13.9	1.55±0.26	2.08±0.25	0.076±0.057	0.201±0.062	274±27.4	756±63.6	33.14±18.27	11.20±0.08	3.60±0.23

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	1.02			76.66	0.012	0.012	0.88	7.91	0.016	0.004
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	0.54±0.42			154±17.0	0.003±0.001	0.019±0.007	0.64±0.06	7.90±0.17		0.005±0.002
B017	Peas, dry (<i>Pisum sativum</i>)	6	0.52±0.19			75.11±13.93	0.010±0.007	0.009±0.004	0.68±0.06	5.09±0.45	0.005±0.003	0.003±0.003
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	0.75			134	0.032	0.006	0.87	6.17	0.012	0.002
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	0.92±0.20			134±17.6	0.025±0.015	0.024±0.024	0.89±0.12	6.30±0.61	0.006±0.005	0.002±0.002
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	0.65±0.16			126±8.1	0.029±0.013	0.013±0.004	0.78±0.08	6.13±0.77	0.003±0.000	0.003±0.004
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	0.83±0.48			71.73±6.41	0.007±0.003	0.003±0.002	1.14±0.14	3.90±0.46	0.003±0.001	0.004±0.003
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	2.21±0.40		0.001±0.001	139±11.8	0.022±0.005	0.020±0.007	1.32±0.15	5.37±1.36	0.004±0.001	0.008±0.005
B023	Ricebean (<i>Vigna umbellata</i>)	1				200	0.002		0.75	4.76		
B024	Soybean, brown (<i>Glycine max</i>)	6	1.45±0.39		0.001±0.000	239±26.6	0.003±0.003	0.049±0.012	1.29±0.22	8.29±0.51		0.001±0.001
B025	Soybean, white (<i>Glycine max</i>)	1	0.71			195	0.007	0.018	0.79	8.22		

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	3.92	0.001	901		0.007	0.25	4.36	0.013		
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	3.91±0.77		0.002±0.001	330±74.2	0.027±0.009	0.005±0.002	0.21±0.08	4.64±0.85	0.004±0.000	0.009±0.004
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	3.03		0.002	245	0.028	0.023	0.22	7.25		0.009
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	3.59±0.47		0.002±0.000	269±34.0	0.024±0.008	0.012±0.002	0.17±0.08	5.28±0.75	0.004±0.001	0.007±0.006
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	2.87±0.87			359±39.7	0.035±0.015	0.002±0.001	0.23±0.07	6.37±1.59	0.001±0.001	0.008±0.008
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	3.61			372	0.028	0.005	0.33	4.58	0.001	0.014
C007	Basella leaves (<i>Basella alba</i>)	2	2.69	2.75	0.002	93.89	0.046	0.006	0.12	4.20	0.006	0.006
C008	Bathua leaves (<i>Chenopodium album</i>)	2		0.82	0.001	211		0.001	0.10	2.66	0.001	

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	86.38	1.56	1.62	0.299	0.145	261	764	56.28	10.87	3.31
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	205±13.5	1.07±0.02		0.059±0.025	0.180±0.014	362±31.7	1356±53.2	18.82±3.46	26.34±0.10	1.92±0.08
B017	Peas, dry (<i>Pisum sativum</i>)	6	123±8.1	1.08±0.09	1.83±3.36	0.113±0.084	0.111±0.021	334±18.3	922±67.4	50.07±3.23	23.40±0.07	3.10±0.14
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	160	1.19		0.034	0.283	386	1362	18.65	9.40	3.08
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	164±22.3	1.19±0.09	1.48±0.18	0.081±0.043	0.287±0.122	396±32.5	1366±113	12.70±5.51	10.47±0.10	2.60±0.17
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	173±9.7	1.24±0.11		0.054±0.035	0.203±0.085	409±32.4	1324±195	22.45±5.37	10.45±0.05	2.69±0.34
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	119±15.3	1.12±0.08	1.56±0.34	0.131±0.080	0.198±0.053	328±17.2	1395±118	14.36±4.16	18.01±0.12	2.63±0.10
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	155±23.1	1.34±0.29	2.22±0.47	0.087±0.054	0.161±0.031	312±38.3	1303±103	15.41±7.61	19.03±0.11	2.99±0.25
B023	Ricebean (<i>Vigna umbellata</i>)	1	201	1.68				270	1196		10.62	2.29
B024	Soybean, brown (<i>Glycine max</i>)	6	259±40.2	2.69±0.37	1.15±0.30	0.157±0.108	0.154±0.039	483±38.9	1613±75.6	19.00±5.48	2.07±0.05	4.01±0.51
B025	Soybean, white (<i>Glycine max</i>)	1	189	2.27		0.156	0.169	494	1634	16.85	2.83	3.47

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	96.64	1.24	0.41	0.003	0.068	52.52	674	30.70	18.12	0.53
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	194±53.2	1.24±0.23		0.024±0.023	0.017±0.008	73.22±12.66	572±152	20.97±2.01	16.08±3.71	0.86±0.31
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	177	2.15		0.013	0.026	75.98	564	22.55	14.58	1.37
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	146±25.9	1.43±0.44		0.010±0.004	0.030±0.020	68.23±5.66	597±118	21.62±2.82	17.55±2.59	1.03±0.31
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	202±68.2	1.07±0.31		0.032±0.015	0.024±0.004	72.46±21.03	569±78.0	28.97±2.54	15.66±1.50	1.57±0.50
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	187	1.84		0.021	0.020	85.02	588	19.41	16.27	1.11
C007	Basella leaves (<i>Basella alba</i>)	2	153	1.29		0.006	0.044	37.26	337	6.17	18.74	0.39
C008	Bathua leaves (<i>Chenopodium album</i>)	2	48.41	1.58	0.18	0.003	0.008	37.55	438	1.40	10.75	0.98

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
C009	Beet greens (<i>Beta vulgaris</i>)	6		3.53±1.92	0.01±0.01	151±46.9		0.004±0.001	0.14±0.01	5.80±0.57	0.011±0.006	
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	2.01±0.51	1.17±0.85	0.002±0.001	207±14.9	0.026±0.010	0.003±0.001	0.24±0.05	3.00±0.77	0.005±0.002	0.012±0.006
C011	Betel leaves, small (<i>Piper betle</i>)	4	1.85±0.43	1.68±0.00		196±13.7	0.019±0.005	0.002±0.001	0.29±0.02	2.87±0.29	0.004±0.003	0.005±0.006
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1		0.57	0.001	53.99	0.002	0.001	0.08	1.54	0.004	
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1				58.46	0.001		0.05	0.39		
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	2.29		0.001	170	0.001	0.002	0.06	2.67		0.004
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata f. alba</i>)	6				51.76±4.44	0.004±0.002	0.001±0.001	0.03±0.02	0.35±0.16		0.001±0.001
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata f. rubra</i>)	2				48.00	0.004	0.002	0.02	0.24		0.001
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	0.46±0.16		0.001±0.000	96.70±16.41	0.014±0.007		0.14±0.01	2.42±0.32	0.006±0.002	0.003±0.003
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6		2.74±1.45	0.001±0.001	216±50.8	0.004±0.003	0.003±0.002	0.29±0.06	3.41±0.50	0.007±0.004	
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	1.15±0.07	1.60±0.01	0.001±0.000	314±71.0	0.020±0.003		0.44±0.26	4.56±1.09	0.004±0.001	0.019±0.013
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	2.01±0.21		0.001±0.000	274±27.8	0.039±0.004	0.006±0.003	0.18±0.04	5.69±1.37	0.006±0.001	0.007±0.002
C021	Garden cress (<i>Lepidium sativum</i>)	2		0.003	0.005	217	0.001	0.006	0.23	6.19	0.015	
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	2.30±0.29			145±15.3	0.061±0.014	0.004±0.002	0.23±0.08	7.65±1.74		0.005±0.002
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	2.74			129	0.040	0.009	0.16	9.56	0.001	0.005
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2		7.98	0.004	368		0.005	0.07	2.51	0.006	
C025	Lettuce (<i>Lactuca sativa</i>)	3	0.90±0.12	1.43±0.31	0.003±0.001	56.71±2.07	0.020±0.010	0.002±0.000	0.14±0.05	2.73±0.59	0.004±0.002	0.008±0.000
C026	Mustard leaves (<i>Brassica juncea</i>)	3	1.74±0.05	3.65±0.32	0.004±0.000	191±23.8	0.039±0.005	0.001±0.000	0.24±0.07	2.84±0.12	0.007±0.000	0.008±0.001
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	3.16	3.29	3.098	150	0.028	0.002	0.06	3.78	0.014	0.005
C028	Parsley (<i>Petroselinum crispum</i>)	3		4.04±0.97	0.007±0.002	288±48.7	0.001±0.000	0.002±0.000	0.19±0.04	5.51±2.25	0.052±0.016	
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2		2.68	0.004	388	0.002	0.014	0.21	3.88	0.008	

Table 5. Minerals and Trace Elements

120

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molebdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
C009	Beet greens (<i>Beta vulgaris</i>)	6	120±7.8	1.16±0.04	0.26±0.12	0.036±0.030	0.02±0.011	36.02±4.80	530±49.0	47.75±17.81	111±34.1	0.16±0.03
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	107±22.4	2.57±0.77	0.21±0.13	0.004±0.004	0.050±0.023	51.73±4.83	649±9.0	12.15±2.80	16.80±0.03	0.47±0.17
C011	Betel leaves, small (<i>Piper betle</i>)	4	89.94±14.98	1.79±0.62		0.002±0.002	0.043±0.017	55.72±3.36	678±5.2	5.40±1.71	14.04±2.32	0.39±0.06
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	32.99	0.41	0.06	0.013	0.012	98.56	639	2.01	18.51	0.57
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	11.51	0.19				33.05	258	1.85	20.28	0.19
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	45.90	1.27		0.004	0.030	54.67	292	2.35	22.98	0.35
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata f. alba</i>)	6	17.99±3.22	0.20±0.09		0.002±0.001	0.009±0.003	30.15±6.48	233±59.0	1.08±0.16	14.98±2.78	0.16±0.03
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata f. rubra</i>)	2	26.87	0.19		0.002	0.004	22.14	201	1.08	24.00	0.13
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	41.50±1.86	0.50±0.05		0.006±0.003	0.013±0.009	62.82±2.98	374±14.1	1.05±0.16	24.31±5.03	0.31±0.06
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	59.44±16.08	1.30±0.42	0.25±0.07	0.015±0.011	0.026±0.012	57.88±5.60	404±104	4.30±1.13	12.08±1.93	0.82±0.21
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	97.09±10.17	1.26±0.60		0.036±0.000	0.024±0.015	109±20.7	397±2.1	5.95±3.28	9.34±2.11	0.72±0.19
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	63.67±18.51	0.84±0.34		0.017±0.014	0.034±0.013	53.05±7.08	226±63.0	1.29±0.51	47.01±4.23	0.54±0.06
C021	Garden cress (<i>Lepidium sativum</i>)	2	79.24	1.20	0.34	0.005	0.042	45.55	379	8.08	25.35	1.52
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	83.09±15.88	2.03±0.32		0.012±0.007	0.050±0.013	41.99±6.83	260±5.4	2.38±0.33	12.34±2.36	0.65±0.08
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	75.75	1.75		0.010	0.050	36.38	161	3.25	14.08	0.63
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	66.00	0.70	0.29	0.105	0.018	55.02	309	10.50	26.80	0.42
C025	Lettuce (<i>Lactuca sativa</i>)	3	43.22±17.56	0.38±0.15	0.08±0.04	0.004±0.002	0.010±0.002	44.10±11.69	279±77.6	5.56±1.89	17.53±2.53	0.51±0.22
C026	Mustard leaves (<i>Brassica juncea</i>)	3	51.63±4.38	0.41±0.07		0.010±0.001	0.015±0.001	71.62±16.63	403±62.5	8.03±0.33	19.14±3.67	0.68±0.09
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	45.28	0.36	0.08	0.020	0.024	25.95	250	0.79	33.73	0.16
C028	Parsley (<i>Petroselinum crispum</i>)	3	49.18±13.89	0.91±0.01	0.49±0.22	0.015±0.007	0.043±0.017	78.56±15.86	466±62.2	10.24±1.91	53.08±0.46	1.29±0.14
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	80.39	0.66	0.34	0.002	0.041	58.26	457	17.19	39.36	0.99

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	4.70±0.90		0.001±0.001	271±73.6	0.053±0.016	0.005±0.002	0.29±0.06	5.58±0.39	0.011±0.005	0.009±0.008
C031	Radish leaves (<i>Raphanus sativus</i>)	6	1.95±0.47	4.91±0.52	0.003±0.001	234±53.1	0.051±0.014	0.005±0.003	0.29±0.08	3.82±0.52	0.003±0.000	0.014±0.005
C032	Rumex leaves (<i>Rumex patientia</i>)	2	3.15	2.75	0.001	131	0.048	0.002	0.25	3.67	0.005	0.007
C033	Spinach (<i>Spinacia oleracea</i>)	6	1.51±0.47			82.29±6.51	0.028±0.005	0.002±0.001	0.17±0.05	2.95±0.68	0.001±0.001	0.047±0.017
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3				66.93±0.96	0.002±0.001		0.56±0.04	2.84±0.70		

D OTHER VEGETABLES

121	D001	Ash gourd (<i>Benincasa hispida</i>)	6	0.04±0.02		19.39±1.46	0.006±0.002	0.001±0.001	0.04±0.01	0.47±0.20	0.003±0.000	0.001±0.000
	D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	0.03		10.00	0.004		0.14	0.33	0.014	
	D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5		0.30±0.07	43.48±18.32		0.001±0.000	0.17±0.01	0.73±0.04		
	D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	0.37±0.20		21.36±3.00	0.014±0.002	0.002±0.001	0.09±0.04	1.15±0.36	0.001±0.000	0.002±0.001
	D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	0.40±0.10		16.27±2.20	0.013±0.003	0.002±0.000	0.12±0.04	1.08±0.47		0.002±0.001
	D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	0.40		17.62	0.013	0.007	0.10	1.28	0.001	0.002
	D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	0.03±0.01		15.42±2.54	0.004±0.001	0.001±0.000	0.05±0.01	0.26±0.03		
	D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	0.05±0.03	0.000±0.001	15.05±1.70	0.003±0.001	0.001±0.000	0.05±0.01	0.28±0.02		
	D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	0.03		16.64	0.003	0.004	0.07	0.34		
	D010	Brinjal-1 (<i>Solanum melongena</i>)	1	0.24	0.002	22.17	0.004	0.001	0.25	0.49	0.002	0.011
	D011	Brinjal-2 (<i>Solanum melongena</i>)	1	0.05	0.002	17.13	0.004	0.003	0.04	0.44		
	D012	Brinjal-3 (<i>Solanum melongena</i>)	2	0.05	0.001	14.58	0.006	0.003	0.11	0.34		0.011

Table 5. Minerals and Trace Elements

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	84.21±9.97	1.14±0.60		0.031±0.016	0.027±0.014	64.54±10.74	423±64.2	1.38±0.25	12.20±2.49	0.90±0.25
C031	Radish leaves (<i>Raphanus sativus</i>)	6	57.96±15.93	0.90±0.59		0.019±0.022	0.025±0.010	50.08±15.00	304±4.2	33.05±26.21	17.39±3.22	0.49±0.12
C032	Rumex leaves (<i>Rumex patientia</i>)	2	48.33	0.82	0.47	0.015	0.020	32.40	336	5.37	19.95	0.46
C033	Spinach (<i>Spinacia oleracea</i>)	6	86.97±8.58	1.12±0.42		0.008±0.004	0.025±0.004	32.59±8.08	625±5.9	2.09±0.22	42.55±4.12	0.46±0.09
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	42.10±0.80	0.64±0.05				86.86±2.14	465±4.0	2.45±0.39	13.43±0.07	0.93±0.03

D OTHER VEGETABLES												
D001	Ash gourd (<i>Benincasa hispida</i>)	6	19.95±6.83	0.09±0.03		0.008±0.004	0.008±0.004	29.07±8.45	372±82.0	1.15±0.18	0.77±0.14	0.13±0.06
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	8.28	0.42			0.008	39.63	422	2.58	1.12	0.37
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	43.75±1.66	0.37±0.02		0.039±0.016	0.027±0.013	62.13±3.09	164±8.3	0.02±0.01	1.46±0.54	0.57±0.05
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	32.14±5.53	0.25±0.02		0.004±0.001	0.015±0.012	44.90±4.39	326±35.0	4.97±1.10	13.09±0.07	0.31±0.07
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	31.58±2.56	0.23±0.11		0.004±0.000	0.013±0.003	40.21±9.79	282±51.6	3.72±0.68	12.59±0.06	0.36±0.07
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	33.34	0.50		0.003	0.047	44.75	356	5.22	11.16	0.43
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	10.93±1.69	0.13±0.07		0.002±0.001	0.008±0.004	16.01±1.97	124±16.5	1.77±0.29	1.46±0.08	0.15±0.02
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	10.89±1.53	0.11±0.04		0.001±0.000	0.013±0.004	16.99±7.45	116±20.2	1.80±0.39	1.52±0.09	0.15±0.02
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	12.90	0.15			0.014	26.86	171	2.05	1.35	0.18
D010	Brinjal-1 (<i>Solanum melongena</i>)	1	26.75	0.29			0.024	39.95	302		3.15	0.32
D011	Brinjal-2 (<i>Solanum melongena</i>)	1	29.56	0.29			0.008	44.65	206		3.92	0.23
D012	Brinjal-3 (<i>Solanum melongena</i>)	2	18.62	0.29			0.024	27.79	192		3.12	0.20

122

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	0.11±0.00			13.39±3.79	0.002±0.001	0.002±0.002	0.14±0.03	0.38±0.12	0.001±0.000	0.009±0.007
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	0.08±0.00		0.001±0.001	17.03±2.93	0.002±0.001		0.11±0.03	0.36±0.04	0.001±0.000	0.009±0.008
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	0.07		0.001	17.17	0.002	0.001	0.11	0.39	0.001	0.016
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	0.15		0.001	19.95	0.003		0.09	0.27		0.004
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	0.09±0.00			21±2	0.004±0.001	0.001±0.001	0.12±0.04	0.42±0.05	0.003±0.003	0.005±0.003
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	0.02			18.79	0.006	0.001	0.11	0.38	0.002	0.001
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	0.12		0.001	15.59	0.007	0.001	0.12	0.41		0.011
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	0.06±0.01			15.92±2.76	0.006±0.004	0.001±0.001	0.12±0.03	0.37±0.08	0.001±0.000	0.005±0.003
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	0.09		0.001	19.85	0.007	0.001	0.14	0.37	0.001	0.012
123	D022	Brinjal-13 (<i>Solanum melongena</i>)	1	0.04		18.95	0.005	0.003	0.11	0.32		0.003
	D023	Brinjal-14 (<i>Solanum melongena</i>)	3	0.11±0.02	0.001±0.001	14.43±3.70	0.005±0.002		0.11±0.02	0.32±0.08	0.001±0.000	0.010±0.005
	D024	Brinjal-15 (<i>Solanum melongena</i>)	4	0.06±0.02		17.82±2.16	0.003±0.002	0.001±0.002	0.12±0.01	0.36±0.14	0.001±0.000	0.009±0.008
	D025	Brinjal-16 (<i>Solanum melongena</i>)	1	0.10	0.001	18.33	0.010		0.07	0.32	0.001	0.003
	D026	Brinjal-17 (<i>Solanum melongena</i>)	1	0.10		20.83	0.004	0.001	0.12	0.50	0.002	
	D027	Brinjal-18 (<i>Solanum melongena</i>)	3	0.08±0.02	0.001±0.001	16.24±4.21	0.007±0.005	0.001±0.002	0.10±0.03	0.38±0.08	0.002±0.002	0.008±0.009
	D028	Brinjal-19 (<i>Solanum melongena</i>)	3	0.07±0.06	0.001±0.000	16.10±1.74	0.003±0.002	0.001±0.000	0.10±0.03	0.32±0.04	0.002±0.000	0.010±0.004
	D029	Brinjal-20 (<i>Solanum melongena</i>)	5	0.14±0.09	0.001±0.001	14.36±2.59	0.005±0.004	0.001±0.001	0.10±0.03	0.33±0.10	0.001±0.000	0.010±0.006
	D030	Brinjal-21 (<i>Solanum melongena</i>)	2	0.08	0.002	15.27	0.007	0.003	0.09	0.34	0.003	0.009
	D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	0.08±0.05	0.001±0.001	16.59±3.13	0.005±0.003	0.001±0.001	0.11±0.03	0.37±0.08	0.001±0.001	0.008±0.006
	D032	Broad beans (<i>Vicia faba</i>)	3		0.34±0.16	64.37±5.06	0.001±0.000	0.002±0.001	0.20±0.01	0.94±0.20	0.003±0.000	
	D033	Capsicum, green (<i>Capsicum annuum</i>)	6		0.001±0.000	14.75±2.93	0.017±0.008	0.002±0.001	0.06±0.01	0.48±0.11	0.001±0.000	0.002±0.002
	D034	Capsicum, red (<i>Capsicum annuum</i>)	4	0.25±0.06	0.001±0.001	15.76±1.11	0.008±0.002	0.001±0.000	0.07±0.01	0.38±0.05	0.001±0.001	0.001±0.000

Table 5. Minerals and Trace Elements

Table 5. Minerals and Trace Elements

124

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	20.65±7.46	0.18±0.03		0.001±0.000	0.019±0.011	31.82±5.99	268±114		3.31±0.24	0.21±0.04
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	25.36±11.97	0.16±0.02		0.001±0.001	0.011±0.008	33.13±6.40	227±35.4		4.03±0.55	0.20±0.05
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	18.82	0.20		0.003	0.007	30.12	289		3.75	0.20
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	15.26	0.16		0.001	0.011	29.58	238		3.45	0.16
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	26.63±8.03	0.19±0.02		0.002±0.001	0.012±0.009	35.84±3.90	284±124		4.73±0.10	0.24±0.08
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	26.23	0.16			0.003	35.71	224		3.08	0.23
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	22.11	0.18			0.016	37.36	252		4.35	0.23
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	20.73±5.13	0.14±0.02		0.002±0.001	0.007±0.003	33.28±7.08	260±51.3		3.47±0.27	0.22±0.04
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	19.26	0.18		0.001	0.013	37.81	259		3.88	0.25
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	18.00	0.15			0.007	26.81	260		3.00	0.19
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	19.19±8.62	0.15±0.07		0.002±0.000	0.015±0.013	30.07±4.05	246±20.2		3.71±0.25	0.19±0.06
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	21.89±3.72	0.15±0.05		0.004±0.003	0.003±0.001	30.32±4.00	215±67.5		3.34±0.27	0.22±0.04
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	17.06	0.18			0.003	29.86	294		3.22	0.19
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	23.13	0.14			0.005	35.94	233		3.09	0.25
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	15.48±1.73	0.17±0.04		0.006±0.000	0.010±0.013	28.03±6.25	208±51.4		3.63±0.38	0.18±0.05
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	18.41±2.91	0.16±0.02		0.001±0.000	0.016±0.003	29.76±2.67	243±57.7		3.11±0.08	0.19±0.03
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	18.51±3.26	0.16±0.05		0.001±0.001	0.009±0.007	31.21±6.76	239±29.6		3.58±0.27	0.20±0.05
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	17.30	0.23			0.017	34.98	252		3.06	0.20
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	21±5.68	0.17±0.06		0.002±0.002	0.011±0.009	32.56±5.91	247±59.8		3.55±0.47	0.21±0.05
D032	Broad beans (<i>Vicia faba</i>)	3	40.18±2.10	0.47±0.04		0.024±0.006	0.04±0.01	67.97±8.14	362±14.1	9.03±1.67	20.74±0.65	0.61±0.06
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	11.84±1.91	0.10±0.04		0.001±0.001	0.014±0.007	23±5.42	154±24.2	0.18±0.05	1.84±0.10	0.15±0.03
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	19.57±5.45	0.24±0.12			0.005±0.004	30.81±5.81	224±24.7	0.34±0.05	1.70±0.14	0.34±0.06

Food code	Food Name	No. of Regions	Aluminium	Arsenic	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
			(Al)	(As)	(Cd)	(Ca)	(Cr)	(Co)	(Cu)	(Fe)	(Pb)	(Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
AL	AS	CD	CA	CR	CO	CU	FE	PB	LI			
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	0.23±0.07	0.03±0.02	0.001±0.000	19.13±4.17	0.036±0.015	0.003±0.001	0.09±0.02	0.69±0.12	0.007±0.002	0.001±0.000
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	0.17±0.13			25.16±3.47	0.007±0.003	0.001±0.001	0.05±0.03	0.96±0.34	0.004±0.001	0.001±0.000
D037	Celery stalk (<i>Apium graveolens</i>)	3	1.32±0.34	0.51±0.10	0.002±0.001	38.73±3.38	0.016±0.006	0.001±0.000	0.12±0.12	1.36±0.41	0.003±0.001	0.001±0.001
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4				18.64±2.31	0.006±0.002	0.001±0.001	0.05±0.01	0.48±0.11		
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	0.33±0.08			121±17.8	0.013±0.004	0.004±0.000	0.14±0.02	3.90±0.66		0.001±0.001
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1		1.16	0.001	29.46	0.015	0.002	0.05	0.77		
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5		1.58±1.42		40.21±6.92	0.020±0.006	0.002±0.002	0.08±0.03	0.55±0.22		0.001±0.001
D042	Corn, baby (<i>Zea mays</i>)	6				76.51±13.84	0.002±0.001	0.001±0.000	0.12±0.03	1.45±0.23		
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	0.07±0.07			16.39±3.74	0.006±0.002	0.002±0.001	0.04±0.01	0.46±0.21	0.001±0.000	0.002±0.002
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	0.05±0.05			19.25±3.46	0.005±0.002	0.002±0.001	0.07±0.05	0.59±0.12	0.001±0.000	0.002±0.001
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	0.10		0.001	21.98	0.006	0.002	0.04	0.45	0.001	0.002
D046	Drumstick (<i>Moringa oleifera</i>)	6	0.24±0.09			33.30±5.54	0.008±0.003		0.10±0.02	0.73±0.18	0.007±0.003	0.002±0.001
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	0.64			70.57	0.006	0.003	0.24	1.95	0.003	0.002
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	0.36±0.13			58.59±5.21	0.007±0.003	0.003±0.002	0.20±0.08	1.48±0.39	0.003±0.001	0.002±0.000
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	0.50±0.26			55.99±10.70	0.007±0.002	0.004±0.003	0.11±0.03	1.25±0.31	0.002±0.000	
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	0.35			49.90	0.004	0.008	0.07	0.98		
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5				45.74±7.19	0.004±0.002		0.24±0.07	0.31±0.04		
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5				37.56±3.36	0.001±0.001	0.001±0.001	0.21±0.07	0.37±0.15	0.001±0.001	
D053	Knol - Khol (<i>Brassica oleracea</i>)	6				35.26±3.81	0.004±0.002	0.002±0.001	0.08±0.03	0.24±0.05		
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	0.06±0.02			34.39±5.90	0.003±0.001	0.002±0.001	0.06±0.01	0.38±0.05		0.001±0.000
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	0.02			37.12	0.002	0.001	0.06	0.29		0.001

Table 5. Minerals and Trace Elements

126

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	17.23±4.30	0.17±0.05			0.008±0.002	43.33±10.64	242±45.6	0.28±0.09	1.56±0.18	0.26±0.08
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	23.08±4.37	0.23±0.08		0.002±0.001	0.013±0.005	47.33±10.61	329±56.3	0.47±0.06	30.72±3.83	0.31±0.11
D037	Celery stalk (<i>Apium graveolens</i>)	3	17.12±6.63	0.24±0.04			0.011±0.001	44.84±9.18	298±10.1	3.59±1.27	10.68±0.05	0.18±0.03
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	13.05±1.03	0.17±0.09		0.002±0.001	0.008±0.005	21.61±4.89	120±20.8	0.16±0.05	1.28±0.05	0.10±0.03
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	81.74±10.44	0.39±0.12		0.022±0.007	0.057±0.016	45.28±4.07	301±47.7	1.59±0.51	4.05±0.73	0.61±0.13
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	11.07	2.00		0.003	0.013	20.31	381	0.82	0.45	0.54
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	19.56±4.36	0.37±0.20		0.005±0.004	0.008±0.003	30.73±6.04	414±85.6	1.48±0.76	0.60±0.15	0.20±0.08
D042	Corn, baby (<i>Zea mays</i>)	6	25.47±2.17	0.19±0.03				8.69±1.35	260±19.4	0.22±0.05	1.40±0.69	1.13±0.22
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	20.38±4.95	0.08±0.03		0.002±0.002	0.008±0.002	28.34±4.85	183±36.6	0.17±0.07	6.33±0.20	0.17±0.02
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	18.48±5.63	0.09±0.02		0.001±0.001	0.008±0.002	29.74±7.59	198±56.4	0.19±0.08	6.11±0.14	0.19±0.05
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	20.34	0.07		0.002	0.009	23.17	185	0.14	8.16	0.16
D046	Drumstick (<i>Moringa oleifera</i>)	6	38.10±10.53	0.19±0.03		0.001±0.000	0.011±0.005	52.87±8.72	419±76.4	3.12±0.70	22.38±0.36	0.31±0.06
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	50.88	0.56		0.047	0.037	73.30	345		14.14	0.64
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	47.42±6.76	0.50±0.09		0.047±0.029	0.039±0.016	76.54±12.27	314±39.0		12.76±0.13	0.63±0.20
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	43.01±7.64	0.44±0.13		0.059±0.032	0.056±0.022	59.86±11.58	324±51.1		8.84±0.10	0.50±0.15
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	34.98	0.27		0.017	0.037	45.90	317		9.18	0.37
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	26.60±9.13	0.36±0.11			0.008±0.006	27.78±3.89	327±18.1		3.53±0.52	0.17±0.03
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	37.04±15.48	0.27±0.10			0.015±0.007	29.33±10.67	376±70.1	0.33±0.10	4.00±0.09	0.29±0.12
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	19.05±3.69	0.13±0.03		0.004±0.002	0.006±0.003	40.77±4.47	327±63.8		27.46±3.47	0.15±0.03
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	19.60±3.26	0.16±0.05		0.001±0.001	0.010±0.002	36.90±4.81	198±34.9		1.53±0.15	0.18±0.03
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	18.87	0.12		0.001	0.006	26.29	167		2.20	0.13

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	0.47±0.15		0.002±0.001	86.12±6.93	0.005±0.001	0.002±0.001	0.13±0.01	0.84±0.15	0.001±0.000	0.002±0.001
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	0.11±0.02			27.00±4.93	0.010±0.003		0.08±0.02	0.40±0.08		
D058	Onion, stalk (<i>Allium cepa</i>)	6	2.78±1.26	1.73±0.46	0.003±0.003	31.12±7.53	0.059±0.014	0.002±0.001	0.14±0.03	3.09±0.54	0.016±0.008	0.007±0.001
D059	Pap (Carica papaya)	6	0.05±0.01	0.63±0.34		22.72±1.71	0.003±0.002		0.05±0.04	0.20±0.03	0.001±0.000	0.001±0.001
D060	Parwar (<i>Trichosanthes dioica</i>)	6	0.33±0.06	0.68±0.38		30.76±3.08	0.013±0.002	0.001±0.001	0.09±0.01	0.50±0.11		
D061	Peas, fresh (<i>Pisum sativum</i>)	6	0.20±0.06			28.24±3.62	0.002±0.001	0.003±0.001	0.22±0.03	1.58±0.15		
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	0.07±0.02			34.06±1.85	0.005±0.002		0.10±0.01	0.40±0.05		
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	0.08±0.06			13.80±2.56	0.012±0.009	0.002±0.003	0.10±0.03	0.34±0.09	0.001±0.001	
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	0.13±0.02	0.05±0.03		11.24±2.30	0.015±0.006	0.001±0.001	0.04±0.02	0.26±0.10	0.002±0.003	0.001±0.001
127	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	0.09			24.10	0.004		0.04	0.29		
	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	0.11±0.05			23.06±4.30	0.002±0.001		0.06±0.01	0.36±0.11		
	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1		0.11	0.002	58.58		0.001	0.45	1.18	0.006	
	Ridge gourd (<i>Luffa acutangula</i>)	6	0.07±0.03			13.70±1.38	0.003±0.000	0.001±0.000	0.10±0.03	0.42±0.05		0.001±0.001
	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	0.10±0.07			14.96±2.15	0.003±0.001	0.001±0.001	0.09±0.02	0.50±0.18		0.001±0.001
	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	0.06±0.03			24.60±4.77	0.002±0.002	0.001±0.001	0.09±0.02	0.32±0.08		0.001±0.000
	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	0.05			27.11	0.002	0.001	0.11	0.47		0.001
	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	0.05			17.90	0.001		0.05	0.20		
	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	0.15±0.03			19.68±3.27	0.004±0.001	0.001±0.000	0.08±0.01	0.41±0.03		0.001±0.001
	Tomato, green (<i>Solanum lycopersicum</i>)	6		0.18±0.07	0.001±0.000	8.49±1.56	0.028±0.013	0.002±0.001	0.06±0.02	0.42±0.08	0.002±0.001	
	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	0.05±0.02			8.90±1.04	0.003±0.001	0.001±0.000	0.04±0.01	0.22±0.02	0.001±0.000	
	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	0.04±0.02			10.17±1.84	0.005±0.004		0.06±0.01	0.30±0.09		

Table 5. Minerals and Trace Elements

128

Food code	Food Name	No. of Regions	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	66.10±8.99	0.30±0.04		0.005±0.002	0.012±0.001	57.48±6.93	263±32.5		7.37±0.14	0.45±0.04
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	17.54±3.18	0.23±0.06			0.006±0.002	14.92±2.22	147±20.9		33.15±0.10	0.09±0.02
D058	Onion, stalk (<i>Allium cepa</i>)	6	66.71±8.82	0.22±0.06		0.017±0.007	0.031±0.007	28.53±3.74	312±63.2	5.22±2.02	15.52±2.48	0.99±0.21
D059	Papaya, raw (<i>Carica papaya</i>)	6	15.03±1.12	0.03±0.01		0.001±0.001	0.002±0.000	24.11±6.35	173±29.1	1.29±1.05	7.55±0.08	0.08±0.01
D060	Parwar (<i>Trichosanthes dioica</i>)	6	24.59±3.64	0.13±0.03			0.012±0.004	33.81±3.72	117±2.5	2.32±0.88	2.29±0.09	0.23±0.03
D061	Peas, fresh (<i>Pisum sativum</i>)	6	40.11±3.29	0.46±0.06		0.020±0.004	0.043±0.008	55.95±2.74	249±9.0	1.63±0.41	3.66±0.04	1.09±0.15
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	39.76±5.37	1.09±0.21		0.004±0.002	0.009±0.003	47.31±5.74	488±46.3	2.82±0.48	7.51±0.11	0.42±0.05
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	35.64±5.34	0.29±0.09	0.12±0.01	0.002±0.001	0.005±0.003	31.69±5.76	402±17.8	0.82±0.79	18.57±0.13	0.23±0.05
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	32.82±9.01	0.10±0.05		0.001±0.001	0.003±0.002	16.31±1.61	373±1.7	0.45±0.272	23.17±2.40	0.14±0.10
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	13.27	0.08				24.51	186	0.34	5.21	0.14
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	10.43±2.35	0.07±0.02				22.18±7.47	253±39.2	0.37±0.17	8.81±0.09	0.11±0.04
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	56.95	0.53	0.05	0.149	0.121	141	616	2.19	2.54	1.10
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	16.15±2.57	0.11±0.04		0.003±0.001	0.012±0.005	33.06±5.97	118±4.0	0.59±0.28	4.71±0.20	0.22±0.06
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	17.66±2.71	0.15±0.02		0.003±0.001	0.014±0.002	39.25±4.18	125±4.1		6.27±0.03	0.26±0.05
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	18.70±5.79	0.14±0.06		0.002±0.001	0.012±0.005	23.27±3.04	100±18.6		7.07±1.20	0.14±0.02
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	21.70	0.19		0.001	0.017	31.03	104		5.04	0.20
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	15.07	0.11		0.002	0.007	21.33	84.00		2.50	0.11
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	18.96±4.68	0.10±0.01		0.001±0.000	0.012±0.002	30.37±2.47	56.18±3.68	0.22±0.06	20.61±4.52	0.20±0.01
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	13.57±2.84	0.12±0.04		0.005±0.002	0.007±0.005	22.50±3.04	225±10.5	8.25±1.97	13.11±2.73	0.16±0.03
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	11.86±2.87	0.09±0.02		0.008±0.012	0.003±0.002	15.45±2.11	167±18.9		11.86±2.83	0.11±0.02
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	13.65±2.13	0.09±0.01				18.77±3.79	204±34.1		9.73±2.51	0.12±0.02

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2				17.26	0.002		0.07	0.52		
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2				20.98	0.003		0.11	0.34		

E	FRUITS											
E001	Apple, big (<i>Malus domestica</i>)	6	0.23±0.12	0.96±0.37	0.040±0.014	13.68±3.20	0.007±0.002	0.261±0.093	0.04±0.01	0.26±0.02	0.058±0.029	0.592±0.402
E002	Apple, green (<i>Malus domestica</i>)	6				6.53±2.48	0.002±0.001		0.33±0.04	0.20±0.04		
E003	Apple, small (<i>Malus domestica</i>)	6	0.08±0.03	0.19±0.21		5.39±0.82	0.005±0.002		0.06±0.03	0.25±0.06	0.002±0.001	0.001±0.000
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	0.11			4.72	0.007		0.06	0.21	0.002	0.001
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	2.11±0.51	0.88±0.44		28.57±4.32	0.016±0.008	0.002±0.001	0.43±0.04	2.50±0.26	0.008±0.012	0.002±0.001
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	0.80±0.18	0.26±0.03		5.42±0.41	0.006±0.001	0.003±0.000	0.42±0.04	1.12±0.23	0.002±0.000	
E007	Avocado fruit (<i>Persea sp.</i>)	1				28.48	0.002		0.39	0.81		
E008	Bael fruit (<i>Aegle marmelos</i>)	1	0.11	0.65	0.027	47.95	0.002	0.419	0.15	0.23	0.077	2.446
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1				6.77	0.017		0.12	0.40	0.002	
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2				8.73	0.010		0.10	0.35	0.001	0.001
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1				9.56	0.008		0.06	0.24	0.001	0.001
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6				5.07±0.94	0.007±0.005		0.13±0.05	0.28±0.05	0.001±0.000	0.001±0.000
E013	Black berry (<i>Rubus sp.</i>)	5				23.81±2.70			0.05±0.01	0.63±0.21		0.002±0.000
E014	Cherries, red (<i>Prunus cerasus</i>)	4	0.37±0.05			23.88±5.01	0.010±0.003		0.07±0.02	0.36±0.10		
E015	Currants, black (<i>Ribes nigrum</i>)	1	0.50		0.001	40.32	0.031		0.08	1.36		
E016	Custard apple (<i>Annona squamosa</i>)	1				28.20	0.003		0.19	0.42		
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	2.47±0.62			71.20±4.51	0.022±0.008	0.001±0.000	0.36±0.05	3.20±0.45	0.013±0.005	0.006±0.002

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	15.41	0.13				21.38	178	0.21	0.40	0.29
D078	Zucchini, yellow(<i>Cucurbita pepo</i>)	2	10.82	0.21				32.03	131	0.30	0.39	0.27
E FRUITS												
E001	Apple, big (<i>Malus domestica</i>)	6	8.09±0.81	0.05±0.02	0.01±0.00	0.839±0.447	3.798±1.461	10.44±1.18	116±12.9	0.47±0.18	1.43±0.42	0.09±0.04
E002	Apple, green (<i>Malus domestica</i>)	6	5.42±0.11	0.02±0.00				7.48±0.11	94.55±2.07	0.25±0.08	1.47±0.65	0.08±0.01
E003	Apple, small (<i>Malus domestica</i>)	6	5.48±0.56	0.04±0.01		0.003±0.002	0.002±0.001	8.39±1.20	100±9.1	0.23±0.07	1.45±0.05	0.05±0.02
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	5.19	0.05		0.002	0.002	10.72	106	0.11	1.22	0.08
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	14.04±2.21	0.31±0.02		0.018±0.011	0.055±0.016	72.02±6.39	285±5.9	2.05±0.52	3.94±0.12	0.41±0.04
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	4.29±0.21	0.06±0.02		0.008±0.000	0.058±0.018	27.33±1.29	95±2.3	1.03±0.39	1.60±0.02	0.26±0.03
E007	Avocado fruit (<i>Persea sp.</i>)	1	48.14	0.74				63.14	377		2.81	0.75
E008	Bael fruit (<i>Aegle marmelos</i>)	1	34.10	0.10	0.07	0.819	0.042	37.29	409	0.72	1.56	0.14
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	30.22	0.36			0.013	20.85	362		1.25	0.15
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	43.79	0.30		0.002	0.010	33.63	335		1.00	0.17
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	31.44	0.19			0.006	23.27	313		1.11	0.09
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	34.98±7.77	0.36±0.15		0.001±0.001	0.008±0.005	24.32±4.46	306±32.7		0.85±0.14	0.14±0.05
E013	Black berry (<i>Rubus sp.</i>)	5	30.90±4.17	0.47±0.01			0.027±0.004	20.08±4.50	205±40.5		1.21±0.33	0.11±0.03
E014	Cherries, red (<i>Prunus cerasus</i>)	4	14.37±4.80	0.15±0.08			0.002±0.001	25.31±8.43	165±44.4		1.64±0.09	0.12±0.04
E015	Currants, black (<i>Ribes nigrum</i>)	1	16.66	0.11			0.005	78.80	283	1.51	1.45	0.21
E016	Custard apple (<i>Annona squamosa</i>)	1	38.47	0.15				40.81	278		3.11	0.22
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	73.79±6.51	0.82±0.10		0.005±0.003	0.030±0.009	73.02±10.73	804±49.5	0.78±0.10	3.27±0.37	0.70±0.06

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	2.43			66.13	0.017	0.001	0.44	4.79	0.006	0.006
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	2.43			15.73	0.015	0.001	0.33	0.89	0.002	0.001
E020	Fig (<i>Ficus carica</i>)	6	0.71±0.24			78.52±16.48	0.017±0.004		0.19±0.02	0.69±0.06		
E021	Gooseberry (<i>Emblica officinalis</i>)	5	0.08±0.02			20.14±2.51	0.007±0.003		0.12±0.08	1.25±0.08	0.004±0.002	0.001±0.001
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4				10.57±2.03	0.008±0.007		0.06±0.01	0.22±0.04	0.001±0.000	
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5				11.16±2.02	0.003±0.000		0.07±0.01	0.24±0.10	0.001±0.000	0.001±0.001
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5				11.27±3.54	0.003±0.002		0.05±0.01	0.33±0.04		0.001±0.000
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5		0.001±0.000		15.26±3.03	0.004±0.001	0.001±0.000	0.16±0.03	0.28±0.02		0.001±0.000
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5				14.22±2.14	0.003±0.001		0.23±0.33	0.24±0.02	0.001±0.001	
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5		0.001±0.000		18.75±5.41	0.004±0.002		0.05±0.01	0.39±0.07		0.001±0.001
E028	Guava, white flesh (<i>Psidium guajava</i>)	5				18.52±2.10	0.004±0.002	0.003±0.002	0.16±0.04	0.32±0.07		
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5				14.22±2.92	0.009±0.003	0.003±0.001	0.17±0.02	0.40±0.14	0.014±0.003	
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5				35.03±4.50	0.005±0.002		0.19±0.09	0.36±0.16	0.002±0.001	
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	0.45			25.36	0.015		0.02	0.33	0.001	
E032	Karonda fruit (<i>Carissa carandas</i>)	1	0.99	1.84	0.002	10.81	0.002	0.001	0.71	0.87	0.021	0.001
E033	Lemon, juice (<i>Citrus limon</i>)	6	0.11±0.04			22.68±2.90	0.002±0.002		0.03±0.01	0.12±0.05	0.003±0.002	
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6				25.79±5.02	0.017±0.007		0.03±0.00	0.11±0.02	0.000±0.000	
E035	Litchi (<i>Litchi chinensis</i>)	4	0.54±0.07	0.21±0.11		5.77±0.80	0.010±0.004		0.11±0.02	0.79±0.21		
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6				15.77±1.64	0.020±0.010		0.10±0.01	0.51±0.17	0.002±0.001	
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2				19.33	0.010		0.07	0.38	0.001	
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3				15.54±1.84	0.016±0.006	0.001±0.002	0.08±0.01	0.29±0.05	0.002±0.002	

Table 5. Minerals and Trace Elements

132

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	75.23	0.84		0.004	0.022	70.26	782	0.77	3.09	0.58
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	14.34	0.44		0.003	0.035	33.88	289	0.46	1.60	0.42
E020	Fig (<i>Ficus carica</i>)	6	26.18±2.34	0.07±0.01			0.013±0.003	21.62±1.97	231±7.2		2.37±1.29	0.22±0.01
E021	Gooseberry (<i>Emblica officinalis</i>)	5	6.50±0.93	0.11±0.02		0.001±0.000	0.010±0.003	21.85±1.87	223±12.6		1.37±0.19	0.05±0.01
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	7.47±0.92	0.08±0.03			0.003±0.002	21.04±3.63	171±26.5		1.93±0.19	0.05±0.02
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	6.87±1.10	0.07±0.01			0.002±0.001	19.50±3.45	166±28.0		1.89±0.19	0.05±0.01
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	7.06±0.84	0.11±0.01			0.003±0.002	27.91±4.51	188±10.2		1.59±0.71	0.07±0.01
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	11.29±1.79	0.15±0.02		0.007±0.003	0.043±0.013	29.02±4.16	237±11.1		1.83±0.74	0.10±0.02
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	8.43±1.73	0.07±0.02			0.002±0.000	20.27±1.20	168±20.4		1.81±1.02	0.05±0.01
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	10.80±1.71	0.15±0.02		0.003±0.002	0.005±0.002	26.68±3.14	235±9.8		1.92±0.75	0.09±0.02
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	15.26±2.22	0.22±0.07			0.009±0.002	23.54±3.12	283±47.1	1.84±0.64	2.87±0.09	0.23±0.03
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	13.26±1.32	0.16±0.03		0.003±0.002	0.014±0.003	29.93±7.85	270±11.6	2.10±1.06	1.89±0.06	0.21±0.01
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	31.84±5.19	0.35±0.17			0.005±0.003	23.02±9.21	279±58.8		1.62±0.08	0.17±0.07
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	27.97	0.04			0.016	9.60	103		2.64	0.06
E032	Karonda fruit (<i>Carissa carandas</i>)	1	24.45	0.24	0.07	0.006	0.010	32.62	351	1.57	2.55	0.25
E033	Lemon, juice (<i>Citrus limon</i>)	6	8.90±0.55	0.02±0.00		0.009±0.006	0.001±0.000	9.86±0.52	113±19.1		1.21±0.23	0.08±0.02
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	15.40±1.42	0.04±0.01		0.001±0.001	0.001±0.000	20.55±1.27	182±39.4	0.72±0.46	1.17±0.45	0.05±0.01
E035	Litchi (<i>Litchi chinensis</i>)	4	14.58±1.67	0.04±0.01			0.007±0.002	23.32±3.13	161±35.6	0.46±0.22	0.54±0.14	0.24±0.09
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	13.35±1.07	0.22±0.08			0.007±0.002	11.07±2.00	144±15.3	1.91±0.745	1.34±0.06	0.12±0.04
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	11.53	0.11			0.001	10.66	115	2.05	1.39	0.06
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	12.07±0.78	0.17±0.04			0.005±0.004	12.25±4.15	137±17.7	1.90±0.49	1.31±0.02	0.12±0.07

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4				15.74±0.89	0.028±0.019		0.07±0.01	0.43±0.19	0.002±0.002	
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2				11.36	0.004		0.08	0.36		
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2				15.11	0.024		0.11	0.51	0.001	
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1				13.34	0.004		0.08	0.28		
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	0.17	0.05	0.002	4.69	0.003	1.501	0.11	0.28	0.056	0.106
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1				8.51			0.22	0.71		
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	0.02±0.01	0.03±0.04		9.80±2.14	0.004±0.002	0.001±0.001	0.03±0.02	0.18±0.04	0.003±0.001	
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	0.04±0.03			9.02±2.95	0.002±0.000	0.001±0.000	0.05±0.02	0.21±0.06	0.003±0.001	
E047	Orange, pulp (<i>Citrus aurantium</i>)	6				19.52±1.48	0.012±0.003		0.03±0.01	0.81±0.04		
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1										
E049	Papaya, ripe (<i>Carica papaya</i>)	6	0.05±0.01			15.02±1.47	0.003±0.000		0.04±0.01	0.23±0.02		
E050	Peach (<i>Prunus communis</i>)	1	0.18	0.11	0.197	6.98	0.006	0.276	0.08	0.35	0.011	0.179
E051	Pear (<i>Pyrus sp.</i>)	6	0.59±0.03			6.55±1.39	0.009±0.003	0.001±0.000	0.08±0.02	0.28±0.10	0.002±0.001	0.001±0.001
E052	Phalsa (<i>Grewia asiatica</i>)	2		0.92		153			0.24	2.01		
E053	Pineapple (<i>Ananas comosus</i>)	6	0.08±0.04	0.24±0.25		10.88±1.91	0.008±0.006	0.001±0.000	0.07±0.03	0.28±0.11	0.002±0.001	
E054	Plum (<i>Prunus domestica</i>)	3	0.20±0.05	0.03±0.04	0.057±0.021	7.61±0.94	0.002±0.000	0.297±0.024	0.41±0.39	0.25±0.09	0.003±0.001	0.070±0.002
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	0.05±0.01			10.65±1.82	0.010±0.003	0.001±0.000	0.13±0.03	0.31±0.06	0.003±0.001	
E056	Pummelo (<i>Citrus maxima</i>)	3		0.33±0.10		14.03±4.73	0.001±0.000		0.03±0.01	0.06±0.01	0.006±0.003	
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	3.06±0.49			73.24±5.48	0.024±0.009	0.003±0.001	0.47±0.12	6.81±0.91	0.005±0.001	0.054±0.043
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	3.53±0.36			51.83±5.26	0.009±0.002	0.003±0.001	0.39±0.04	4.26±0.60	0.008±0.003	0.009±0.009
E059	Rambutan (<i>Nephelium lappaceum</i>)	1				8.67	0.003		0.08	0.37		

Table 5. Minerals and Trace Elements

134

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	12.53±1.19	0.22±0.07			0.004±0.002	12.36±0.38	143±21.5	1.85±0.41	1.43±0.03	0.10±0.04
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	10.10	0.07				11.63	137	1.36	1.20	0.07
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	14.28	0.24			0.003	15.18	153	1.44	1.63	0.20
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	12.55	0.32			0.004	9.87	160	1.85	1.32	0.08
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	12.00	0.04	0.03	0.002	5.183	7.18	46.93		3.79	0.21
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	32.98	0.27				73.53	376		1.35	0.56
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	11.62±3.20	0.04±0.01			0.006±0.003	17.28±1.65	206±41.9	0.88±0.32	14.94±2.71	0.09±0.03
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	9.81±2.68	0.04±0.01			0.006±0.002	13.09±2.91	196±42.2	1.35±0.48	15.78±3.74	0.09±0.02
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	11.05±0.52	0.02±0.00		0.001±0.001	0.001±0.000	12.90±4.47	164±23.6	0.19±0.16	1.47±0.05	0.04±0.01
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1							158		1.25	0.05
E049	Papaya, ripe (<i>Carica papaya</i>)	6	10.97±2.21	0.03±0.00		0.001±0.000	0.002±0.001	17.73±3.53	173±12.4	12.78±5.71	6.68±0.16	0.08±0.03
E050	Peach (<i>Prunus communis</i>)	1	8.06	0.05	0.01	0.713	0.138	19.08	281	0.67	1.15	0.10
E051	Pear (<i>Pyrus sp.</i>)	6	7.61±1.23	0.08±0.01			0.008±0.004	6.74±1.79	106±6.6		1.64±0.08	0.07±0.02
E052	Phalsa (<i>Grewia asiatica</i>)	2	76.92	0.47	0.17	0.003	0.006	23.65	362	3.53	1.99	0.48
E053	Pineapple (<i>Ananas comosus</i>)	6	12.68±4.32	1.28±0.35			0.017±0.004	13.56±4.36	143±22.2	0.08±0.06	1.43±0.10	0.10±0.02
E054	Plum (<i>Prunus domestica</i>)	3	7.79±1.00	0.06±0.02	0.01±0.00	0.115±0.162	0.052±0.023	13.83±3.85	162±3.3	0.56±0.04	1.55±0.09	0.10±0.04
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	11.07±0.96	0.13±0.03			0.005±0.003	27.20±10.01	206±32.9	0.55±0.22	2.13±0.10	0.18±0.04
E056	Pummelo (<i>Citrus maxima</i>)	3	6.83±1.69	0.01±0.00	0.03±0.01	0.001±0.000		13.99±1.75	189±15.4		1.06±0.49	0.06±0.01
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	33.76±6.09	0.52±0.09		0.016±0.020	0.025±0.004	77.62±8.95	1105±145	1.86±0.98	10.99±1.77	0.22±0.07
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	28.32±6.15	0.41±0.06		0.011±0.015	0.018±0.007	93.30±7.18	913±59.9	1.72±0.45	10.16±0.04	0.25±0.05
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	21.38	0.37				6.98	131		1.75	0.53

Food code	Food Name	No. of Regions	Aluminium	Arsenic	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
			(Al)	(As)	(Cd)	(Ca)	(Cr)	(Co)	(Cu)	(Fe)	(Pb)	(Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
AL	AS	CD	CA	CR	CO	CU	FE	PB	LI			
E060	Sapota (<i>Achras sapota</i>)	6				17.87±3.38	0.010±0.003		0.07±0.03	0.49±0.33		
E061	Soursop (<i>Annona muricata</i>)	1				10.05	0.001		0.14	0.29	0.013	0.821
E062	Star fruit (<i>Averrhoa carambola</i>)	1	0.43	0.05	0.852	4.97	0.023	0.002	0.07	0.45	0.010	0.176
E063	Strawberry (<i>Fragaria x ananassa</i>)	6				15.28±3.37	0.001±0.000		0.07±0.01	0.36±0.03		
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	4.03±0.81		0.001±0.001	149±13.9	0.066±0.007	0.002±0.001	0.50±0.09	9.16±1.71	0.014±0.003	0.007±0.005
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6				5.29±1.09	0.002±0.001	0.001±0.001	0.04±0.01	0.22±0.14	0.001±0.001	
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	0.01±0.00			4.35±0.88	0.003±0.002	0.001±0.000	0.03±0.01	0.16±0.07	0.001±0.000	
E067	Wood Apple (<i>Limonia acidissima</i>)	3	0.09±0.03			55.71±7.46	0.004±0.002	0.001±0.000	0.20±0.04	0.45±0.06	0.004±0.001	
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	0.11			46.55	0.006		0.12	0.40		0.001

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	0.33±0.08			17.28±2.25	0.008±0.001	0.001±0.000	0.12±0.03	0.76±0.12		0.003±0.002
F002	Carrot, orange (<i>Daucus carota</i>)	6	0.36±0.14			35.09±5.89	0.004±0.001		0.08±0.01	0.60±0.24		0.001±0.001
F003	Carrot, red (<i>Daucus carota</i>)	4	0.54±0.13			41.06±8.47	0.004±0.001		0.10±0.03	0.71±0.37		0.004±0.003
F004	Colocasia (<i>Colocasia esculenta</i>)	6	0.82±0.22			30.18±3.86	0.009±0.003	0.003±0.002	0.30±0.03	0.66±0.09		0.003±0.001
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	5.91±1.59	3.89±2.13		37.71±2.79	0.028±0.009	0.004±0.001	0.22±0.02	3.34±1.31	0.001±0.001	0.006±0.004
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	0.13±0.05		0.001±0.001	9.52±1.09	0.002±0.001	0.005±0.002	0.09±0.02	0.57±0.20		0.001±0.001
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	0.15			8.53	0.007	0.003	0.14	0.53		
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	0.16		0.002	8.62	0.006	0.001	0.15	0.66		
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	0.26±0.23			28.44±1.88	0.004±0.003	0.001±0.000	0.03±0.00	0.37±0.11		
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	0.20±0.13			30.20±3.58	0.003±0.001	0.001±0.001	0.03±0.01	0.36±0.22		

Table 5. Minerals and Trace Elements

136

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
E060	Sapota (<i>Achras sapota</i>)	6	16.19±2.51	0.08±0.01		0.001±0.000	0.029±0.006	22.26±1.34	280±8.6	0.39±0.19	4.61±0.08	0.18±0.01
E061	Soursop (<i>Annona muricata</i>)	1	17.70	0.07				25.83	264		6.78	0.12
E062	Star fruit (<i>Averrhoa carambola</i>)	1	11.53	0.06	0.04	0.010	0.028	11.67	159	0.56	1.56	0.24
E063	Strawberry (<i>Fragaria x ananassa</i>)	1	15.53±1.31	0.43±0.02				26.31±2.09	140±5.7	0.30±0.11	1.19±0.67	0.14±0.02
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	82.73±8.55	0.52±0.14		0.070±0.060	0.032±0.020	113±18.1	836±8.1	2.05±0.48	24.92±2.45	0.58±0.05
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	9.91±0.73	0.04±0.02			0.010±0.008	11.33±2.50	124±7.5		1.89±0.33	0.10±0.02
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	7.42±1.71	0.03±0.01			0.009±0.008	8.09±1.76	126±5.6		1.62±0.31	0.07±0.01
E067	Wood Apple (<i>Limonia acidissima</i>)	3	23.70±1.68	0.20±0.02			0.025±0.006	84.32±4.00	347±28.5	2.32±0.21	1.48±0.36	0.31±0.03
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	16.72	0.24			0.008	32.38	237	1.42	1.52	0.10

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	33.21±2.70	0.57±0.11		0.002±0.001	0.008±0.002	36.33±4.84	306±26.9	0.25±0.05	69.44±0.83	0.30±0.09
F002	Carrot, orange (<i>Daucus carota</i>)	6	16.73±3.20	0.23±0.07		0.002±0.002	0.010±0.004	43.06±6.46	273±28.2	0.22±0.06	52.33±0.62	0.25±0.03
F003	Carrot, red (<i>Daucus carota</i>)	4	18.83±7.02	0.20±0.05		0.008±0.002	0.011±0.006	25.81±11.63	267±15.7	0.29±0.14	60.69±7.21	0.34±0.09
F004	Colocasia (<i>Colocasia esculenta</i>)	6	36.93±4.86	0.47±0.29		0.027±0.021	0.035±0.019	81.16±11.90	514±2.8	0.30±0.05	4.54±1.06	0.41±0.09
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	26.58±1.74	1.40±0.81		0.002±0.000	0.023±0.008	74.30±7.54	611±105	4.61±4.35	20.63±1.33	0.35±0.11
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	24.07±7.55	0.14±0.04	0.29±0.03	0.002±0.001	0.006±0.001	43.42±8.44	541±5.3	0.75±0.61	4.11±0.06	0.28±0.03
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	22.34	0.16		0.003	0.013	37.90	474	0.28	3.97	0.38
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	25.54	0.14			0.012	30.39	501	0.32	4.36	0.34
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	13.34±1.14	0.09±0.01		0.011±0.007	0.005±0.002	27.51±6.96	255±6.0	0.13±0.01	24.73±2.82	0.16±0.02
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	16.07±3.27	0.10±0.04		0.009±0.003	0.005±0.003	30.10±10.91	288±30.9	0.10±0.01	28.20±5.92	0.22±0.09

Food code	Food Name	No. of Regions	Aluminium	Arsenic	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
			(Al)	(As)	(Cd)	(Ca)	(Cr)	(Co)	(Cu)	(Fe)	(Pb)	(Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
AL	AS	CD	CA	CR	CO	CU	FE	PB	LI			
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	0.17			35.76	0.003		0.03	0.42		
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	0.08			34.23	0.002	0.001	0.04	0.41		
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4		0.15±0.16	0.001±0.000	27.50±5.24	0.002±0.001	0.002±0.002	0.17±0.02	0.35±0.03		
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3		0.09±0.04		28.93±3.24	0.002±0.001	0.001±0.001	0.15±0.03	0.51±0.16		
F015	Tapioca (<i>Manihot esculenta</i>)	3	0.26±0.18			25.89±6.52	0.005±0.001	0.002±0.001	0.19±0.04	0.81±0.18	0.001±0.001	0.001±0.001
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	0.11	0.60	0.001	37.15	0.014	0.003	0.19	0.77	0.029	0.113
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	0.72±0.19		0.001±0.001	46.91±5.12	0.009±0.003	0.006±0.004	0.17±0.04	1.22±0.11	0.001±0.001	0.001±0.000
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	0.46±0.14			16.19±2.79	0.006±0.002	0.001±0.000	0.23±0.08	0.77±0.22		
F019	Yam, wild (<i>Dioscorea villosa</i>)	2		0.21	0.001	44.13		0.003	0.21	1.04	0.006	

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	0.35±0.24		24.10±7.08	0.006±0.002	0.003±0.002	0.19±0.06	1.46±0.30	0.001±0.000	0.006±0.002	
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	0.20±0.06		0.000±0.001	16.86±2.36	0.004±0.001	0.003±0.001	0.15±0.03	1.24±0.38	0.001±0.001	0.008±0.002
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	0.33±0.16		0.001±0.001	18.04±3.56	0.004±0.003	0.005±0.004	0.14±0.06	1.25±0.08		0.004±0.001
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	0.32±0.16		0.001±0.001	15.87±1.49	0.004±0.003	0.005±0.003	0.16±0.11	1.08±0.28	0.005±0.000	0.003±0.003
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	0.27±0.20		0.000±0.001	15.31±3.61	0.005±0.004	0.003±0.002	0.12±0.03	0.93±0.12		0.004±0.001
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1	0.10		0.001	24.82	0.003	0.005	0.14	0.75		0.002
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1	2.09			16.85	0.002	0.006	0.09	1.23		0.006
G008	Chillies, green - all varieties (<i>Capsicum annuum</i>)	6	0.45±0.57		0.001±0.001	18.45±4.86	0.005±0.002	0.004±0.003	0.15±0.06	1.20±0.30	0.002±0.002	0.005±0.003
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	1.84±0.49			146±13.0	0.033±0.007	0.002±0.001	0.24±0.04	5.30±1.55	0.001±0.001	0.006±0.002
G010	Curry leaves (<i>Murraya koenigii</i>)	6	4.10±0.44	7.42±1.16	0.002±0.000	659±77.4	0.060±0.012	0.005±0.002	0.46±0.09	8.67±0.42	0.037±0.018	0.051±0.033

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molebdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	22.25	0.08		0.016	0.003	28.27	308	0.22	32.27	0.18
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	15.46	0.13		0.005	0.009	29.47	287	0.13	24.14	0.17
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	17.37±4.75	0.28±0.24		0.003±0.000	0.013±0.001	42.96±1.95	345±24.3		29.60±5.32	0.16±0.05
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	21.05±3.95	0.20±0.03		0.005±0.000	0.009±0.004	37.60±4.74	329±37.6		29.04±3.64	0.14±0.03
F015	Tapioca (<i>Manihot esculenta</i>)	3	23.08±4.06	0.20±0.06			0.015±0.008	42.55±11.04	255±36.3	0.07±0.01	10.86±0.10	0.17±0.05
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	57.43	0.57	0.02	0.007	0.011	62.83	382	2.43	13.08	0.67
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	33.51±7.66	0.28±0.07		0.005±0.005	0.011±0.003	43.06±5.98	501±84.3	0.59±0.12	14.33±2.20	0.26±0.04
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	30.40±3.90	0.14±0.10		0.002±0.001	0.013±0.003	49.46±8.37	463±74.1	0.57±0.08	15.28±0.07	0.33±0.09
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	31.75	0.37	0.21	0.002	0.020	55.94	654	0.56	12.80	0.31

138

G CONDIMENTS AND SPICES-FRESH												
G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	34.72±8.28	0.29±0.08		0.002±0.002	0.014±0.002	62.16±14.29	431±53.8		3.32±0.66	0.31±0.08
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	27.54±6.31	0.27±0.09		0.002±0.002	0.041±0.027	51.72±9.20	321±41.7		2.47±0.50	0.26±0.06
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	29.90±6.97	0.27±0.10		0.002±0.002	0.032±0.017	50.24±12.28	317±72.7		2.56±1.04	0.27±0.08
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	29.74±8.00	0.29±0.18		0.001±0.001	0.032±0.035	42.79±2.85	318±25.0		1.94±0.60	0.28±0.15
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	23.96±6.20	0.25±0.11		0.001±0.001	0.021±0.014	44.35±15.69	317±66.7		2.19±0.88	0.31±0.13
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1	34.80	0.33		0.006		56.05	340		2.43	0.29
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1	26.71	0.28			0.034	45.58	319		2.00	0.17
G008	Chillies, green - all varieties (<i>Capsicum annuum</i>)	6	29.51±7.13	0.28±0.10		0.002±0.002	0.029±0.022	50.91±11.79	341±64.6		2.50±0.80	0.27±0.09
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	72.68±14.20	0.96±0.25		0.014±0.009	0.044±0.015	64.69±13.00	546±134	0.45±0.26	37.00±8.01	0.68±0.16
G010	Curry leaves (<i>Murraya koenigii</i>)	6	182±44.8	1.23±0.25		0.013±0.006	0.093±0.030	83.29±14.06	584±113	17.25±5.96	18.66±4.13	1.18±0.51

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
G011	Garlic, big clove (<i>Allium sativum</i>)	6	0.05±0.02		0.001±0.001	20.08±5.73	0.004±0.002	0.001±0.000	0.19±0.02	1.05±0.15	0.001±0.000	0.001±0.000
G012	Garlic, small clove (<i>Allium sativum</i>)	3	0.05±0.02		0.001±0.001	17.63±2.77	0.003±0.002		0.11±0.09	0.88±0.21	0.006±0.000	0.002±0.001
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	0.18		0.004	19.00	0.008		0.23	1.01	0.003	0.001
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	1.71±0.47			18.88±2.87	0.013±0.005	0.003±0.001	0.13±0.02	1.90±0.55	0.004±0.003	0.001±0.001
G015	Mango ginger (<i>Curcuma amada</i>)	3		0.21±0.00	0.002±0.002	13.74±2.59	0.002±0.001	0.003±0.001	0.10±0.03	2.31±1.27	0.007±0.005	
G016	Mint leaves (<i>Mentha spicata</i>)	4	1.17±0.16	5.26±0.00		205±31.8	0.063±0.000	0.007±0.000	0.37±0.18	8.56±3.21	0.019±0.000	0.009±0.000
G017	Onion, big (<i>Allium cepa</i>)	6	0.08±0.03		0.001±0.001	21.03±6.68	0.003±0.002	0.002±0.001	0.11±0.09	0.43±0.11	0.003±0.002	
G018	Onion, small (<i>Allium cepa</i>)	5		0.29±0.09		19.92±4.48	0.002±0.001	0.001±0.001	0.07±0.02	0.53±0.37		
G CONDIMENTS AND SPICES-DRY												
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	4.76±1.45	2.13±3.13	0.001±0.001	266±41.4	0.051±0.016	0.022±0.008	0.22±0.03	15.68±4.51	0.035±0.019	0.012±0.005
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	7.59±1.21	3.79±1.73	0.008±0.006	378±40.7	0.210±0.053	0.039±0.009	0.92±0.30	8.33±1.44	0.011±0.007	0.003±0.002
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	6.05±1.26	0.28±0.01	0.006±0.001	312±57.3	0.091±0.007	0.011±0.002	0.75±0.09	7.94±1.07	0.006±0.003	0.007±0.001
G022	Chillies, red (<i>Capsicum annum</i>)	6	4.70±1.01		0.003±0.000	99.83±6.61	0.114±0.020	0.036±0.004	0.87±0.06	6.23±0.79	0.007±0.005	0.011±0.005
G023	Cloves (<i>Syzygium aromaticum</i>)	6	6.09±1.25	5.08±0.92		567±70.8	0.047±0.026	0.006±0.000	0.54±0.08	9.41±2.10	0.026±0.018	0.004±0.001
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	5.74±1.83		0.001±0.001	718±43.0	0.041±0.019	0.020±0.008	1.46±0.08	17.64±6.74	0.003±0.002	0.026±0.007
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	9.31±3.52		0.001±0.001	878±78.0	0.126±0.072	0.026±0.015	1.14±0.04	20.58±4.24		0.059±0.020
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	1.31±0.31	3.48±0.70	0.002±0.001	135±17.2	0.015±0.004	0.031±0.011	1.16±0.32	8.47±1.90	0.012±0.009	
G027	Mace (<i>Myristica fragrans</i>)	6	1.99±0.42	4.70±1.95	0.001±0.001	174±3.5	0.069±0.015	0.006±0.002	1.90±0.13	22.69±6.87	0.051±0.018	0.004±0.003
G028	Nutmeg (<i>Myristica fragrans</i>)	6	0.68±0.19			148±12.1	0.006±0.002	0.001±0.000	1.20±0.09	2.33±0.20	0.035±0.024	
G029	Omum (<i>Trachyspermum ammi</i>)	6	6.71±1.12	8.32±6.00	0.005±0.002	1034±144	0.069±0.020	0.021±0.009	1.24±0.08	13.65±2.29	0.015±0.007	0.043±0.012
G030	Pippali (<i>Piper longum</i>)	6	4.48±0.34	3.71±1.07	0.001±0.000	414±66.2	0.055±0.028	0.008±0.004	1.34±0.40	7.99±2.11	0.030±0.014	0.006±0.001

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
G011	Garlic, big clove (<i>Allium sativum</i>)	6	27.08±7.89	0.34±0.03		0.001±0.000	0.019±0.009	119±10.9	430±84		9.42±0.07	0.89±0.18
G012	Garlic, small clove (<i>Allium sativum</i>)	3	25.78±4.86	0.32±0.11			0.026±0.016	116±27.9	453±126	0.37±0.07	10.56±0.05	0.81±0.17
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	41.13	0.13		0.009	0.032	128	584	0.43	8.87	0.66
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	54.66±7.12	3.85±1.56		0.002±0.001	0.030±0.017	44.36±2.16	407±49.5		10.03±1.91	0.39±0.17
G015	Mango ginger (<i>Curcuma amada</i>)	3	36.86±6.27	1.52±0.53	0.04±0.01	0.006±0.004	0.011±0.005	68.33±20.13	384±2.5		5.51±1.29	0.47±0.14
G016	Mint leaves (<i>Mentha spicata</i>)	4	110±30.9	1.06±0.57	0.21±0.00	0.020±0.000	0.042±0.000	65.25±16.18	539±2.7	10.79±1.48	16.87±5.37	0.75±0.08
G017	Onion, big (<i>Allium cepa</i>)	6	17.96±5.17	0.24±0.21			0.008±0.005	32.34±7.63	171±38.6	0.35±0.10	5.50±1.14	0.35±0.29
G018	Onion, small (<i>Allium cepa</i>)	5	15.16±3.75	0.11±0.02		0.003±0.000	0.005±0.002	39.65±9.90	160±34.8	1.02±0.77	4.06±0.06	0.24±0.04
G CONDIMENTS AND SPICES-DRY												
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	96.40±17.98	2.96±1.11		0.014±0.006	0.052±0.030	69.09±15.60	245±30.4	13.42±2.90	16.04±0.55	0.98±0.21
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	330±66.1	37.98±1.44		0.013±0.018	0.219±0.074	132±14.8	1262±14.4	11.71±2.73	15.51±0.70	3.71±0.31
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	286±31.9	30.25±2.38		0.006±0.001	0.234±0.183	117±18.7	1331±63.7	3.99±1.89	16.25±4.22	4.75±0.36
G022	Chillies, red (<i>Capsicum annum</i>)	6	231±25.4	1.45±0.13	1.60±0.25	0.012±0.011	0.036±0.004	280±57.5	2245±145	18.83±2.09	19.45±3.60	1.66±0.12
G023	Cloves (<i>Syzygium aromaticum</i>)	6	334±42.2	61.86±5.79		0.008±0.004	0.060±0.021	83.10±18.56	1434±86.6	7.75±1.59	183±23.9	1.13±0.14
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	343±25.5	2.81±0.39		0.011±0.005	0.143±0.024	293±54.4	1473±59.2	6.34±1.22	34.41±0.39	3.91±0.32
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	442±65.7	4.21±0.63		0.015±0.006	0.164±0.063	382±6.4	1886±139	4.01±1.98	125±31.1	4.29±0.23
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	167±35.6	1.60±0.33		0.098±0.036	0.188±0.054	435±115	891±11.5	9.98±1.81	40.20±0.06	3.80±0.93
G027	Mace (<i>Myristica fragrans</i>)	6	207±25.1	2.12±0.73		0.013±0.009	0.259±0.093	110±17.7	623±25.9	7.24±3.15	27.17±6.81	1.16±0.15
G028	Nutmeg (<i>Myristica fragrans</i>)	6	212±25.0	3.42±0.17		0.007±0.005	0.221±0.060	207±37.2	474±15.2	7.33±6.84	14.31±0.28	1.45±0.10
G029	Omum (<i>Trachyspermum ammi</i>)	6	273±22.3	6.86±0.92		0.053±0.018	0.296±0.069	329±57.7	1692±246	87.04±10.70	28.58±0.29	5.67±0.46
G030	Pippali (<i>Piper longum</i>)	6	189±46.0	1.85±0.70		0.040±0.021	0.218±0.117	181±6.9	1852±425	20.51±4.23	16.28±2.00	1.52±0.26

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
G031	Pepper, black (<i>Piper nigrum</i>)	6	6.37±2.16	2.01±0.35	0.001±0.000	405±40.9	0.068±0.020	0.005±0.002	1.76±0.43	11.91±3.48	0.037±0.028	0.005±0.003
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	2.81±0.82		0.005±0.002	1372±194	0.030±0.009	0.010±0.002	2.05±0.17	10.13±1.04	0.005±0.005	0.004±0.002
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	12.55±2.14	1.84±0.52	0.001±0.002	122±20.9	0.151±0.043	0.039±0.011	0.44±0.02	46.08±1.83	0.196±0.103	0.014±0.007

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6	0.88±0.32		228±10.2	0.006±0.003	0.007±0.002	1.08±0.06	4.59±0.61	0.002±0.002	0.001±0.001	
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	1.68±0.97		61±13.25	0.045±0.020	0.003±0.003	1.27±0.29	2.74±0.71	0.008±0.006	0.004±0.003	
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	1.05±0.33	0.001±0.000	51±11.33	0.029±0.016	0.002±0.001	1.57±0.59	3.26±0.90	0.005±0.003	0.002±0.000	
H004	Arecanut, fresh (<i>Areca catechu</i>)	2			34.03			0.71	1.04			
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	0.18±0.11		34±2.98	0.002±0.001	0.004±0.001	2.23±0.13	5.95±0.44	0.005±0.004		
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	0.41±0.05	0.001±0.000	32±4.51	0.013±0.012	0.006±0.003	0.90±0.11	3.13±0.47	0.006±0.003	0.004±0.003	
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	0.03±0.01	0.001±0.000	8±1.42	0.003±0.002	0.004±0.002	0.36±0.19	1.30±0.51	0.002±0.000		
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	11.01±10.33	0.008±0.003	318±54.8		0.019±0.010	0.51±0.09	17.20±5.49	0.042±0.029		
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	2.08±0.32	0.004±0.002	1664±329	0.029±0.014	0.035±0.013	1.76±0.24	13.90±1.60	0.034±0.017	0.035±0.019	
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	2.50±0.69	0.001±0.001	1174±189	0.020±0.009	0.022±0.011	1.68±0.18	14.95±1.69	0.010±0.011	0.004±0.003	
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	1.29±0.43		1283±149	0.015±0.006	0.023±0.026	1.50±0.12	15.04±2.09	0.024±0.017	0.005±0.003	
H012	Ground nut (<i>Arachis hypogaea</i>)	6	3.16±0.39	0.002±0.001	54±7.37	0.007±0.002	0.009±0.003	0.92±0.08	3.44±0.36	0.003±0.002	0.002±0.002	
H013	Mustard seeds (<i>Brassica nigra</i>)	6	7.78±1.60	5.84±1.58	0.004±0.002	402±54.0	0.027±0.018	0.019±0.010	0.69±0.15	13.49±2.95	0.008±0.004	0.016±0.016
H014	Linseeds (<i>Linum usitatissimum</i>)	6		8.25±3.18	0.009±0.002	257±14.0	0.001±0.000	0.033±0.014	1.34±0.09	5.44±0.69	0.004±0.002	
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	11.94±3.46	3.35±0.16	0.001±0.001	572±37.1	0.029±0.019	0.011±0.004	1.20±0.04	18.19±0.22	0.004±0.003	0.037±0.035

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molebdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
G031	Pepper, black (<i>Piper nigrum</i>)	6	196±68.8	7.50±1.22		0.022±0.014	0.269±0.088	144±14.8	1487±178	12.13±2.48	24.08±3.85	1.24±0.43
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	393±60.9	7.14±1.11		0.103±0.030	0.143±0.039	804±139	646±55.0	7.68±1.67	25.35±2.22	6.38±0.21
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	260±16.2	8.09±1.55	1.93±0.52	0.047±0.048	0.049±0.020	276±33.1	2374±172	6.41±1.34	24.41±2.48	2.64±0.25

H NUTS AND OIL SEEDS

142	H001	Almond (<i>Prunus amygdalus</i>)	6	318±49.5	2.54±0.20		0.033±0.012	0.130±0.027	446±23.2	699±43.4	3.61±1.30	1.50±0.51	3.50±0.10
	H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	76.39±17.49	2.14±0.75		0.005±0.003	0.111±0.057	105±8.3	524±43.4	15.21±4.09	12.06±1.47	0.89±0.11
	H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	91.01±14.45	2.32±0.84		0.022±0.036	0.104±0.019	127±3.4	617±125	12.52±1.56	17.13±2.81	1.02±0.20
	H004	Arecanut, fresh (<i>Areca catechu</i>)	2	47.60	1.36				90.48	329		5.53	0.56
	H005	Cashew nut (<i>Anacardium occidentale</i>)	6	307±46.6	1.78±0.08		0.025±0.011	0.607±0.145	500±35.3	635±35.2	13.08±1.07	9.00±0.19	5.34±0.27
	H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	97.21±14.66	1.61±0.40	2.10±0.65	0.025±0.013	0.282±0.098	203±6.0	739±62.0	25.25±2.78	16.68±0.38	1.41±0.11
	H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	35±11.30	0.74±0.15		0.012±0.008	0.050±0.025	67.73±15.15	246±81.2		8.12±2.48	0.58±0.16
	H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	307±11.9	2.87±0.35		0.033±0.007	0.128±0.045	539±50.7	952±41.7	54.41±4.38	21.84±3.57	4.83±0.97
	H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	390±53.1	2.53±0.32		0.075±0.021	0.262±0.100	568±96.4	480±8.7	15.70±1.67	15.91±0.56	8.59±0.69
	H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	328±13.3	1.76±0.19		0.114±0.029	0.113±0.030	613±86.8	491±7.5	52.64±8.89	11.94±0.17	7.84±0.93
	H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	372±39.9	1.74±0.15		0.126±0.036	0.116±0.039	754±42.6	460±38.9	26.74±2.78	15.43±0.70	7.77±0.67
	H012	Ground nut (<i>Arachis hypogaea</i>)	6	197±15.5	1.62±0.07	1.37±0.00	0.108±0.024	0.174±0.065	391±13.0	679±48.9	3.41±0.74	12.21±0.47	3.18±0.14
	H013	Mustard seeds (<i>Brassica nigra</i>)	6	266±47.3	4.23±1.18		0.028±0.010	0.076±0.036	715±82.1	694±112	71.47±15.33	3.97±1.01	4.03±0.26
	H014	Linseeds (<i>Linum usitatissimum</i>)	6	349±19.8	2.14±0.23		0.022±0.009	0.171±0.052	445±20.1	655±45.6	46.87±9.22	32.93±6.45	4.86±0.25
	H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	346±41.0	3.08±0.19		0.030±0.018	0.257±0.036	461±9.5	716±70.6	39.31±5.41	10.70±1.79	4.98±0.77

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	13.84±2.87	3.02±0.38	0.004±0.006	375±58.1	0.046±0.022	0.017±0.005	1.37±0.15	19.61±5.77	0.008±0.008	0.024±0.020
H017	Pine seed (<i>Pinus</i> sp.)	5		7.00±1.48	0.004±0.001	17±1.27	0.002±0.001	0.001±0.001	1.17±0.07	4.50±1.03	0.004±0.002	
H018	Pistachio nuts (<i>Pistacia vera</i>)	6		3.09±0.56	0.001±0.000	135±22.4	0.003±0.004	0.001±0.000	0.89±0.05	4.50±0.63	0.014±0.007	
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5		1.19±0.21	0.005±0.002	211±14.5	0.003±0.002	0.003±0.001	0.56±0.13	4.06±0.42	0.032±0.044	
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	1.33±0.51		0.005±0.000	176±27.0	0.009±0.002	0.021±0.001	2.78±0.99	5.85±1.09	0.009±0.003	0.006±0.000
H021	Walnut (<i>Juglans regia</i>)	6	0.37±0.15	0.46±0.52		105±5.9	0.006±0.007	0.009±0.003	1.52±0.33	3.21±0.17	0.015±0.012	
I SUGARS												
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	2.40±0.82			107±19.7	0.011±0.006	0.006±0.004	0.07±0.04	4.63±1.23	0.008±0.002	0.005±0.004
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	0.14±0.12			18±4.07	0.002±0.000	0.001±0.000	0.03±0.01	1.12±0.27	0.001±0.001	0.001±0.000
J MUSHROOMS												
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1	0.13	0.15	0.288	18.38	0.010	0.001	0.09	0.29	1.725	1.275
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1				4.83			0.42	0.30		
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	0.51	2.54	1.154	5.30	0.022	0.001	0.23	1.93	1.666	1.023
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	5.17	1.95	3.591	23.61	0.058	0.003	0.90	3.58	9.301	4.383
K MISCELLANEOUS FOODS												
K001	Toddy (<i>Borassus flabellifer</i>)	10				0.44±0.25			0.02±0.01	0.42±0.13		
K002	Coconut Water (<i>Cocos nucifera</i>)	6	0.04±0.02			27.47±4.28	0.001±0.001		0.02±0.01	0.06±0.01	0.003±0.003	

Table 5. Minerals and Trace Elements

Food code	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
	H016 Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	379±69.3	4.44±0.14		0.048±0.026	0.293±0.104	474±93.5	874±11.4	153.64±5.52	8.08±0.18	3.62±0.82
	H017 Pine seed (<i>Pinus</i> sp.)	5	268±18.7	7.92±0.55		0.033±0.021	0.191±0.045	618±39.7	686±69.0	10.56±4.93	1.31±0.04	4.18±0.04
	H018 Pistachio nuts (<i>Pistacia vera</i>)	6	149±3.0	0.87±0.06	0.65±0.33	0.022±0.003	0.087±0.009	537±9.2	1053±11.7	10.46±2.65	6.93±1.84	2.42±0.14
	H019 Safflower seeds (<i>Carthamus tinctorius</i>)	5	321±49.5	0.56±0.81	0.36±0.10	0.020±0.010	0.053±0.016	644±56.5	550±64.3	6.33±1.14	3.05±0.91	3.90±0.76
	H020 Sunflower seeds (<i>Helianthus annuus</i>)	5	413±33.5	2.35±0.91		0.047±0.020	0.322±0.144	752±118	559±8.0		1.90±0.44	7.07±0.52
	H021 Walnut (<i>Juglans regia</i>)	6	180±16.2	3.47±0.32		0.020±0.006	0.300±0.079	400±43.0	457±33.2	6.53±3.72	1.33±0.56	2.94±0.25
	I SUGARS											
144	I001 Jaggery, cane (<i>Saccharum officinarum</i>)	6	115±27.9	0.72±0.39			0.017±0.006	74.53±12.20	488±103		25.38±7.47	0.45±0.22
	I002 Sugarcane, juice (<i>Saccharum officinarum</i>)	6	13.03±6.37	0.33±0.23			0.002±0.000	22.08±5.08	150±47.2		1.16±0.28	0.14±0.07
	J MUSHROOMS											
	J001 Button mushroom, fresh (<i>Agaricus</i> sp.)	1	18.30	0.15		0.002	0.009	87.11	318		7.72	0.17
	J002 Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1	10.78	0.18				79.74	340		10.22	0.55
	J003 Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	24.47	0.13	0.15	0.002	0.007	96.36	323		9.30	1.21
	J004 Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	136	1.02	5.01	0.004	0.044	702	350	0.04	8.67	8.67
	K MISCELLANEOUS FOODS											
	K001 Toddy (<i>Borassus flabellifer</i>)	10	3.99±0.64	0.02±0.01				5.82±1.31	83.54±17.52		1.64±0.45	0.01±0.01
	K002 Coconut Water (<i>Cocos nucifera</i>)	6	18.19±6.03	0.48±0.16			0.043±0.034	18.05±7.06	215±40.0		28.09±4.41	0.04±0.01

Food code	Food Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6			0.01±0.00	121±3.0	0.004±0.001	0.005±0.001	0.03±0.01	0.16±0.02	0.005±0.002	
L002	Milk, whole, Cow	6			0.01±0.00	118±2.9	0.004±0.001	0.004±0.001	0.03±0.01	0.15±0.02	0.002±0.001	
L003	Panner	6	2.53±0.51			476±35.7	0.110±0.012	0.001±0.001	0.10±0.05	0.90±0.24		
L004	Khoa	6	3.36±0.34	2.89±0.95		602±79.7	0.119±0.011		0.07±0.09	2.32±0.36	0.010±0.003	0.004±0.001

Table 5. Minerals and Trace Elements

Food Group	Food Name	No. of Regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6	10.05±1.46	0.01±0.00				86.94±6.27	109±5.6	1.45±0.26	30.10±2.98	0.30±0.05
L002	Milk, whole, Cow	6	8.28±1.38	0.01±0.00				96.56±9.10	115±4.1	0.95±0.17	25.46±2.86	0.33±0.03
L003	Paneer	6	26.62±1.87	0.13±0.05			0.010±0.006	330±34.6	63.53±9.96	23.14±1.37	18.04±1.25	2.74±0.14
L004	Khoa	6	58.53±6.04	0.08±0.03			0.008±0.001	476±47.4	536±24.3	44.97±13.14	48.10±10.89	2.34±0.15

Food Code	Food Name	No. of regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
M EGG AND EGG PRODUCTS												
M001	Egg, poultry, whole, raw	6				49.44±8.99			0.07±0.01	1.82±0.40		
M002	Egg, poultry, white, raw	6				5.64±0.95			0.03±0.00	0.07±0.05		
M003	Egg, poultry, yolk, raw	6				116±10.0			0.10±0.01	3.17±0.34		
M004	Egg, poultry, whole, boiled	6				55.12±3.14			0.07±0.02	1.87±0.16		
M005	Egg, poultry, white, boiled	6				8.07±0.03			0.05±0.01	0.15±0.05		
M006	Egg, poultry, yolk, boiled	6				120±2.2			0.13±0.00	4.92±0.33		
M007	Egg, poultry, omlet	3				53.26±4.25			0.15±0.09	2.16±0.39		
M008	Egg, country hen, whole, raw	1				50.14			0.06	1.64		
M009	Egg, country hen, whole, boiled	1				57.79			0.09	1.73		
M010	Egg, country hen, omlet	1				55.88			0.17	2.15		
M011	Egg, duck, whole, boiled	1				56.12			0.12	2.61		
M012	Egg, duck, whole, raw	1				52.46			0.11	2.46		
M013	Egg, duck, whole, omlet	1				71.79			0.17	3.28		
M014	Egg, quail, whole, raw	1				60.67			0.09	2.55		
M015	Egg, quail, whole, boiled	1				61.35			0.13	2.63		
N POULTRY												
N001	Chicken, poultry, leg, skinless	4	0.01±0.00			20.52±0.33			0.25±0.11	1.27±0.23	0.002±0.000	
N002	Chicken, poultry, thigh, skinless	6	0.10±0.00			18.37±0.39			0.23±0.20	1.11±0.16		
N003	Chicken, poultry, breast, skinless	5	0.03±0.00			12.91±3.41			0.27±0.23	0.83±0.16		
N004	Chicken, poultry, wing, skinless	5	0.02±0.00			28.13±3.66			0.43±0.29	1.38±0.29		

Table 5. Minerals and Trace Elements

Food Category	Food Name	No. of regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
M EGG AND EGG PRODUCTS												
	M001 Egg, poultry, whole, raw	6	12.01±0.50	0.02±0.01			185±2.8	138±7.1	40.44±3.63	123±6.2	1.23±0.31	
	M002 Egg, poultry, white, raw	6	11.42±1.07				15.81±2.3	152±3.9	21.23±2.87	166±1.9	0.03±0.01	
	M003 Egg, poultry, yolk, raw	6	13.17±0.30	0.03±0.00			549±18.2	118±7.7	51.44±1.97	46.33±2.16	1.64±0.32	
	M004 Egg, poultry, whole, boiled	6	13.76±0.25	0.03±0.00			209±16.3	127±1.4	46.12±3.87	121±2.8	1.31±0.11	
	M005 Egg, poultry, white, boiled	6	11.62±0.57				23±3.3	147±15.0	14.86±1.51	144±15.3	0.09±0.03	
	M006 Egg, poultry, yolk, boiled	6	15.52±2.19	0.05±0.01			586±2.9	106±7.7	38.57±3.23	44.83±2.04	3.59±0.20	
	M007 Egg, poultry, omlet	3	14.84±0.34	0.02±0.00			222±30.3	163±10.6	42.18±3.37	169±19.9	1.31±0.13	
	M008 Egg, country hen, whole, raw	1	11	0.02			198	117	62.33	157	1.12	
148	M009 Egg, country hen, whole, boiled	1	11	0.02			206	120	52.65	149	1.25	
	M010 Egg, country hen, omlet	1	13	0.03			243	151	58.63	157	1.26	
	M011 Egg, duck, whole, boiled	1	12	0.06			263	221	43.66	110	1.58	
	M012 Egg, duck, whole, raw	1	12	0.06			247	228	46.33	113	1.49	
	M013 Egg, duck, whole, omlet	1	15	0.08			309	154	42.02	175	1.89	
	M014 Egg, quail, whole, raw	1	11	0.03			236	119	50.63	132	1.51	
	M015 Egg, quail, whole, boiled	1	12	0.03			237	115	42.60	130	1.55	
N POULTRY												
	N001 Chicken, poultry, leg, skinless	4	23.82±1.59	0.03±0.01		0.01±0.00	199±13.7	283±28.5	20.22±1.67	65.07±13.68	1.77±0.14	
	N002 Chicken, poultry, thigh, skinless	6	22.55±0.64	0.02±0.00			186±12.6	263±33.7	18.69±2.12	64.59±14.32	1.42±0.07	
	N003 Chicken, poultry, breast, skinless	5	20.20±0.14	0.02±0.01			178±0.5	295±15.6	18.56±2.12	36.70±3.29	0.78±0.30	
	N004 Chicken, poultry, wing, skinless	5	22.81±0.71	0.04±0.02		0.01±0.00	189±12.7	185±5.8	20.52±2.52	72.78±9.61	1.48±0.23	

Food Code	Food Name	No. of regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
N005	Poultry, chicken, liver	1				4.10			0.29	9.92		
N006	Poultry, chicken, gizzard	1				5.46			0.20	3.19		
N007	Country hen, leg, with skin	1				22.56			0.22	1.66		
N008	Country hen, thigh, with skin	1				20.12			0.40	1.40		
N009	Country hen, breast, with skin	1				12.49			0.13	1.09		
N010	Country hen, wing, with skin	1				35.46			0.15	1.45		
N011	Duck, meat, with skin	1				22.77	0.001		1.00	4.26		
N012	Emu, meat, skinless	1				7.40	0.002		0.65	3.95		
N013	Guinea fowl, meat, with skin	1				30.77	0.002		0.17	2.20		
149	N014	Pigeon, meat, with skin	1			18.11			0.10	3.81		
	N015	Quail, meat, skinless	1			20.60			0.20	1.90		
	N016	Turkey, leg, with skin	1			20.44	0.001		0.53	2.01		
	N017	Turkey, thigh, with skin	1			23.52			0.47	1.58		
	N018	Turkey, breast, with skin	1			14.35			0.10	1.01		
	N019	Turkey, wing, with skin	1			33.49	0.001		0.20	1.00		

O ANIMAL MEAT

O001	Goat, shoulder, meat	6	0.29±0.06	0.71±0.32	6.18±1.58	0.008±0.005		0.11±0.07	1.48±0.34	0.003±0.001	
O002	Goat, chops	6	0.16±0.02	0.76±0.41	7.44±0.28	0.012±0.007	0.001±0.000	0.07±0.01	1.87±0.44	0.002±0.000	
O003	Goat, legs	6	0.13±0.02	1.20±0.69	5.76±0.97	0.007±0.003		0.08±0.02	1.77±0.48	0.003±0.001	
O004	Goat, brain	5	0.22±0.04	0.56±0.20	10.61±0.24	0.011±0.012		0.30±0.06	1.63±0.35	0.003±0.001	
O005	Goat, tongue	4	0.40±0.04	0.57±0.18	7.11±0.14	0.014±0.004		0.16±0.03	2.09±0.42	0.003±0.002	

Table 5. Minerals and Trace Elements

Food Code	Food Name	No. of regions	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
MG	MN	HG	MO	NI	P	K	SE	NA	ZN			
N005	Poultry, chicken, liver	1	16	0.21			244	241	46.35	61.58	2.65	
N006	Poultry, chicken, gizzard	1	14	0.03			119	244	54.66	50.60	2.65	
N007	Country hen, leg, with skin	1	25	0.03			250	357	16.33	50.46	2.71	
N008	Country hen, thigh, with skin	1	24	0.02			232	330	18.33	51.14	2.16	
N009	Country hen, breast, with skin	1	22	0.01			222	365	20.12	23.13	0.78	
N010	Country hen, wing, with skin	1	25	0.02			235	249	18.01	54.15	1.64	
N011	Duck, meat, with skin	1	26	0.06			237	273	23.55	82.25	2.92	
N012	Emu, meat, skinless	1	25	0.04			243	275	21.32	48.48	2.91	
N013	Guinea fowl, meat, with skin	1	21	0.03			187	240	24.37	57.64	1.48	
N014	Pigeon, meat, with skin	1	29	0.04			255	346	19.32	56.10	2.48	
N015	Quail, meat, skinless	1	31	0.05			300	333	14.32	56.21	1.13	
N016	Turkey, leg, with skin	1	26	0.04			236	308	17.63	66.47	3.35	
N017	Turkey, thigh, with skin	1	23	0.02			194	280	20.36	50.01	2.95	
N018	Turkey, breast, with skin	1	22	0.02			182	315	14.33	40.45	1.28	
N019	Turkey, wing, with skin	1	24	0.02			199	262	18.36	57.00	1.68	

O	ANIMAL MEAT											
O001	Goat, shoulder, meat	6	21.39±1.54	0.02±0.00	0.25±0.30		0.01±0.00	189±11.6	332±46.8	12.91±3.65	47.31±8.90	4.19±0.54
O002	Goat, chops	6	21.13±2.10	0.02±0.01	0.19±0.13		0.01±0.00	195±11.7	334±43.9	21.76±5.69	45.72±6.21	4.55±1.05
O003	Goat, legs	6	21.71±1.72	0.01±0.00	0.01±0.01		0.01±0.00	187±14.2	339±25.5	17.76±3.82	42.77±5.74	3.52±0.43
O004	Goat, brain	5	13.94±0.67	0.04±0.01	0.03±0.02		0.01±0.00	296±21.2	296±15.6	21.70±6.90	132±38.4	1.08±0.09
O005	Goat, tongue	4	19.39±2.23	0.04±0.01	0.20±0.19		0.01±0.01	212±15.9	223±37.3	22.76±6.04	118±35.1	2.44±0.11

Table 5. Minerals and Trace Elements

Food Code	Food Name	No. of regions	Aluminium	Arsenic	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	
			(Al)	(As)	(Cd)	(Ca)	(Cr)	(Co)	(Cu)	(Fe)	(Pb)	(Li)	
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg	
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI	
O006	Goat, lungs	4	0.32±0.05	1.18±0.35		10.44±2.48	0.041±0.031	0.001±0.000	0.22±0.01	7.10±1.77	0.002±0.000		
O007	Goat, heart	5	0.37±0.08	0.93±0.21		5.71±1.43	0.012±0.005		0.34±0.04	3.38±0.54	0.002±0.000		
O008	Goat, liver	6	0.53±0.12	1.49±0.49	0.002±0.003	6.09±2.31	0.010±0.004	0.006±0.002	3.70±1.67	6.56±0.34	0.004±0.002		
O009	Goat, tripe	5	0.33±0.06	0.18±0.23		20.87±6.81	0.007±0.001		0.07±0.02	0.81±0.23	0.003±0.001		
O010	Goat, spleen	4	0.29±0.03	1.18±0.39		8.35±0.44	0.015±0.006	0.001±0.001	0.13±0.02	51.41±17.21	0.004±0.002		
O011	Goat, kidneys	4	0.19±0.04	1.44±0.87	0.002±0.001	12.37±4.51	0.009±0.005	0.003±0.001	0.25±0.03	6.73±0.13	0.001±0.000		
O012	Goat, tube (small intestine)	3	0.57±0.19	2.05±0.91		27.52±1.44	0.009±0.000	0.001±0.000	0.06±0.03	2.21±0.97	0.001±0.000		
O013	Goat, testis	2	0.06	0.65	0.001	5.95	0.015	0.001	0.08	1.43	0.007		
O014	Sheep, shoulder	5	0.25±0.06	1.18±0.52		5.46±2.05	0.023±0.038	0.001±0.000	0.07±0.04	1.63±0.62	0.003±0.001		
151	O015	Sheep, chops	4	0.13±0.02	0.69±0.39		7.98±1.94	0.009±0.004	0.001±0.001	0.08±0.02	2.24±0.33	0.003±0.001	
	O016	Sheep, leg	5	0.13±0.03	0.70±0.26		6.87±1.88	0.009±0.003		0.09±0.01	1.54±0.15	0.001±0.001	
O017	Sheep, brain	1	0.14	0.73		10.27	0.003		0.28	1.93	0.002		
O018	Sheep, tongue	1	0.28	0.34		8.05	0.082		0.17	2.46	0.001		
O019	Sheep, lungs	2	0.48	1.85	0.004	7.74	0.015	0.003	0.41	8.58	0.001		
O020	Sheep, heart	1	0.03	6.04		6.79	0.012	0.001	0.29	3.07		0.03	
O021	Sheep, liver	4	0.16±0.00	1.66±0.51	0.001±0.000	5.92±0.44	0.025±0.004	0.007±0.002	5.70±1.99	6.15±1.70	0.007±0.001		
O022	Sheep, tripe	2	0.27	0.10		14.85	0.019		0.06	0.90	0.002		
O023	Sheep, spleen	1	0.16	0.92	0.001	11.49	0.013	0.001	0.16	53.11	0.009		
O024	Sheep, kidneys	2	0.19	2.10	0.003	14.15	0.006	0.009	0.38	6.11	0.006		
O025	Beef, shoulder	6	0.38±0.10	0.76±0.26		6.50±1.85	0.007±0.002		0.07±0.04	2.22±0.56	0.003±0.001		
O026	Beef, chops	4	0.30±0.04	1.40±0.41		4.64±1.64	0.005±0.001		0.04±0.02	1.95±0.46	0.002±0.000		
O027	Beef, round (leg)	6	0.19±0.11	1.08±0.29		5.86±1.13	0.007±0.002		0.06±0.01	2.30±0.96	0.003±0.001		

Table 5. Minerals and Trace Elements

152

Food Code	Food Name	No. of regions	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
MG	MN	HG	MO	NI	P	K	SE	NA	ZN			
O006	Goat, lungs	4	11.48±1.33	0.04±0.00	0.07±0.03	0.02±0.00	0.01±0.00	209±8.5	180±19.4	26.00±6.96	85.72±22.56	1.70±0.32
O007	Goat, heart	5	18±2.32	0.03±0.01	0.04±0.03		0.01±0.00	174±21.0	224±26.8	15.00±3.00	73.21±10.98	1.45±0.16
O008	Goat, liver	6	18±1.34	0.26±0.04	0.44±0.79	0.12±0.04	0.01±0.00	336±45.5	284±48.8	48.12±26.66	55.41±14.75	3.48±1.32
O009	Goat, tripe	5	13±2.07	0.07±0.03	0.15±0.07		0.01±0.01	59.2±21.2	45±28.7	15.59±7.21	22.38±5.45	1.66±0.40
O010	Goat, spleen	4	15.3±2.76	0.03±0.00	0.05±0.01	0.01±0.00	0.01±0.00	266±7.3	368±17.1	48.55±13.46	52.40±8.62	1.95±0.19
O011	Goat, kidneys	4	18.6±2.65	0.08±0.01	0.38±0.11	0.01±0.00	0.01±0.00	220±8.1	195±43.7	142±47.6	184±21.3	1.73±0.07
O012	Goat, tube (small intestine)	3	7.14±1.99	0.05±0.02	0.05±0.03	0.01±0.00	0.03±0.00	55.9±16.5	130±5.4	26.09±10.09	7.46±2.01	1.12±0.55
O013	Goat, testis	2	13.66	0.02	0.64			186	253	80.34	92.61	1.19
O014	Sheep, shoulder	5	21.31±3.01	0.02±0.01	0.07±0.03	0.01±0.00	0.01±0.00	195±24.9	336±61.6	22.36±7.31	45.65±11.25	3.69±0.53
O015	Sheep, chops	4	21.42±2.22	0.03±0.01	0.13±0.01		0.01±0.00	191±20.0	323±49.9	20.82±9.63	45.26±10.93	3.46±0.71
O016	Sheep, leg	5	22.22±1.50	0.01±0.00	0.02±0.02			187±9.2	333±22.2	20.00±7.37	49.30±9.48	2.67±0.56
O017	Sheep, brain	1	14.08	0.04	0.02		0.01	271	312	34.60	122	1.11
O018	Sheep, tongue	1	24.53	0.03	0.45		0.02	207	220	23.20	185	2.46
O019	Sheep, lungs	2	11.68	0.03	0.07	0.01	0.01	187	204	16.12	109	1.58
O020	Sheep, heart	1	15.19	0.03	0.03		0.01	163	225	33.30	72.62	1.31
O021	Sheep, liver	4	17.91±2.26	0.28±0.02	0.16±0.15	0.15±0.03	0.02±0.01	334±55.6	280±53.8	43.38±17.97	55.82±12.86	3.73±1.05
O022	Sheep, tripe	2	17.81	0.16	0.19		0.01	55.61	48.75	13.92	18.37	1.89
O023	Sheep, spleen	1	17.23	0.04	0.04	0.04	0.01	266	327	64.53	50.58	1.71
O024	Sheep, kidneys	2	17.46	0.69	0.61	0.02	0.01	204	198	127	163	1.92
O025	Beef, shoulder	6	22.24±3.28	0.01±0.00	0.10±0.07			201±25.2	367±56.0	11.58±3.25	45.59±12.45	4.64±0.38
O026	Beef, chops	4	24.72±4.70	0.01±0.00	0.24±0.39			209±42.2	383±73.0	11.54±4.42	32.47±4.39	3.77±1.08
O027	Beef, round (leg)	6	26.59±2.36	0.01±0.00	0.02±0.01		0.01±0.00	215±20.0	366±3.8	18.14±10.72	38.96±8.25	3.36±0.52

Food Code	Food Name	No. of regions	Aluminium	Arsenic	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
			(Al)	(As)	(Cd)	(Ca)	(Cr)	(Co)	(Cu)	(Fe)	(Pb)	(Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
O028	Beef, brain	4	0.38±0.10	0.85±0.15		11.38±0.39	0.004±0.000		0.29±0.06	2.15±0.42	0.003±0.001	
O029	Beef, tongue	4	0.48±0.10	1.04±0.27		9.49±0.28	0.005±0.002		0.13±0.03	2.17±0.70	0.003±0.001	
O030	Beef, lungs	3	0.33±0.04	2.06±0.57	0.001±0.000	9.31±0.87	0.011±0.010	0.002±0.001	0.20±0.12	6.85±1.65	0.006±0.002	
O031	Beef, heart	5	0.62±0.12	1.39±0.32		6.16±1.43	0.006±0.001	0.002±0.002	0.37±0.08	3.62±0.29	0.004±0.001	
O032	Beef, liver	6	0.52±0.14	2.60±0.33	0.001±0.000	5.46±0.44	0.012±0.005	0.004±0.003	1.23±1.40	14.82±2.65	0.007±0.002	
O033	Beef, tripe	5	0.37±0.21	0.61±0.43		15.30±2.91	0.012±0.007	0.001±0.001	0.04±0.02	0.84±0.12	0.002±0.000	
O034	Beef, spleen	6	0.32±0.12	1.80±0.56	0.001±0.000	9.40±0.24	0.008±0.004	0.001±0.000	0.09±0.01	31.68±4.50	0.003±0.001	
O035	Beef, kidneys	3	0.34±0.12	2.37±0.54	0.043±0.010	15.31±0.44	0.005±0.000	0.002±0.002	0.21±0.09	4.71±1.89	0.481±0.827	
O036	Calf, shoulder	2	0.29	0.70		8.39	0.008		0.05	1.31	0.001	
O037	Calf, chops	2	0.27	0.27		9.27	0.012		0.07	1.20	0.004	
O038	Calf, round (leg)	2	0.19	0.93		10.03	0.007		0.08	2.40		
O039	Calf, brain	2	0.15	0.71		10.53	0.006		0.24	1.44	0.002	
O040	Calf, tongue	2	0.30	0.93		9.08	0.015		0.14	2.63		
O041	Calf, heart	1	0.17	0.60		6.48	0.031	0.001	0.28	4.66		
O042	Calf, liver	1	0.07	3.47	0.001	5.19	0.007	0.013	1.04	16.26		
O043	Calf, spleen	1	0.32	0.45	0.003	10.56	0.008	0.001	0.19	25.42	0.006	
O044	Calf, kidneys	2	0.19	1.42	0.014	12.63	0.008	0.002	0.21	4.92	0.003	
O045	Mithun, shoulder	1	0.35	1.40		4.27	0.050		0.08	2.05	0.003	
O046	Mithun, chops	1	0.36	0.62	0.001	4.88	0.019		0.09	2.25	0.006	
O047	Mithun, round (leg)	1	0.17	0.63		5.32	0.038	0.001	0.09	2.18	0.004	
O048	Pork, shoulder	6	0.47±0.14	1.53±0.89		9.95±5.13	0.020±0.011		0.23±0.17	0.91±0.23	0.005±0.000	
O049	Pork, chops	6	0.41±0.12	0.85±0.38		8.12±0.81	0.024±0.005		0.22±0.13	1.00±0.20	0.003±0.001	

Table 5. Minerals and Trace Elements

154

Food Code	Food Name	No. of regions	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
MG	MN	HG	MO	NI	P	K	SE	NA	ZN			
O028	Beef, brain	4	15.84±2.93	0.03±0.01	0.04±0.01		0.01±0.00	326±34.2	320±59.0	16.57±4.35	127±25.4	1.18±0.19
O029	Beef, tongue	4	22.82±7.66	0.04±0.01	0.11±0.07		0.01±0.00	220±61.6	260±57.4	15.16±2.49	89.88±20.41	3.31±0.35
O030	Beef, lungs	3	11.60±1.19	0.07±0.09	0.07±0.02	0.01±0.00	0.01±0.00	172±15.0	216±37.2	16.69±5.47	109±14.5	1.52±0.20
O031	Beef, heart	5	15.66±8.91	0.03±0.01	0.09±0.07			181±16.0	258±69.1	20.66±7.75	70.52±13.92	1.50±0.22
O032	Beef, liver	6	18.57±2.85	0.25±0.08	0.46±0.25	0.10±0.02	0.02±0.01	332±61.4	289±58.2	20.20±5.44	50.14±3.83	4.36±1.97
O033	Beef, tripe	5	9.33±2.12	0.03±0.02	0.08±0.03		0.01±0.00	60.17±9.2	143±61.1	10.18±3.72	41.00±11.13	2.02±0.36
O034	Beef, spleen	6	15.80±1.25	0.03±0.01	0.11±0.04	0.05±0.01	0.01±0.00	252±24.2	348±32.4	37.55±9.76	58.94±5.92	2.01±0.16
O035	Beef, kidneys	3	14.70±6.68	0.05±0.02	0.78±0.18	0.01±0.01		180±16.5	184±80.9	135±16.8	160±31.1	1.40±0.49
O036	Calf, shoulder	2	22.71	0.01	0.07		0.01	197	369	12.34	77.00	3.31
O037	Calf, chops	2	20.77		0.13		0.01	195	366	12.53	64.94	3.29
O038	Calf, round (leg)	2	22.28	0.01	0.05		0.01	185	356	13.32	67.04	2.64
O039	Calf, brain	2	14.29	0.03	0.03		0.01	296	306	15.48	115	1.11
O040	Calf, tongue	2	15.38	0.03	0.07		0.01	178	238	10.57	91.64	2.67
O041	Calf, heart	1	18.21	0.04	0.05		0.01	185	224	11.86	58.00	1.63
O042	Calf, liver	1	19.16	0.19	0.80	0.12	0.01	358	307	19.94	54.99	3.80
O043	Calf, spleen	1	18.95	0.04	0.11	0.08	0.01	274	372	41.33	67.87	2.02
O044	Calf, kidneys	2	17.35	0.06	1.33	0.01	0.01	204	206	91.31	174	1.58
O045	Mithun, shoulder	1	18.86	0.01	0.08		0.02	199	307	28.28	32.94	6.11
O046	Mithun, chops	1	18.20	0.02			0.03	178	222	14.58	42.17	6.08
O047	Mithun, round (leg)	1	22.23	0.01			0.06	190	338	14.81	28.42	3.47
O048	Pork, shoulder	6	15.01±4.36	0.02±0.01	0.15±0.10			157±36.8	234±33.1	13.26±5.22	54.47±16.10	2.08±0.66
O049	Pork, chops	6	11.62±1.58	0.03±0.01	0.23±0.05			143±0.3	243±0.7	15.06±3.70	43.70±11.05	1.34±0.46

Food Code	Food Name	No. of regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
O050	Pork, ham	6	0.32±0.28	1.54±0.94		7.40±2.16	0.015±0.012		0.20±0.19	1.27±0.48	0.003±0.001	
O051	Pork, lungs	4	0.33±0.14	2.03±0.55	0.002±0.000	10.30±0.26	0.007±0.007	0.001±0.001	0.21±0.12	6.76±2.03		
O052	Pork, heart	4	0.29±0.09	1.06±0.24		4.74±0.91	0.011±0.004		0.32±0.04	3.97±0.43	0.002±0.001	
O053	Pork, liver	5	0.33±0.27	1.64±0.89	0.003±0.004	5.52±0.27	0.007±0.002	0.003±0.003	0.66±0.31	20.74±7.24	0.002±0.001	
O054	Pork, stomach	1	0.44	5.94		11.75	0.042		0.74	1.92	0.006	
O055	Pork, spleen	3	0.26±0.22	1.83±1.59	0.003±0.003	6.98±2.93	0.018±0.018		0.11±0.01	27.21±6.43	0.799±1.381	
O056	Pork, kidneys	5	0.11±0.02	1.80±1.89	0.022±0.014	6.71±0.55	0.012±0.008	0.001±0.001	0.53±0.19	6.26±2.55	0.002±0.001	
O057	Pork, tube (small intestine)	1	0.52	2.48	0.001	16.05	0.008		0.11	2.83	0.007	
O058	Hare, shoulder	1				57.51	0.002		0.43	2.98	0.002	
155	O059 Hare, chops	1				38.36			0.19	2.78	0.001	
	O060 Hare, leg	1				53.02			0.25	2.46	0.002	
	O061 Rabbit, shoulder	1				46.37	0.001		0.64	1.74	0.003	
	O062 Rabbit, chops	1				25.48			0.08	2.42	0.002	
O063	Rabbit, leg	1				22.31			0.18	1.21	0.003	

Table 5. Minerals and Trace Elements

156

Food Code	Food Name	No. of regions	Magnesium (Mg)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Phosphorus (P)	Potassium (K)	Selenium (Se)	Sodium (Na)	Zinc (Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
O050	Pork, ham	6	17.05±3.66	0.01±0.01	0.10±0.14			140±26.6	239±34.6	13.21±6.77	40.44±9.89	1.76±0.41
O051	Pork, lungs	4	9.82±3.41	0.03±0.01	0.12±0.11		0.01±0.00	161±33.4	200±23.0	17.75±9.09	61.41±20.69	1.18±0.21
O052	Pork, heart	4	18.23±1.82	0.03±0.00	0.27±0.05	0.01±0.00	0.01±0.02	187±18.5	268±54.9	20.75±5.43	70.52±13.46	1.60±0.23
O053	Pork, liver	5	16.59±1.79	0.17±0.03	0.92±1.63	0.13±0.02	0.01±0.00	310±24.2	279±20.7	33.49±10.76	64.89±17.55	4.19±1.30
O054	Pork, stomach	1	23.32	0.02	0.16		0.01	125	200	31.64	109	2.34
O055	Pork, spleen	3	16.08±2.24	0.03±0.01	0.18±0.10	0.01±0.00	0.01±0.00	230±28.7	325±35.1	37.25±4.76	49.14±5.55	2.09±0.29
O056	Pork, kidneys	5	15.56±1.39	0.10±0.01	1.15±0.43	0.01±0.01	0.01±0.00	201±17.8	198±11.5	206±39.5	138±17.5	1.90±0.28
O057	Pork, tube (small intestine)	1	9.78	0.05	0.16		0.01	124	140	26.44	60.17	1.36
O058	Hare, shoulder	1	28	0.04				260	303	16.38	55.03	2.72
O059	Hare, chops	1	31	0.03				295	340	30.25	48.61	1.45
O060	Hare, leg	1	32	0.02				275	370	21.01	42.48	1.62
O061	Rabbit, shoulder	1	32	0.03				238	361	14.83	61.38	2.34
O062	Rabbit, chops	1	33	0.03				245	374	30.22	47.84	1.30
O063	Rabbit, leg	1	21	0.03				245	389	24.31	46.03	1.23

Food Code	Fish Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
P MARINE FISH												
P001	Allathi (<i>Elops machnata</i>)	1				13.78	0.012		0.03	0.62		
P002	Aluva (<i>Parastromateus niger</i>)	3			0.001±0.000	11.32±2.07	0.011±0.007	0.001±0.000	0.04±0.01	0.42±0.02	0.004±0.002	0.003±0.002
P003	Anchovy (<i>Stolephorus indicus</i>)	2			0.003	36.60	0.016		0.04	0.54		0.011
P004	Ari fish (<i>Aprion virescens</i>)	1				4.36	0.002		0.02	0.47		0.002
P005	Betki (<i>Lates calcarifer</i>)	1	0.01	0.27		8.84	0.014		0.79	0.31	0.002	
P006	Black snapper (<i>Macolor niger</i>)	1	0.17	0.08		9.91	0.046		0.02	0.56		
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	0.67	7.68	0.001	159	0.010	0.001	0.03	0.81	0.003	0.004
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3				47.33±16.91	0.017±0.002	0.001±0.000	0.14±0.21	0.43±0.10		0.002±0.001
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1				5.54	0.015		0.03	0.72		
P010	Chakla (<i>Rachycentron canadum</i>)	5				6.55±1.09	0.014±0.003	0.001±0.001	0.38±0.73	0.41±0.10	0.001±0.000	0.002±0.002
P011	Chappal (<i>Aluterus monoceros</i>)	1				10.22	0.014		0.43	1.29		0.001
P012	Chelu (<i>Elagatis bipinnulata</i>)	2				8.17	0.009		0.13	0.67		0.002
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1			0.001	23.72	0.003		0.03	0.31		0.001
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1				12.45	0.001		0.02	0.46		0.001
P015	Gobro (<i>Epinephelus diacanthus</i>)	2				24.18	0.006	0.001	0.10	0.36		0.001
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1				17.32	0.024	0.001	0.03	0.44		0.002
P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	0.59	0.18	0.001	19.82	0.006	0.001	0.15	1.19		0.001
P018	Jallal (<i>Arius sp.</i>)	1				14.73	0.003		0.03	0.46		0.002
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2				6.65	0.011	0.001	0.02	0.28	0.001	0.001
P020	Kadal bral (<i>Synodus indicus</i>)	1			0.001	73.92	0.001		0.02	0.31		0.002

Table 5. Minerals and Trace Elements

158

Food Code	Fish Name	No. of Regions	Magnesium	Manganese	Mercury	Molebdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
P MARINE FISH												
P001	Allathi (<i>Elops machnata</i>)	1	29.08	0.01			0.004	215	286	12.55	32.68	0.30
P002	Aluva (<i>Parastromateus niger</i>)	3	34.38±1.63	0.01±0.00			0.004±0.001	245±13.9	470±61.3	35.15±8.07	44.86±6.80	0.38±0.02
P003	Anchovy (<i>Stolephorus indicus</i>)	2	53.00	0.07			0.004	246	270	56.22	212	0.65
P004	Ari fish (<i>Aprion virescens</i>)	1	30.27	0.01			0.006	265	447	53.21	37.35	0.31
P005	Betki (<i>Lates calcarifer</i>)	1	24.16	0.01	5.87		0.003	188	355	35.75	63.68	0.36
P006	Black snapper (<i>Macolor niger</i>)	1	26.72	0.01	6.88	0.001	0.007	195	341	14.40	41.23	0.40
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	24.27	0.05	0.90		0.006	185	188	25.45	223	0.42
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	27.13±4.91	0.03±0.03			0.005±0.002	207±29.5	349±27.7	18.01±5.16	61.87±2.43	0.67±0.21
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	25.69	0.01			0.005	252	429	42.33	35.82	0.58
P010	Chakla (<i>Rachycentron canadum</i>)	5	24.71±1.74	0.01±0.00		0.001±0.000	0.006±0.002	219±59.3	343±43.7	58.99±7.35	51.41±11.15	0.57±0.38
P011	Chappal (<i>Aluterus monoceros</i>)	1	25.85	0.01		0.004		203	306	52.37	38.12	0.67
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	31.68	0.02			0.019	252	406	18.43	37.60	0.41
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	30.55	0.02			0.002	211	323	15.65	38.98	0.32
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	30.99	0.01			0.005	243	402	14.36	41.19	0.31
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	28.23	0.01			0.004	170	316	70.58	52.68	0.37
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	27.45	0.01		0.003	0.002	230	342	34.66	70.81	0.35
P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	30.62	0.08	0.52		0.001	278	341	37.62	80.88	0.64
P018	Jallal (<i>Arius sp.</i>)	1	29.12	0.01			0.003	204	368	41.03	74.33	0.83
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	31.12	0.01		0.001	0.003	249	467	12.35	30.53	0.35
P020	Kadal bral (<i>Synodus indicus</i>)	1	29.55	0.02			0.002	219	366	52.85	53.66	0.38

Food Code	Fish Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
P021	Kadali (<i>Nemipterus mesoprion</i>)	1				8.62	0.018		0.02	0.38		
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2				7.54	0.006	0.001	0.03	0.50	0.009	0.001
P023	Kalava (<i>Epinephelus cooides</i>)	1			0.001	10.66	0.009		0.72	0.26	0.004	
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2				7.72	0.003		0.02	0.36		0.001
P025	Kannadi paarai (<i>Alectis indicus</i>)	3			0.002±0.001	9.04±2.54	0.010±0.004	0.001±0.001	0.03±0.01	0.31±0.06		0.002±0.001
P026	Karimeen (<i>Etorplus suratensis</i>)	1				11.73	0.006	0.001		0.60		
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1				60.03	0.013		0.01	0.44		0.007
P028	Kayrai (<i>Thunnus albacores</i>)	2				6.00	0.006		0.08	0.98		
P029	Kiriyen (<i>Atule mate</i>)	1			0.004	19.42			0.09	1.00		0.002
P030	Kite fish (<i>Mobula kuhlii</i>)	1			0.001	11.02	0.005		0.04	1.38		0.002
P031	Korka (<i>Terapon jarbua</i>)	1			0.003	11.12	0.004		1.22	0.73	0.004	0.001
P032	Kulam paarai (<i>Carangooides fulvoguttatus</i>)	1				15.17	0.027	0.001	0.05	0.50		
P033	Maagaa (<i>Polynemus plebeius</i>)	1				8.42	0.002		0.02	0.23		0.001
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3			0.002±0.001	31.27±15.90	0.011±0.007	0.001±0.001	0.12±0.03	1.46±0.63	0.003±0.000	0.003±0.003
P035	Manda clathi (<i>Naso reticulatus</i>)	1				11.48	0.027		0.01	0.43		0.001
P036	Matha (<i>Acanthurus mata</i>)	2				14.02	0.017	0.001	0.02	0.32		0.003
P037	Milk fish (<i>Chanos chanos</i>)	1			0.003	29.18	0.006		0.45	1.35	0.002	0.001
P038	Moon fish (<i>Mene maculata</i>)	1			0.001	29.18	0.004	0.001	0.16	1.67		0.004
P039	Mullet (<i>Mugil cephalus</i>)	3			0.001±0.001	35.20±5.83	0.014±0.002	0.001±0.000	0.06±0.05	1.31±0.98		0.002±0.001
P040	Mural (<i>Tylosurus crocodilus</i>)	1				8.61	0.005		0.02	0.24		
P041	Myil meen (<i>Istiophorus platypterus</i>)	2				7.20	0.060	0.002	0.12	1.20		0.003

Food Code	Fish Name	No. of Regions	Magnesium	Manganese	Mercury	Molebdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
			MG	MN	HG	MO	NI	P	K	SE	NA	ZN
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	26.23			0.001	0.005	207	390	16.88	36.06	0.35
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	34.29	0.01		0.001	0.003	227	420	57.99	29.33	0.38
P023	Kalava (<i>Epinephelus cooides</i>)	1	22.87	0.02			0.003	177	279	12.34	40.14	0.82
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	27.07	0.01			0.003	194	346	5.60	50.53	0.31
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	32.36±2.43	0.01±0.00			0.005±0.002	252±47.7	432±47.8	23.26±0.15	59.57±15.15	0.40±0.05
P026	Karimeen (<i>Etorplus suratensis</i>)	1	28.49	0.03			0.005	192	452	19.66	23.72	0.46
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	44.30	0.02			0.004	178	228	16.45	63.27	0.41
P028	Kayrai (<i>Thunnus albacores</i>)	2	31.74	0.01			0.003	266	321	40.32	25.12	0.39
09+	P029	Kiriyen (<i>Atule mate</i>)	1	31.98	0.03	0.001	0.004	214	277	23.56	35.88	0.82
	P030	Kite fish (<i>Mobula kuhlii</i>)	1	28.46	0.01		0.005	231	387	15.69	59.03	0.55
	P031	Korka (<i>Terapon jarbua</i>)	1	28.55	0.02		0.007	229	349	51.96	43.30	1.47
	P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	30.79	0.01		0.008	244	366	21.51	49.17	0.52
	P033	Maagaa (<i>Polynemus plebeius</i>)	1	30.32	0.01		0.002	181	375	32.85	52.28	0.35
	P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	37.46±10.04	0.02±0.00		0.002±0.001	231±18.6	309±36.8	64.08±9.98	83.01±12.99	0.67±0.11
	P035	Manda clathi (<i>Naso reticulatus</i>)	1	37.88	0.01	0.003	0.006	320	431	22.56	58.50	0.37
	P036	Matha (<i>Acanthurus mata</i>)	2	40.24	0.01		0.012	263	450	17.90	62.58	0.32
	P037	Milk fish (<i>Chanos chanos</i>)	1	35.38	0.02		0.003	292	301	62.25	42.98	2.43
	P038	Moon fish (<i>Mene maculata</i>)	1	37.14	0.04		0.003	169	157	30.02	65.17	0.93
	P039	Mullet (<i>Mugil cephalus</i>)	3	34.09±4.19	0.04±0.03		0.004±0.002	222±35.2	331±18.9	40.49±16.75	66.09±6.91	0.45±0.13
	P040	Mural (<i>Tylosurus crocodilus</i>)	1	27.10	0.01		0.001	224	330	26.36	110	0.71
	P041	Myil meen (<i>Istiophorus platypterus</i>)	2	30.08	0.02	0.007	0.004	268	365	47.58	61.96	0.58

Table 5. Minerals and Trace Elements

Food Code	Fish Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1				9.04	0.005		0.02	0.31		0.002
P043	Narba (<i>Caranx sexfasciatus</i>)	2			0.001	7.21	0.004		0.10	1.11	0.004	0.002
P044	Paarai (<i>Caranx heberi</i>)	1				13.52	0.011		0.03	0.69		0.001
P045	Padayappa (<i>Canthidermis maculata</i>)	1			0.001	9.83	0.003	0.001	0.58	0.33	0.001	0.001
P046	Pali kora (<i>Panna microdon</i>)	1				17.03	0.002		0.01	0.42		0.002
P047	Pambada (<i>Lepturacanthus savala</i>)	2				16.53	0.023	0.001	0.02	0.38		0.004
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1				12.18	0.004		0.03	0.47		0.002
P049	Parava (<i>Lactarius lactarius</i>)	1				29.12	0.006		0.02	3.58		0.002
P050	Parcus (<i>Psettodes erumei</i>)	1				21.08	0.005		0.02	0.28		0.002
P051	Parrot fish (<i>Scarus ghobban</i>)	1				9.21	0.021	0.003	0.06	0.38		
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1				7.25	0.015		0.02	0.29		0.001
P053	Phopat (<i>Coryphaena hippurus</i>)	4				9.32±3.09	0.013±0.002		0.05±0.01	0.47±0.05	0.015±0.006	
P054	Piranha (<i>Pygopristis</i> sp.)	1				14.85	0.003	0.001		0.50		
P055	Pomfret, black (<i>Parastromateus niger</i>)	1	0.13	1.52	0.001	18.10	0.008		0.07	0.78		
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2			0.001	6.57	0.002		0.03	0.41		0.001
P057	Pomfret, white (<i>Pampus argenteus</i>)	2				13.64	0.011	0.004	0.05	0.31		0.001
P058	Pranel (<i>Gerres</i> sp.)	1				21.88	0.003	0.001	0.03	0.41		0.001
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1				21.84	0.014	0.001	0.04	0.35		0.002
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3				5.75±1.87	0.015±0.005		0.05±0.01	0.49±0.09		0.001±0.001
P061	Raai fish (<i>Lobotes surinamensis</i>)	2			0.001	11.09	0.016	0.001	0.03	0.46		0.001
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1				8.72	0.009		0.03	0.36		0.001

Table 5. Minerals and Trace Elements

162

Food Code	Fish Name	No. of Regions	Magnesium	Manganese	Mercury	Molebdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
MG	MN	HG	MO	NI	P	K	SE	NA	ZN			
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1	29.20	0.01		0.003	197	403	12.34	57.87	0.30	
P043	Narba (<i>Caranx sexfasciatus</i>)	2	26.33	0.01		0.003	235	384	42.50	49.51	0.45	
P044	Paarai (<i>Caranx heberi</i>)	1	27.59	0.01	0.003	0.007	284	384	35.63	45.22	0.45	
P045	Padayappa (<i>Canthidermis maculata</i>)	1	28.98	0.02		0.006	256	490	62.35	33.87	1.48	
P046	Pali kora (<i>Panna microdon</i>)	1	28.00	0.01		0.001	195	364	32.15	54.85	0.38	
P047	Pambada (<i>Lepturacanthus savala</i>)	2	29.87	0.02		0.002	170	263	13.58	82.65	0.41	
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	29.15	0.01		0.004	203	427	15.65	49.15	0.33	
P049	Parava (<i>Lactarius lactarius</i>)	1	32.52	0.03	0.001	0.009	194	363	11.54	84.08	0.56	
P050	Parcus (<i>Psettodes erumei</i>)	1	28.84	0.02		0.004	218	446	16.23	64.38	0.33	
P051	Parrot fish (<i>Scarus ghobban</i>)	1	28.88	0.02	0.004	0.003	316	432	64.52	51.79	0.31	
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	29.01	0.01		0.003	236	365	26.33	34.16	0.36	
P053	Phopat (<i>Coryphaena hippurus</i>)	4	32.27±2.78	0.01±0.00		0.007±0.004	258±21.3	439±12.1	65.53±7.30	36.20±2.65	0.36±0.06	
P054	Piranha (<i>Pygopristis</i> sp.)	1	23.41	0.02		0.003	170	323	28.22	38.97	0.43	
P055	Pomfret, black (<i>Parastromateus niger</i>)	1	28.22	0.02	1.70	0.005	195	295	50.25	69.09	0.50	
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	29.85	0.01		0.004	247	483	30.62	36.10	0.92	
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	32.20	0.02	0.001	0.003	211	255	29.33	46.09	0.53	
P058	Pranel (<i>Gerres</i> sp.)	1	26.26	0.02		0.003	166	251	63.35	52.37	0.55	
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	31.12	0.01		0.002	232	335	53.25	58.56	0.52	
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	28.10±2.72	0.01±0.00	0.001±0.000	0.006±0.003	235±17.8	440±17.8	39.82±11.13	48.93±9.31	0.35±0.02	
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	21.99	0.02		0.003	213	347	7.92	47.62	0.36	
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	27.39	0.01		0.006	178	311	16.53	50.83	0.35	

Food Code	Fish Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
P063	Rani (<i>Pink perch</i>)	1	0.41	0.90		37.90	0.005		0.08	0.87		0.001
P064	Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1			0.001	9.64	0.001		0.03	0.25		0.002
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1				8.39	0.006		0.03	0.37		0.003
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1				17.43	0.013		0.16	0.57		0.002
P067	Sadaya (<i>Platax orbicularis</i>)	1				9.08	0.011		0.16	0.47		
P068	Salmon (<i>Salmo salar</i>)	1			0.001	24.30	0.008		0.08	0.98		
P069	Sangada (<i>Nemipterus japonicus</i>)	1				7.90	0.008	0.001	0.05	0.99		0.005
P070	Sankata paarai (<i>Caranx ignobilis</i>)	1				6.03	0.003		0.05	0.99		
P071	Sardine (<i>Sardinella longiceps</i>)	1	0.10	0.08	0.001	42.26	0.008		0.07	0.83		
P072	Shark (<i>Carcharhinus sorrah</i>)	2				8.44	0.028	0.007	0.23	0.38	0.002	0.001
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	0.18	0.88		7.92	0.014		0.03	0.86		
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1			0.004	8.10	0.012		0.03	0.54		0.001
P075	Shelavu (<i>Sphyraena jello</i>)	4				11.42±1.81	0.006±0.001		0.04±0.03	0.52±0.27		0.001±0.001
P076	Silan (<i>Silonia silondia</i>)	1	0.03	1.20		28.82	0.007	0.001	0.08	0.56	0.004	
P077	Silk fish (<i>Beryx sp.</i>)	1				10.46	0.003		0.02	0.30		0.001
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	0.11	9.61		85.55	0.025		0.02	0.58		0.002
P079	Sole fish (<i>Cynoglossus arel</i>)	1				47.28	0.004		0.02	0.33		0.004
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	0.02	0.44	0.001	9.16	0.010		0.03	0.74	0.003	
P081	Tarlava (<i>Drepane punctata</i>)	2				11.68	0.009	0.001	0.03	0.53		
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2				11.40	0.016		0.05	0.60		0.001
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	0.86	0.65		99.39	0.033	0.001	0.04	2.84	0.011	

Table 5. Minerals and Trace Elements

164

Food Code	Fish Name	No. of Regions	Magnesium	Manganese	Mercury	Molebdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
P063	Rani (Pink perch)	1	29.91	0.02	4.53		0.001	208	335	40.12	63.17	0.40
P064	Ray fish, bow head, spotted (<i>Rhina australostoma</i>)	1	19.25	0.01			0.003	196	353	44.37	105	0.49
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	32.65	0.01			0.003	204	446	12.84	59.89	0.34
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	31.03	0.01			0.004	204	327	23.65	38.97	0.40
P067	Sadaya (<i>Platax orbicularis</i>)	1	26.27	0.02			0.033	221	360	23.55	49.41	0.68
P068	Salmon (<i>Salmo salar</i>)	1	31.18	0.01		0.003	0.005	211	345	36.34	20.25	0.51
P069	Sangada (<i>Nemipterus japonicus</i>)	1	28.37	0.09			0.003	211	217	26.00	77.82	0.32
P070	Sankata paurai (<i>Caranx ignobilis</i>)	1	27.53	0.01			0.001	246	379	33.02	22.33	0.39
P071	Sardine (<i>Sardinella longiceps</i>)	1	24.39	0.02	1.49		0.003	191	228	50.21	38.49	0.89
P072	Shark (<i>Carcharhinus sorrah</i>)	2	32.58	0.02		0.002	0.005	263	372	28.90	63.63	0.46
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	25.11	0.02	3.74		0.008	200	304	50.31	53.55	0.40
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	19.05	0.02			0.003	179	318	62.32	131	0.55
P075	Shelavu (<i>Sphyraena jello</i>)	4	29.90±6.95	0.01±0.00			0.006±0.003	251±28.2	453±51.9	30.81±3.61	38.73±5.26	0.42±0.12
P076	Silan (<i>Silonia silondia</i>)	1	22.64	0.02	0.21			163	223	20.23	29.39	0.58
P077	Silk fish (<i>Beryx</i> sp.)	1	27.13	0.01			0.004	211	440	16.59	41.57	0.34
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	24.97	0.03	1.81		0.005	187	249	72.55	19.60	0.57
P079	Sole fish (<i>Cynoglossus arel</i>)	1	27.96	0.07			0.003	123	199	40.22	74.57	0.17
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	24.61	0.01	1.54		0.004	174	270	23.85	64.14	0.44
P081	Tarlava (<i>Drepane punctata</i>)	2	30.10	0.01		0.001	0.005	199	370	23.42	67.40	0.31
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2	26.14	0.01		0.001	0.004	241	382	46.23	28.00	0.36
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	24.56	0.10			0.010	184	255	20.85	52.55	0.88

Food Code	Fish Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
P084	Tuna (<i>Euthynnus affinis</i>)	5			0.001±0.001	9.82±1.65	0.015±0.004	0.001±0.001	0.27±0.13	1.60±0.50	0.001±0.000	0.001±0.001
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1			0.001	6.45	0.002		0.11	1.43		
P086	Valava (<i>Chirocentrus nudus</i>)	1				37.06	0.004		0.03	0.24		0.002
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2		0.22	0.060	9.85		0.007	0.08	0.41		0.012
P088	Vela meen (<i>Aprion virescens</i>)	1				14.90	0.045	0.009	0.08	0.64		
P089	Vora (<i>Siganus javus</i>)	2				7.64	0.016		0.01	0.27		0.001
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1			0.001	8.32	0.006	0.002	0.10	0.33		0.003
P091	Xiphinis (<i>Xiphias gladius</i>)	1			0.002	12.08	0.010		0.03	0.54		0.002
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	0.48	1.11		61.69	0.021	0.005	0.08	6.65		

165

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	1.40	0.13	0.009	128	0.048	0.018	0.42	1.10		0.005
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1			0.006	333	0.032	0.012	0.84	0.98		0.017
Q003	Lobster, brown (<i>Thenu s orientalis</i>)	1			0.003	73.06	0.044	0.003	0.12	0.77		0.007
Q004	Lobster, king size (<i>Thenu s orientalis</i>)	1	0.17	1.08	0.011	66.44	0.014	0.001	0.49	0.35	0.009	0.005
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1			0.001	201	0.014	0.001	1.23	0.87		
Q006	Oyster (<i>Crassostrea sp.</i>)	1			0.013	126	0.096	0.011	3.41	0.90		0.010
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1			0.001	37.81	0.020	0.001	0.32	0.73		0.006
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1			0.001	71.89	0.004		0.41	0.39		

Table 5. Minerals and Trace Elements

166

Food Code	Fish Name	No. of Regions	Magnesium	Manganese	Mercury	Molebdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
MG	MN	HG	MO	NI	P	K	SE	NA	ZN			
P084	Tuna (<i>Euthynnus affinis</i>)	5	35.85±1.59	0.02±0.01		0.002±0.001	0.007±0.002	292±39.6	357±20.6	21.55±5.13	52.89±10.16	0.69±0.20
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	26.02	0.02			0.004	209	273	23.85	22.60	0.46
P086	Valava (<i>Chirocentrus nudus</i>)	1	39.05	0.02			0.004	229	365	32.02	91.91	0.42
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	36.73	0.01		0.002		302	473	32.64	34.85	0.74
P088	Vela meen (<i>Aprion virescens</i>)	1	31.93	0.02		0.001	0.011	280	387	35.45	38.15	0.36
P089	Vora (<i>Siganus javus</i>)	2	32.27	0.01			0.003	246	401	23.65	43.66	0.29
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	20.61	0.01			0.001	274	365	33.95	116	0.38
P091	Xiphinis (<i>Xiphias gladius</i>)	1	26.38	0.01			0.002	255	306	32.82	66.21	0.56
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	59.93	0.50	2.26		0.016	445	252	43.57	54.83	3.11

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	38.04	0.33	4.61	0.024	0.024	100	171	34.80	244	0.76
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	80.04	0.16		0.012	0.003	193	252	37.69	313	3.07
Q003	Lobster, brown (<i>Thenu s orientalis</i>)	1	45.34	0.07		0.004	0.005	223	212	33.82	140	1.16
Q004	Lobster, king size (<i>Thenu s orientalis</i>)	1	50.16	0.04	14.58		0.006	261	315	69.71	191	1.92
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	46.92	0.79			0.002	153	227	51.97	305	3.30
Q006	Oyster (<i>Crassostrea sp.</i>)	1	22.24	0.56		0.071		170	122	28.91	41.01	7.35
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	45.93	0.03			0.003	189	141	46.95	188	1.10
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	30.50	0.02		0.001	0.003	191	140	54.22	61.05	1.16

Food Code	Fish Name	No. of Regions	Aluminium (Al)	Arsenic (As)	Cadmium (Cd)	Calcium (Ca)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Lithium (Li)
			mg	µg	mg	mg	mg	mg	mg	mg	mg	mg
			AL	AS	CD	CA	CR	CO	CU	FE	PB	LI
R MARINE MOLLUSKS												
R001	Clam, green shell (<i>Perna viridis</i>)	1			0.008	121	0.104	0.027	0.25	1.01		
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1			0.012	50.00	0.123	0.031	0.31	0.94		0.004
R003	Octopus (<i>Octopus vulgaris</i>)	1	0.10	0.34	0.015	22.10	0.011	0.035	6.72	1.08		
R004	Squid, black (<i>Loligo</i> sp.)	1	0.16	0.47	0.004	22.98	0.005	0.001	1.09	0.50	0.023	0.003
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1			0.004	8.73	0.006		0.10	0.62	0.001	0.002
R006	Squid, red (<i>Loligo duvaucelii</i>)	2			0.003	14.15	0.027		0.15	0.26		0.007
R007	Squid, white, small (<i>Uroteuthis duvaucelii</i>)	1	0.08	0.85	0.005	36.46	0.007	0.009	1.10	0.39	0.022	0.003
S FRESHWATER FISH AND SHELLFISH												
S001	Cat fish (<i>Tandanus tandanus</i>)	2	0.48±0.17	1.68±0.71		21.99±8.75	0.008±0.002		0.03±0.01	0.82±0.19	0.012±0.001	
S002	Catla (<i>Catla catla</i>)	6	0.41±0.13	7.70±3.37		43.53±3.91	0.017±0.002	0.003±0.003	0.06±0.02	1.14±0.35	0.005±0.003	
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	0.81	1.81	0.004	52.99	0.069		2.72	1.54	0.606	
S004	Gold fish (<i>Carassius auratus</i>)	2	0.27	2.84		47.89	0.01		0.03	0.76		
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6	0.38±0.20	2.22±1.06	0.001±0.000	11.19±1.58	0.009±0.003		0.04±0.01	0.69±0.16	0.004±0.000	
S006	Rohu (<i>Labeo rohita</i>)	6	0.48±0.10	3.71±1.29		39.37±5.44	0.009±0.005	0.003±0.003	0.05±0.02	1.04±0.34	0.014±0.003	
S007	Crab (<i>Pachygrapsus</i> sp.)	1	0.49	1.74	0.030	199	0.016	0.001	0.52	1.10		0.006
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1	0.95	3.02	0.003	48.55	0.008		0.69	0.78		
S009	Prawns, small (<i>Macrobrachium</i> sp.)	3	0.91	8.14		67.99	0.007	0.001	0.14	0.87		0.001
S010	Tiger prawns (<i>Macrobrachium</i> sp.)	2	0.36	4.77	0.002	57.90	0.007		0.39	0.84		0.003

Table 5. Minerals and Trace Elements

168

Food Code	Fish Name	No. of Regions	Magnesium	Manganese	Mercury	Molebdenum	Nickel	Phosphorus	Potassium	Selenium	Sodium	Zinc
			(Mg)	(Mn)	(Hg)	(Mo)	(Ni)	(P)	(K)	(Se)	(Na)	(Zn)
			mg	mg	µg	mg	mg	mg	mg	µg	mg	mg
R MARINE MOLLUSKS												
R001	Clam, green shell (<i>Perna viridis</i>)	1	73.64	0.34		0.044	0.036	128	152	76.34	322	1.64
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	86.64	0.22		0.048	0.044	192	245	32.81	404	1.16
R003	Octopus (<i>Octopus vulgaris</i>)	1	50.92	0.04	1.37	0.003	0.007	131	181	40.21	230	4.07
R004	Squid, black (<i>Loligo sp.</i>)	1	41.99	0.03	0.95		0.004	173	162	57.13	179	1.24
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	35.46	0.02				173	116	41.34	99.14	1.30
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	35.74	0.02		0.001	0.003	167	134	47.43	121	0.95
R007	Squid, white, small (<i>Uroteuthis duvaucelii</i>)	1	38.53	0.02	1.67		0.006	151	134	70.02	154	1.64
S FRESHWATER FISH AND SHELLFISH												
S001	Cat fish (<i>Tandanus tandanus</i>)	2	18.78±6.65	0.02±0.03	1.89±2.43		0.004±0.002	157±58.6	250±83.0	71.03±12.14	28.29±11.65	0.71±0.24
S002	Catla (<i>Catla catla</i>)	6	25.58±0.87	0.03±0.02	1.59±1.06	0.001±0.000	0.006±0.002	182±7	301±29.0	19.73±26.86	36.56±6.32	0.68±0.13
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	42.50	0.13	3.97		0.012	361	450	67.32	88.67	2.23
S004	Gold fish (<i>Carassius auratus</i>)	2	21.66	0.02	2.29		0.01	185	243	14.22	27.53	1.69
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6	25.09±4.41	0.03±0.01	0.26±0.20	0.001±0.000	0.003±0.002	179±37.0	282±78.6	19.31±6.56	37.42±9.50	0.69±0.16
S006	Rohu (<i>Labeo rohita</i>)	6	26.53±3.81	0.04±0.02	1.71±2.54		0.005±0.002	200±48.7	303±72.4	51.50±11.49	35.56±6.36	0.80±0.11
S007	Crab (<i>Pachygrapsus sp.</i>)	1	66.77	0.09	4.04		0.001	208	286	71.84	280	2.49
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1	39.25	0.03	0.94	0.002	0.006	237	269	28.59	849	1.44
S009	Prawns, small (<i>Macrobrachium sp.</i>)	3	26.91	0.02	0.78	0.004	0.006	192	224	19.92	77.71	0.87
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	22.94	0.08	0.40		0.005	155	149	14.69	80.77	1.02

Table 6

**STARCH
AND
INDIVIDUAL SUGARS**



Table 6. STARCH AND INDIVIDUAL SUGARS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			$\leftarrow \text{ g } \rightarrow$						
			STARCH	FRUS	GLUS	SUCS	MALS		
A CEREALS AND MILLETS									
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	56.71	55.83	0.10	0.22	0.46	0.10	0.88
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	60.13±1.30	59.33±1.31	0.10±0.01	0.22±0.04	0.48±0.04		0.80±0.07
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	56.02±2.57	55.21±2.57	0.21±0.01	0.60±0.02			0.81±0.01
A004	Barley (<i>Hordeum vulgare</i>)	6	72.73±2.93	72.67±2.92		0.06±0.02			0.06±0.02
A005	Jowar (<i>Sorghum vulgare</i>)	6	60.96±1.70	59.70±1.70	0.57±0.07	0.10±0.01	0.60±0.04		1.27±0.05
A006	Maize, dry (<i>Zea mays</i>)	6	61.01±0.76	59.35±0.83	0.16±0.03	0.80±0.01	0.70±0.03		1.66±0.04
A007	Maize, tender, local (<i>Zea mays</i>)	6	17.35±2.78	15.88±2.80	0.27±0.03	0.80±0.06	0.40±0.04		1.47±0.05
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	12.11±0.64	7.45±0.68	0.91±0.04	0.97±0.02	2.79±0.03		4.67±0.05
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	49.82	48.41		1.41			1.41
A010	Ragi (<i>Eleusine coracana</i>)	5	62.47±1.24	62.13±1.31		0.25±0.06	0.12±0.02		0.34±0.06
A011	Rice flakes (<i>Oryza sativa</i>)	6	68.40±1.67	68.06±1.81		0.20±0.07	0.14±0.02		0.34±0.06
A012	Rice puffed (<i>Oryza sativa</i>)	6	69.89±2.19	69.25±2.16		0.49±0.07	0.15±0.03		0.64±0.08
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	72.00±1.87	71.31±1.91		0.55±0.08	0.14±0.02		0.69±0.08
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	76.80±5.71	76.14±5.73		0.51±0.24	0.16±0.06		0.67±0.25
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	76.39±2.76	75.70±2.70		0.54±0.25	0.15±0.06		0.69±0.28
A016	Samai (<i>Panicum miliare</i>)	6	56.43±4.09	56.07±4.12		0.24±0.10	0.13±0.01		0.37±0.09
A017	Varagu (<i>Setaria italica</i>)	5	66.25±2.90	64.96±2.93		0.89±0.11	0.40±0.02		1.29±0.10
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	71.82±1.07	70.03±1.01	0.64±0.03	0.75±0.02	0.40±0.05		1.79±0.08

Table 6. Starch and Individual Sugars

172

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			↖	g ↗	STARCH	FRUS	GLUS	SUCS	MALS
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	58.62±2.68	56.82±2.69	0.72±0.03	0.78±0.05	0.30±0.02		1.80±0.06
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	59.30±1.86	57.53±1.86	0.74±0.11	0.73±0.08	0.30±0.09		1.77±0.15
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	61.74±3.52	60.54±3.62	0.32±0.34	0.55±0.13	0.33±0.08		1.20±0.24
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	59.85±2.99	58.20±2.95	0.60±0.04	0.55±0.03	0.50±0.04		1.65±0.08
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	56.99±1.91	55.31±1.93	0.60±0.02	0.58±0.02	0.50±0.02		1.68±0.03
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	56.69±2.10	54.55±2.05	0.63±0.16	1.01±0.02	0.50±0.05		2.14±0.17
B GRAIN LEGUMES									
B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	41.52±0.87	40.49±0.83	0.10±0.02	0.10±0.01	0.63±0.23	0.20±0.03	1.03±0.23
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	36.68±3.62	35.69±3.63	0.10±0.01	0.10±0.01	0.69±0.16	0.10±0.01	0.99±0.16
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	48.73±1.91	47.89±1.90	0.20±0.03	0.20±0.02	0.44±0.14		0.84±0.15
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	42.64±5.56	42.19±5.52	0.10±0.01	0.10±0.02	0.30±0.02		0.45±0.24
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	47.09±0.79	45.49±0.66	0.30±0.19	0.61±0.24	0.68±0.20		1.60±0.38
B006	Cowpea, white (<i>Vigna catjang</i>)	1	47.51	46.33	0.13	0.39	0.67		1.18
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	41.22	40.07	0.20	0.53	0.42		1.15
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	43.47	42.30	0.20	0.29	0.68		1.17
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	44.32±1.37	42.25±0.52	0.10±0.01	0.41±0.06	0.56±0.23		1.07±0.28
B010	Green gram, dal (<i>Vigna radiata</i>)	6	42.01±0.79	41.06±0.64	0.10±0.01	0.30±0.02	0.55±0.20		0.95±0.41
B011	Green gram, whole (<i>Vigna radiata</i>)	6	39.75±5.41	39.21±5.42	0.10±0.02	0.14±0.02	0.30±0.11		0.54±0.11
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	48.31±1.68	47.96±1.68	0.10±0.03	0.15±0.03	0.10±0.01		0.35±0.05
B013	Lentil dal (<i>Lens culinaris</i>)	6	46.39±2.28	44.44±2.17	0.80±0.16	0.30±0.01	0.85±0.02		1.95±0.17
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	43.03±1.05	41.41±0.92	0.78±0.22	0.15±0.06	0.71±0.11		1.63±0.33
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	43.58	42.08	0.50	0.23	0.77		1.50

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			←	STARCH	FRUS	GLUS	SUCS	MALS	→
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	48.00±0.72	46.64±0.76	0.10±0.01	0.62±0.03	0.64±0.11		1.36±0.11
B017	Peas, dry (<i>Pisum sativum</i>)	6	45.07±2.32	43.04±2.09	0.61±0.04	0.48±0.26	0.94±0.08		2.03±0.26
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	40.46	38.45		0.18	1.84		2.02
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	40.32±2.28	38.05±2.28		0.39±0.16	1.88±0.49		2.27±0.53
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	40.07±0.51	38.55±0.28		0.23±0.04	1.29±0.23		1.52±0.26
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	50.60±1.41	48.53±1.24	0.10±0.02	0.20±0.02	1.78±0.17		2.08±0.14
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	40.27±2.16	38.97±1.91	0.10±0.01	0.20±0.02	1.00±0.07		1.30±0.09
B023	Ricebean (<i>Vigna umbellata</i>)	1	45.38	44.05	0.20	0.73	0.40		1.33
B024	Soybean, brown (<i>Glycine max</i>)	6	9.16±1.10	6.65±1.34	0.20±0.02	0.63±0.25	1.68±0.39		2.51±0.43
B025	Soybean, white (<i>Glycine max</i>)	1	9.46	7.26	0.20	0.56	1.44		2.20

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	3.95	3.72	0.10	0.10	0.03		0.23
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	1.02±0.02	0.70±0.01	0.09±0.01	0.19±0.02	0.04±0.02		0.32±0.02
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	1.05	0.77	0.24	0.04			0.28
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	1.10±0.12	0.95±0.04	0.03±0.02	0.12±0.10			0.15±0.11
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	0.83±0.03	0.69±0.02	0.01±0.01	0.13±0.02			0.14±0.02
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	0.86	0.73	0.01	0.12			0.13
C007	Basella leaves (<i>Basella alba</i>)	2	1.69	1.67	0.01	0.01	0.01		0.02
C008	Bathua leaves (<i>Chenopodium album</i>)	2	1.59	1.07	0.01	0.51			0.52
C009	Beet greens (<i>Beta vulgaris</i>)	6	2.18±0.05	2.05±0.03	0.03±0.02	0.10±0.01			0.13±0.02
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	6.61±0.06	6.24±0.04	0.20±0.01	0.17±0.02			0.37±0.03

Table 6. Starch and Individual Sugars

174

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
C011	Betel leaves, small (<i>Piper betle</i>)	4	5.54±0.03	5.14±0.02	0.20±0.02	0.20±0.02			0.40±0.03
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	4.42	4.31	0.04	0.05	0.08		0.17
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	1.42	1.00	0.20	0.10	0.12		0.42
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	2.35	1.59	0.41	0.24	0.11		0.76
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	1.54±0.21	0.53±0.13	0.52±0.08	0.26±0.09	0.23±0.08		1.00±0.11
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	1.33	0.54	0.43	0.18	0.19		0.80
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	2.15±0.07	1.53±0.03	0.32±0.01	0.24±0.02	0.05±0.03		0.61±0.04
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	2.72±0.09	2.10±0.03	0.20±0.04	0.10±0.01	0.33±0.03		0.63±0.07
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	2.51±0.12	2.49±0.12		0.02±0.01			0.02±0.01
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	1.48±0.05	0.60±0.07	0.71±0.08	0.17±0.03			0.88±0.08
C021	Garden cress (<i>Lepidium sativum</i>)	2	2.17	1.25	0.10	0.72	0.10		0.92
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	1.16±0.06	1.15±0.06		0.01±0.01			0.01±0.01
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	1.17	1.16		0.01			0.01
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	4.57	4.47		0.05	0.05		0.10
C025	Lettuce (<i>Lactuca sativa</i>)	3	1.72±0.09	1.50±0.14	0.17±0.04	0.05±0.01			0.22±0.05
C026	Mustard leaves (<i>Brassica juncea</i>)	3	1.45±0.09	1.41±0.07		0.02±0.01	0.02±0.02		0.04±0.03
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	1.62	1.10	0.10	0.20	0.22		0.52
C028	Parsley (<i>Petroselinum crispum</i>)	3	7.05±0.07	6.36±0.10	0.29±0.02	0.20±0.03	0.20±0.02		0.69±0.03
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	4.10	3.66	0.11	0.33			0.44
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	2.20±0.03	2.10±0.02		0.10±0.02			0.10±0.02
C031	Radish leaves (<i>Raphanus sativus</i>)	6	2.09±0.07	1.80±0.03	0.14±0.03	0.05±0.02	0.10±0.01		0.29±0.05

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	g	→				
				STARCH	FRUS	GLUS	SUCS	MALS	
C032	Rumex leaves (<i>Rumex patientia</i>)	2	1.55	1.10	0.11	0.21	0.14		0.45
C033	Spinach (<i>Spinacia oleracea</i>)	6	1.62±0.20	1.38±0.24	0.07±0.03	0.18±0.04			0.24±0.04
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	7.01±0.02	6.85±0.02	0.05±0.02	0.12±0.02			0.17±0.00

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6	1.20±0.06	1.01±0.01	0.12±0.04	0.05±0.02	0.02±0.02		0.19±0.06
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	0.60	0.51	0.07	0.02			0.09
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	4.56±0.05	3.53±0.02	0.38±0.02	0.51±0.03	0.14±0.02		1.03±0.04
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	0.96±0.09	0.92±0.08	0.04±0.01				0.04±0.01
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	0.99±0.08	0.93±0.07	0.06±0.01				0.06±0.01
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	0.95	0.87	0.08				0.08
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	1.03±0.12	0.67±0.09	0.23±0.05	0.13±0.03			0.36±0.06
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	1.02±0.06	0.67±0.07	0.25±0.03	0.10±0.01			0.34±0.04
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	0.97	0.58	0.33	0.06			0.39
D010	Brinjal-1 (<i>Solanum melongena</i>)	1	1.92	1.04	0.66	0.03	0.19		0.88
D011	Brinjal-2 (<i>Solanum melongena</i>)	1	1.99	1.01	0.79	0.04	0.15		0.98
D012	Brinjal-3 (<i>Solanum melongena</i>)	2	1.44	0.51	0.52	0.32	0.10		0.93
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	1.83±0.07	0.97±0.02	0.55±0.01	0.15±0.04	0.17±0.02		0.86±0.06
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	1.84±0.33	0.85±0.21	0.67±0.13	0.10±0.06	0.22±0.15		0.99±0.13
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	2.36	1.36	0.52	0.26	0.23		1.00
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	2.27	0.89	1.01	0.30	0.07		1.38

Table 6. Starch and Individual Sugars

176

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	2.77±0.07	1.98±0.02	0.41±0.20	0.11±0.03	0.27±0.18		0.79±0.06
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	2.45	1.54	0.47	0.23	0.21		0.91
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	2.15	1.29	0.50	0.23	0.13		0.86
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	2.81±0.10	1.76±0.04	0.54±0.03	0.21±0.01	0.30±0.06		1.05±0.08
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	1.97	0.75	0.82	0.14	0.27		1.22
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	2.27	1.12	0.59	0.37	0.19		1.15
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	1.80±0.16	0.92±0.01	0.40±0.02	0.28±0.07	0.20±0.20		0.88±0.17
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	1.90±0.12	1.08±0.01	0.40±0.02	0.15±0.02	0.27±0.13		0.82±0.12
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	1.60	0.61	0.54	0.13	0.32		0.99
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	1.47	0.62	0.40	0.26	0.19		0.85
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	2.72±0.85	1.28±0.57	0.95±0.44	0.20±0.23	0.29±0.28		1.44±0.43
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	2.02±0.02	1.05±0.02	0.50±0.03	0.32±0.04	0.14±0.02		0.96±0.01
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	2.83±0.04	2.08±0.02	0.42±0.02	0.21±0.02	0.12±0.01		0.76±0.03
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	2.01	1.08	0.70	0.07	0.15		0.93
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	2.28±0.51	1.31±0.48	0.55±0.19	0.20±0.09	0.22±0.12		0.97±0.21
D032	Broad beans (<i>Vicia faba</i>)	3	2.06±0.06	0.84±0.03	0.61±0.02	0.41±0.02	0.20±0.02		1.22±0.05
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	1.16±0.10	0.31±0.02	0.42±0.04	0.20±0.07	0.23±0.01		0.86±0.11
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	1.01±0.05	0.08±0.02	0.34±0.03	0.26±0.02	0.33±0.01		0.93±0.05
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	1.10±0.03	0.12±0.01	0.38±0.02	0.25±0.03	0.35±0.03		0.97±0.04
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	1.05±0.07	0.59±0.11	0.27±0.06	0.14±0.03	0.06±0.06		0.47±0.10
D037	Celery stalk (<i>Apium graveolens</i>)	3	1.42±0.08	0.68±0.03	0.15±0.03	0.25±0.04	0.35±0.02		0.75±0.06

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	1.93±0.03	1.17±0.02	0.40±0.01	0.25±0.02	0.12±0.01		0.76±0.02
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	4.54±0.04	4.42±0.03		0.10±0.01	0.02±0.01		0.12±0.02
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	1.08	0.55	0.37	0.16			0.53
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	1.14±0.20	0.89±0.19	0.09±0.02	0.16±0.08			0.25±0.09
D042	Corn, baby (<i>Zea mays</i>)	6	4.61±0.05	4.12±0.03	0.20±0.02	0.15±0.02	0.14±0.03		0.49±0.02
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	0.76±0.13	0.50±0.10	0.25±0.03	0.02±0.01			0.27±0.04
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	0.79±0.11	0.58±0.12	0.19±0.04	0.02±0.01			0.21±0.04
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	0.75	0.53	0.18	0.05			0.22
D046	Drumstick (<i>Moringa oleifera</i>)	6	2.77±0.22	1.31±0.46	1.02±0.36	0.20±0.10	0.24±0.07		1.47±0.50
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	2.63	1.68	0.68	0.21	0.06		0.95
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	2.27±0.21	1.51±0.01	0.59±0.18	0.15±0.04	0.02±0.02		0.76±0.21
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	1.82±0.11	0.75±0.05	0.60±0.14	0.12±0.02	0.12±0.05	0.22±0.18	1.06±0.13
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	1.77	0.77	0.65	0.14	0.10	0.12	1.00
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	2.04±0.06	0.02±0.01	1.21±0.02	0.26±0.03	0.55±0.03		2.02±0.05
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	8.77±0.05	6.54±0.03	1.45±0.03	0.67±0.02	0.11±0.01		2.23±0.03
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	0.94±0.05	0.51±0.01	0.05±0.02	0.11±0.01	0.27±0.04		0.43±0.04
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	1.21±0.29	0.22±0.04	0.74±0.16	0.06±0.03		0.19±0.13	0.98±0.29
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	1.19	0.12	0.83	0.10		0.14	1.07
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	1.37±0.07	0.89±0.04	0.40±0.05	0.07±0.01	0.05±0.01		0.48±0.08
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	8.32±0.46	5.80±0.54	1.84±0.23	0.52±0.30			2.42±0.31
D058	Onion, stalk (<i>Allium cepa</i>)	6	1.51±0.04	1.10±0.02		0.05±0.04	0.06±0.02	0.31±0.05	0.41±0.05

Table 6. Starch and Individual Sugars

178

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
D059	Papaya, raw (<i>Carica papaya</i>)	6	3.63±0.24		2.64±0.17	0.99±0.07			3.63±0.24
D060	Parwar (<i>Trichosanthes dioica</i>)	6	1.26±0.21	0.90±0.09	0.31±0.12	0.06±0.05			0.37±0.17
D061	Peas, fresh (<i>Pisum sativum</i>)	6	7.89±0.50	6.92±0.49	0.41±0.02	0.20±0.02	0.36±0.02		0.97±0.02
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	2.03±0.11	1.86±0.11	0.13±0.01	0.04±0.01			0.17±0.01
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	16.29±1.65	15.43±1.15	0.76±0.59	0.10±0.11			0.86±0.67
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	5.15±0.70	4.51±0.34		0.65±0.45			0.65±0.45
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	3.10	0.20	1.03	1.01	0.86		2.90
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	3.30±0.12	0.33±0.08	1.90±0.24	0.33±0.15	0.74±0.33		2.97±0.15
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	14.57	14.02	0.22	0.10	0.23		0.55
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	1.40±0.07	0.81±0.12	0.45±0.11	0.08±0.05	0.03±0.00	0.06±0.01	0.62±0.18
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	1.19±0.16	0.79±0.05	0.32±0.11	0.06±0.04	0.02±0.02	0.01±0.00	0.41±0.16
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	1.20±0.56	0.78±0.55	0.31±0.03	0.05±0.05	0.01±0.01	0.05±0.02	0.42±0.05
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	1.19	0.74	0.30	0.10	0.01	0.04	0.45
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	1.18	0.72	0.31	0.12	0.01	0.01	0.46
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	1.07±0.06	0.64±0.02	0.25±0.03	0.07±0.03		0.12±0.02	0.44±0.06
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	1.31±0.04	0.48±0.03	0.41±0.02	0.42±0.02			0.83±0.02
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	1.82±0.18		1.65±0.15	0.18±0.05			1.82±0.18
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	1.34±0.19		1.16±0.18	0.18±0.07			1.34±0.19
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	1.61	1.47	0.12	0.02			0.14
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	1.37	1.07	0.19	0.10			0.29

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars	
			<	g	→	STARCH	FRUS	GLUS	SUCS	MALS
E FRUITS										
E001	Apple, big (<i>Malus domestica</i>)	6	9.53±0.23		8.36±0.23	1.03±0.02	0.14±0.02		9.53±0.23	
E002	Apple, green (<i>Malus domestica</i>)	6	8.39±0.06		7.19±0.04	1.08±0.03	0.12±0.02		8.39±0.06	
E003	Apple, small (<i>Malus domestica</i>)	6	9.80±0.09		8.52±0.08	1.17±0.02	0.11±0.02		9.80±0.09	
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	9.15		7.18	1.60	0.37		9.15	
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	70.10±2.52	44.38±2.30	16.52±0.74	6.98±0.05	2.21±0.02		25.72±0.71	
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	9.34±0.02	4.99±0.02	1.33±0.02	0.43±0.02	2.60±0.04		4.36±0.04	
E007	Avocado fruit (<i>Persea</i> sp.)	1	1.75	0.10	1.00	0.44	0.21		1.65	
E008	Bael fruit (<i>Aegle marmelos</i>)	1	23.55	7.20	9.58	2.65	4.12		16.35	
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	18.22	3.32	6.32	7.68	0.90		14.90	
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	17.26	4.72	5.43	6.12	0.99		12.54	
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	18.53	3.96	6.03	4.05	4.49		14.57	
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	18.94±0.07	5.29±0.04	6.50±0.07	4.05±0.05	3.10±0.05		13.65±0.06	
E013	Black berry (<i>Rubus</i> sp.)	5	7.61±0.27		4.47±0.28	2.50±0.04	0.64±0.02		7.61±0.27	
E014	Cherries, red (<i>Prunus cerasus</i>)	4	10.72±0.05		5.91±0.05	4.61±0.02	0.20±0.03		10.72±0.05	
E015	Currants, black (<i>Ribes nigrum</i>)	1	8.89	2.56	2.98	2.85	0.50		6.33	
E016	Custard apple (<i>Annona squamosa</i>)	1	13.69	0.34	9.10	4.25			13.35	
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	67.50±2.87	0.87±0.08	14.90±0.05	6.15±0.02	45.58±2.94		66.63±2.90	
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	69.83	0.99	15.04	6.26	47.54		68.84	
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	58.74	1.78	22.34	5.00	29.62		56.96	
E020	Fig (<i>Ficus carica</i>)	6	9.79±0.07	1.15±0.02	5.89±0.02	1.20±0.01	1.55±0.03		8.64±0.06	

Table 6. Starch and Individual Sugars

180

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
E021	Gooseberry (<i>Emblica officinalis</i>)	5	3.95±0.05	0.56±0.03	2.10±0.02	1.29±0.02			3.39±0.02
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	10.02±0.05		7.10±0.02	2.77±0.03	0.15±0.03		10.02±0.05
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	9.59±0.02		7.11±0.03	2.38±0.02	0.10±0.01		9.59±0.02
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	10.47±0.07		7.80±0.02	2.57±0.04	0.10±0.02		10.47±0.07
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	9.19±0.03		7.08±0.01	2.01±0.02	0.10±0.01		9.19±0.03
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	9.60±0.06		7.35±0.06	2.15±0.01	0.10±0.03		9.60±0.06
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	10.88±0.05		7.49±0.03	3.29±0.03	0.10±0.02		10.88±0.05
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	4.74±0.08	0.63±0.02	2.00±0.04	1.90±0.02	0.20±0.03		4.10±0.07
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	8.49±0.58	0.70±0.03	4.01±0.32	3.60±0.02	0.18±0.01		7.79±1.29
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	12.71±0.04	0.50±0.03	4.12±0.03	3.33±0.03	4.76±0.03		12.21±0.02
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	8.32	1.48	4.47	2.21	0.16		6.84
E032	Karonda fruit (<i>Carissa carandas</i>)	1	2.55	0.80	1.19	0.56			1.75
E033	Lemon, juice (<i>Citrus limon</i>)	6	2.59±0.06		1.01±0.03	1.28±0.04	0.30±0.02		2.59±0.06
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	3.94±0.03	0.52±0.03	0.70±0.02	2.60±0.01	0.12±0.01		3.42±0.01
E035	Litchi (<i>Litchi chinensis</i>)	4	9.30±0.06		4.05±0.04	2.17±0.04	3.08±0.02		9.30±0.06
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	7.77±0.07		2.38±0.03	0.73±0.02	4.66±0.09		7.77±0.07
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	8.13		3.90	2.60	1.63		8.13
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	8.06±0.07		4.50±0.01	0.55±0.04	3.01±0.02		8.06±0.07
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	9.00±0.05		4.80±0.02	2.65±0.01	1.55±0.04		9.00±0.05
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	7.94		4.42	2.71	0.81		7.94
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	8.48		4.95	2.46	1.07		8.48

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	9.24		7.33	1.05	0.86		9.24
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	9.41	0.50	5.12	1.67	2.12		8.91
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	12.63	0.50	3.45	4.12	4.56		12.13
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	2.99±0.05		0.62±0.02	0.71±0.01	1.65±0.06		2.99±0.05
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	2.36±0.06		0.51±0.02	0.84±0.02	1.01±0.03		2.36±0.06
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	6.86±0.06		2.86±0.03	1.21±0.02	2.79±0.03		6.86±0.06
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	1.03	0.84	0.17	0.02			0.19
E049	Papaya, ripe (<i>Carica papaya</i>)	6	4.09±0.17		2.44±0.13	1.15±0.02	0.50±0.03		4.09±0.17
E050	Peach (<i>Prunus communis</i>)	1	6.95		1.15	0.89	4.61	0.30	6.95
E051	Pear (<i>Pyrus sp.</i>)	6	7.39±0.77		3.51±0.21	2.74±0.30	1.12±0.01		7.39±0.77
E052	Phalsa (<i>Grewia asiatica</i>)	2	13.75	0.75	6.12	4.66	2.22		13.00
E053	Pineapple (<i>Ananas comosus</i>)	6	8.56±0.05		1.21±0.02	3.12±0.02	4.23±0.02		8.56±0.05
E054	Plum (<i>Prunus domestica</i>)	3	10.13±0.03		3.50±0.03	3.42±0.03	3.21±0.03		10.13±0.03
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	10.87±0.05		1.01±0.03	1.74±0.04	8.12±0.04		10.87±0.05
E056	Pummelo (<i>Citrus maxima</i>)	3	4.85±0.05	0.46±0.02	2.09±0.02	1.44±0.03	0.86±0.04		4.38±0.07
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	62.80±2.05	1.29±0.03	23.12±1.79	16.22±0.66	22.17±0.93		61.51±2.02
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	58.17±2.00	1.05±0.03	26.54±0.56	15.58±2.03	15.00±0.23		57.12±2.02
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	15.80		8.78	6.00	1.02		15.80
E060	Sapota (<i>Achras sapota</i>)	6	12.30±0.05		8.60±0.03	2.85±0.06	0.85±0.03		12.30±0.05
E061	Soursop (<i>Annona muricata</i>)	1	9.95	0.12	7.99	1.66	0.18		9.83
E062	Star fruit (<i>Averrhoa carambola</i>)	1	3.95		2.22	1.73			3.95

Table 6. Starch and Individual Sugars

182

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	3.66±0.11	0.10±0.01	1.90±0.05	1.60±0.14	0.07±0.03		3.56±0.11
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	52.88±2.38		12.31±1.27	14.53±0.83	26.04±1.08		52.88±2.38
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	3.66±0.27		1.91±0.15	0.31±0.03	1.44±0.02		3.66±0.27
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	3.00±0.25		2.57±0.39	0.21±0.02	0.22±0.01		3.00±0.25
E067	Wood Apple (<i>Limonia acidissima</i>)	3	6.60±0.04	2.79±0.02	1.38±0.02	1.41±0.02	1.02±0.02		3.81±0.02
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	8.29		4.30	2.98	1.01		8.29
F ROOTS AND TUBERS									
F001	Beet root (<i>Beta vulgaris</i>)	6	6.04±0.94	1.69±0.43	1.67±0.02	1.46±0.02	1.21±0.03		4.35±0.02
F002	Carrot, orange (<i>Daucus carota</i>)	6	4.48±0.65	1.24±0.27	0.11±0.02	1.15±0.03	1.98±0.02		3.23±0.03
F003	Carrot, red (<i>Daucus carota</i>)	4	5.35±0.03	1.39±0.05	1.08±0.02	1.13±0.02	1.75±0.02		3.96±0.03
F004	Colocasia (<i>Colocasia esculenta</i>)	6	14.78±0.71	13.88±0.74	0.54±0.03	0.25±0.03	0.12±0.02		0.90±0.05
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	13.46±0.78	13.22±0.82	0.07±0.02	0.11±0.02	0.07±0.02		0.24±0.04
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	11.79±0.76	11.47±0.71	0.24±0.02	0.05±0.02	0.04±0.02		0.32±0.02
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	10.73	10.29	0.26	0.08	0.10		0.44
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	13.46	13.08	0.22	0.10	0.05		0.38
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	1.56±0.04	0.41±0.02	0.48±0.06	0.27±0.04	0.40±0.04		1.15±0.03
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	1.54±0.11	0.59±0.09	0.31±0.05	0.03±0.01	0.62±0.03		0.95±0.04
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	1.50	0.64	0.38	0.18	0.30		0.86
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	1.46	0.30	0.36	0.30	0.50		1.16
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	22.45±1.75	18.82±1.74	0.46±0.04	0.71±0.04	2.47±0.05		3.63±0.05
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	23.91±1.54	19.88±1.53	0.90±0.03	0.97±0.02	2.16±0.04		4.03±0.03

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	STARCH	FRUS	GLUS	SUCS	MALS	→
F015	Tapioca (<i>Manihot esculenta</i>)	3	17.50±0.10	15.36±0.12	0.13±0.03	0.29±0.02	1.72±0.02		2.14±0.05
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	17.88	15.93	0.12	0.32	1.51		1.95
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	15.94±0.20	14.36±0.18	0.70±0.02	0.16±0.03	0.72±0.03		1.58±0.05
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	16.09±1.00	14.94±0.35	0.42±0.24	0.11±0.06	0.62±0.48		1.15±0.75
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	16.89	15.35	0.62	0.12	0.80		1.54

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5	3.02±0.04	2.31±0.01	0.54±0.03	0.16±0.03	0.02±0.00		0.71±0.03
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3	3.01±0.09	1.96±0.04	0.93±0.03	0.11±0.02	0.02±0.01		1.05±0.05
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5	2.39±0.07	1.85±0.02	0.45±0.04	0.08±0.02	0.02±0.01		0.54±0.04
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3	2.27±0.07	1.65±0.03	0.47±0.05	0.14±0.02	0.01±0.00		0.62±0.06
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2	2.30±0.01	1.84±0.03	0.42±0.03	0.02±0.01	0.02±0.00		0.46±0.02
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1	2.29	1.70	0.43	0.15	0.01		0.59
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1	3.21	2.48	0.66	0.05	0.02		0.73
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6	2.63±0.37	1.96±0.26	0.55±0.17	0.11±0.05	0.02±0.00		0.67±0.18
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	1.23±0.13	1.06±0.09	0.07±0.04	0.06±0.03	0.05±0.02		0.17±0.04
G010	Curry leaves (<i>Murraya koenigii</i>)	6	3.66±0.17	3.08±0.16	0.41±0.03	0.20±0.01			0.60±0.03
G011	Garlic, big clove (<i>Allium sativum</i>)	6	20.81±1.23	14.84±0.97	4.20±0.34	1.20±0.02	0.57±0.21		5.97±0.43
G012	Garlic, small clove (<i>Allium sativum</i>)	3	19.70±0.97	14.86±0.87	1.48±0.06	1.08±0.03	2.28±0.06		4.84±0.11
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	21.26	17.53	1.21	1.05	1.47		3.73
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	5.11±0.11	3.80±0.04	1.00±0.07	0.15±0.03	0.17±0.14		1.31±0.12

Table 6. Starch and Individual Sugars

184

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			↖	g	↗				
				STARCH	FRUS	GLUS	SUCS	MALS	
G015	Mango ginger (<i>Curcuma amada</i>)	3	4.21±0.07	1.79±0.09	1.11±0.02	0.81±0.11	0.50±0.03		2.42±0.12
G016	Mint leaves (<i>Mentha spicata</i>)	4	1.10±0.03	1.02±0.03	0.01±0.00	0.07±0.02			0.08±0.02
G017	Onion, big (<i>Allium cepa</i>)	6	6.68±0.09	0.80±0.03	1.89±0.19	1.47±0.04	2.52±0.10		5.88±0.09
G018	Onion, small (<i>Allium cepa</i>)	5	6.37±1.15	0.75±0.26	1.44±0.26	1.63±0.09	2.55±1.06		5.62±1.06
G CONDIMENTS AND SPICES-DRY									
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	37.76±1.01	36.83±1.00	0.21±0.11	0.47±0.13	0.25±0.10		0.93±0.26
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	33.75±1.38	29.47±1.39	1.84±0.02	1.89±0.04	0.55±0.05		4.28±0.06
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	31.34±0.34	29.04±0.36	1.37±0.03	0.76±0.02	0.17±0.02		2.30±0.04
G022	Chillies, red (<i>Capsicum annum</i>)	6	9.45±0.59	4.75±0.22	2.68±0.33	1.82±0.33	0.20±0.02		4.70±0.38
G023	Cloves (<i>Syzygium aromaticum</i>)	6	10.67±0.35	8.57±0.45	1.68±0.16	0.43±0.05			2.10±0.15
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	8.45±0.77	6.07±0.76	1.61±0.84	0.77±0.16			2.38±0.95
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	15.84±0.50	14.46±0.20	0.63±0.11	0.75±0.24			1.38±0.33
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	4.22±0.20	3.66±0.20	0.31±0.02	0.12±0.01	0.11±0.02	0.01±0.01	0.55±0.05
G027	Mace (<i>Myristica fragrans</i>)	6	23.71±1.14	22.85±1.07	0.20±0.02	0.28±0.05	0.38±0.11		0.85±0.12
G028	Nutmeg (<i>Myristica fragrans</i>)	6	25.56±1.40	24.49±1.39	0.29±0.10	0.59±0.11	0.20±0.02		1.08±0.21
G029	Omum (<i>Trachyspermum ammi</i>)	6	18.51±1.26	15.75±1.05	2.07±0.13	0.47±0.28	0.22±0.06		2.76±0.37
G030	Pippali (<i>Piper longum</i>)	6	34.46±0.61	31.72±0.72	1.24±0.23	0.51±0.10	1.00±0.02		2.75±0.25
G031	Pepper, black (<i>Piper nigrum</i>)	6	35.67±0.85	35.35±1.12	0.09±0.04	0.23±0.05			0.32±0.05
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	12.28±0.79	10.43±0.81	0.78±0.43	0.77±0.11	0.30±0.13		1.85±0.40
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	45.67±1.50	44.44±1.34		0.49±0.22	0.75±0.42		1.23±0.35

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			<	g	→				
			STARCH	FRUS	GLUS	SUCS	MALS		
H NUTS AND OIL SEEDS									
H001	Almond (<i>Prunus amygdalus</i>)	6	2.24±0.21	0.01±0.01	1.20±0.22	0.76±0.02	0.27±0.01		2.23±0.21
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	68.32±2.36	66.56±2.38	0.50±0.06	0.71±0.02	0.55±0.03		1.76±0.05
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	69.12±2.92	67.33±2.74	0.60±0.17	0.83±0.07	0.36±0.02		1.79±0.20
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	40.10	35.38	3.24	1.06	0.43		4.72
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	23.23±1.11	20.11±1.08	1.97±0.05	1.05±0.04	0.10±0.02		3.11±0.08
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	6.93±0.30		1.37±0.04	1.00±0.03	4.57±0.28		6.93±0.30
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	6.20±0.26		1.00±0.08	0.89±0.04	4.31±0.20		6.20±0.26
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	31.03±1.87	30.12±1.74	0.09±0.01	0.21±0.08	0.61±0.08		0.91±0.16
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	9.53±0.59	8.54±0.58	0.31±0.02	0.47±0.02	0.21±0.02		0.99±0.05
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	9.31±1.09	7.92±1.06	0.50±0.02	0.21±0.03	0.68±0.03		1.39±0.04
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	8.61±0.73	7.94±0.74	0.09±0.02	0.33±0.01	0.26±0.03		0.67±0.04
H012	Ground nut (<i>Arachis hypogaea</i>)	6	14.61±0.87	10.19±0.52	0.60±0.30	0.25±0.04	3.57±0.40		4.42±0.51
H013	Mustard seeds (<i>Brassica nigra</i>)	6	14.12±1.06	9.05±0.80	1.13±0.46	1.40±0.42	2.55±0.56		5.07±0.72
H014	Linseeds (<i>Linum usitatissimum</i>)	6	8.15±0.17	7.55±0.13	0.20±0.02	0.40±0.05			0.60±0.04
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	16.76±0.85	15.01±0.82	1.34±0.12	0.31±0.02	0.10±0.01		1.75±0.11
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	16.75±0.15	16.34±0.20	0.11±0.01	0.20±0.03	0.10±0.10		0.41±0.08
H017	Pine seed (<i>Pinus sp.</i>)	5	22.60±0.49	17.93±0.44	1.55±0.17	1.00±0.02	2.12±0.07		4.67±0.14
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	14.55±0.30	6.65±0.33	4.11±0.02	2.65±0.16	1.15±0.03		7.90±0.19
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	28.15±0.85	25.48±0.76	0.80±0.02	0.52±0.07	1.35±0.06		2.67±0.11
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	6.79±0.56	3.97±0.45	0.74±0.08	0.60±0.02	1.48±0.15		2.81±0.13

Table 6. Starch and Individual Sugars

Food code	Food Name	No. of Regions	Total Available CHO	Total Starch	Fructose	Glucose	Sucrose	Maltose	Total Free Sugars
			↖	g	↗				
				STARCH	FRUS	GLUS	SUCS	MALS	
H021	Walnut (<i>Juglans regia</i>)	6	10.05±0.73	6.63±0.34	1.10±0.02	0.36±0.03	1.76±0.10		3.22±0.08
I SUGARS									
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	84.32±3.22		22.31±1.92	3.79±0.79	58.23±1.21		84.32±3.22
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	12.85±0.80		0.55±0.22	2.27±0.49	10.03±0.33		12.85±0.80
J MUSHROOMS									
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1	0.80	0.70	0.10				0.10
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1	1.96	1.86	0.10				0.10
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	4.51	4.31	0.20				0.20
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	22.00	21.32	0.68				0.68
K MISCELLANEOUS FOODS									
K001	Toddy (<i>Borassus flabellifer</i>)	10	5.73±0.17		5.73±0.17				5.73±0.17
K002	Coconut Water (<i>Cocos nucifera</i>)	6	3.06±0.07		3.06±0.07				3.06±0.07
L MILK AND MILK PRODUCTS									
L001	Milk, whole, Buffalo ¹	6	5.48±0.19		0.24±0.05	0.39±0.04	0.59±0.06		5.34±0.16
L002	Milk, whole, Cow ²	6	4.94±0.18		0.20±0.04	0.18±0.04	0.24±0.03		4.89±0.14
L003	Paneer ³	6	12.01±0.08		0.50±0.03	1.11±0.24	0.84±0.08		11.57±0.28
L004	Khoa ⁴	6	16.33±3.84		0.80±0.04	1.57±0.34	0.91±0.04		16.14±1.11

Lactose content (g/100) (1) 4.12±0.14; (2) 4.28±0.10; (3) 9.12±0.20; (4) 12.86±1.03

Table 7

FATTY ACID PROFILE



Table 7. FATTY ACID PROFILE

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			← mg →											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
A CEREALS AND MILLETS														
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1			15.64	1043	155	38.00	16.07	12.14			1020	
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6			10.68±1.35	891±54.5	172±14.1	36.02±2.68	15.61±1.31	13.51±2.06			1030±64.3	
A003	Bajra (<i>Pennisetum typhoideum</i>)	6				729±21.3	128±19.6	18.21±2.78				6.97±0.45	1040±39.8	
A004	Barley (<i>Hordeum vulgare</i>)	6				209±9.4	23.35±2.74						90.79±5.63	
A005	Jowar (<i>Sorghum vulgare</i>)	6				149±5.6	14.22±0.79						314±13.7	
A006	Maize, dry (<i>Zea mays</i>)	6				363±4.6	42.45±2.76	7.14±0.95					700±17.9	
A007	Maize, tender, local (<i>Zea mays</i>)	6				96.13±3.97	10.88±1.55	2.37±0.63					145±6.5	
A008	Maize, tender, sweet (<i>Zea mays</i>)	4				106±2.4	14.36±0.59	2.95±0.08					174±6.1	
A009	Quinoa (<i>Chenopodium quinoa</i>)	1			82.76	434	52.88				44.41	56.79	1323	
A010	Ragi (<i>Eleusine coracana</i>)	5				290±15.4	27.86±2.43						585±36.3	
A011	Rice flakes (<i>Oryza sativa</i>)	6				261±20.2	23.68±1.50						425±11.4	
A012	Rice puffed (<i>Oryza sativa</i>)	6				43.29±5.23	3.55±0.45						39.77±5.05	
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	1.39±0.31		30.42±3.15	273±14.9	33.01±4.34	3.09±0.21	1.98±0.21	2.49±0.38		2.77±0.46	197±15.4	
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.63±0.21		13.22±1.52	120±8.0	13.83±1.67	1.31±0.18	0.91±0.18	0.93±0.24		1.19±0.21	84.09±6.47	
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	0.85±0.30		13.19±3.00	143±28.0	14.50±3.27	1.46±0.40	1.98±1.49	1.14±0.35		1.49±0.47	109±21.2	
A016	Samai (<i>Panicum miliare</i>)	6				487±26.1	102±11.9						868±24.2	
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5				211±0.9	28.40±1.22	3.84±0.78	2.22±0.24			3.21±0.11	291±7.2	

Table 7. FATTY ACID PROFILE

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	← mg →		
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
A CEREALS AND MILLETS												
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	12.62			2259		20.91		1280	1033	2279
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	12.71±1.56			2223±129		43.03±2.70		1140±70.5	1043±65.8	2266±132
A003	Bajra (<i>Pennisetum typhoideum</i>)	6				1844±56.7		140±5.8		875±34.5	1047±39.9	1984±55.0
A004	Barley (<i>Hordeum vulgare</i>)	6				549±21.6		26.32±3.35		232±11.9	90.79±5.63	575±18.6
A005	Jowar (<i>Sorghum vulgare</i>)	6				508±18.3		16.54±1.31		163±6.2	314±13.7	524±18.3
A006	Maize, dry (<i>Zea mays</i>)	6	6.62±0.74			1565±18.2		40.76±2.43		413±5.6	706±17.4	1606±18.5
A007	Maize, tender, local (<i>Zea mays</i>)	6	1.85±0.61			337±4.9		10.46±0.74		109±4.4	147±6.8	347±5.2
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	2.05±0.22			292±10.3		7.65±0.33		123±2.9	176±6.3	300±10.3
A009	Quinoa(<i>Chenopodium quinoa</i>)	1				2203		204		570	1424	2406
A010	Ragi (<i>Eleusine coracana</i>)	5				362±15.3		68.58±11.85		317±17.0	585±36.3	431±20.7
A011	Rice flakes (<i>Oryza sativa</i>)	6				553±38.2		24.37±4.81		284±20.6	425±11.4	577±36.4
A012	Rice puffed (<i>Oryza sativa</i>)	6				43.42±5.98		1.39±0.19		46.84±5.55	39.77±5.05	44.80±6.15
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	1.89±0.25		0.89±0.22	490±33.2		16.10±0.92		346±20.3	203±15.7	506±33.6
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.89±0.14		0.49±0.16	209±12.8		7.18±0.56		150±10.2	86.66±6.38	216±13.2
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	1.54±0.44		0.75±0.36	234±45.8		9.51±1.09		184±8.9	117±6.6	253±13.2
A016	Samai (<i>Panicum miliare</i>)	6				1230±42.9		47.20±5.17		589±31.9	868±24.2	1277±47.5
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	2.75±0.89			576±17.8		21.02±1.20		246±2.3	297±6.8	597±18.4

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			← mg →											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6				91.24±1.50	7.31±0.73						50.64±2.98	
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6				191±5.6	14.55±3.10						149±7.5	
A020	Wheat, whole (<i>Triticum aestivum</i>)	6				176±7.4	14.83±2.25						141±9.4	
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6				179±4.2	17.41±2.78						152±5.8	
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6				81.63±4.28	7.24±1.49						67.34±3.25	
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6				59.43±4.42	5.15±0.65						36.06±2.43	
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6				46.97±4.72	2.98±0.21						28.84±1.22	

191

B GRAIN LEGUMES

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6			405±6.6	51.90±2.23	11.55±1.42				7.89±0.99	855±18.9
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6			382±4.6	58.02±6.35	13.29±2.64				7.87±1.06	871±25.1
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6			221±9.9	54.60±2.89						186±8.1
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6			211±12.2	47.37±6.75						161±7.1
B005	Cowpea, brown (<i>Vigna catjang</i>)	6			227±5.6	33.10±1.30	6.84±0.76	11.52±0.79	4.43±0.43			57.69±6.88
B006	Cowpea, white (<i>Vigna catjang</i>)	1			228	34.43	6.34	12.19	4.05			67.63
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1			142	36.97	3.33	2.61	2.68			80.07
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1			149	39.16	3.66	3.01	3.04			127
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5			142±6.0	37.22±1.84	2.81±0.22	2.31±0.48	1.92±0.26			61.57±6.06
B010	Green gram, dal (<i>Phaseolus radiata</i>)	6			208±6.3	39.24±4.70						35.85±4.30
B011	Green gram, whole (<i>Phaseolus radiata</i>)	6			233±7.6	41.32±4.98						27.22±5.09
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6			114±2.1	13.59±0.76		4.45±0.21	2.65±0.19			68.89±1.85

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated	Total Mono	Total Poly
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	Fatty Acids	Fatty Acids	Fatty Acids
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6				325±6.8		17.45±1.21		98.55±1.87	50.64±2.98	343±7.8
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6				697±19.4		44.93±1.64		206±8.2	149±7.5	742±19.2
A020	Wheat, whole (<i>Triticum aestivum</i>)	6				616±22.1		38.51±3.88		191±8.0	141±9.4	654±23.7
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6				657±9.0		42.69±3.34		196±2.6	152±5.8	700±11.3
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6				306±3.0		19.21±0.84		88.87±5.16	67.34±3.25	325±2.4
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6				209±17.4		11.26±0.74		64.59±4.94	36.06±2.43	220±17.8
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6				162±12.8		8.55±0.50		49.95±4.74	28.84±1.22	170±13.1

192

B GRAIN LEGUMES

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	13.23±2.17		2360±51.0		116±5.1		469±8.0	876±17.9	2476±51.6
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	11.77±1.44		2220±73.6		117±7.9		453±10.6	890±24.6	2337±78.2
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6			176±7.7		566±25.6		276±12.2	186±8.1	742±32.5
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6			117±5.9		601±23.8		258±18.6	161±7.1	718±29.0
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	2.89±0.50		343±9.8		207±16.0		283±5.3	60.58±6.62	550±24.0
B006	Cowpea, white (<i>Vigna catjang</i>)	1	2.49		354		203		285	70.12	557
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1			398		69.82		188	80.07	468
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1			389		70.06		198	127	460
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5			426±6.2		76.61±8.35		186±6.9	61.57±6.06	503±12.8
B010	Green gram, dal (<i>Phaseolus radiata</i>)	6			377±14.8		157±14.9		247±9.5	35.85±4.30	534±28.2
B011	Green gram, whole (<i>Phaseolus radiata</i>)	6			430±10.8		180±6.7		274±10.9	27.22±5.09	611±12.8
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6			207±3.8		51.68±3.81		135±2.3	68.89±1.85	258±6.4

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
B013	Lentil dal (<i>Lens culinaris</i>)	6				79.74±3.82	11.28±0.91						112±7.6
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6				70.01±2.45	11.20±0.99						102±5.3
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2				66.76	9.41						92.18
B016	Moth bean (<i>Vigna aconitifolia</i>)	6				320±7.9	97.75±3.22	7.94±0.27	4.79±0.50	2.83±0.28			72.25±5.74
B017	Peas, dry (<i>Pisum sativum</i>)	6				193±10.2	48.50±3.39						398±31.2
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2				216	21.97						105
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6				215±13.1	26.74±3.42						91.76±2.33
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3				225±6.0	30.51±5.16						87.84±14.82
B021	Red gram, dal (<i>Cajanus cajan</i>)	6				222±11.6	35.22±3.19						89.94±4.43
B022	Red gram, whole (<i>Cajanus cajan</i>)	6				236±11.0	40.95±3.31						78.55±6.71
B023	Ricebean (<i>Vigna umbellata</i>)	1				50.69	14.81	17.97	28.06	18.26			357
B024	Soybean, brown (<i>Glycine max</i>)	6				2381±26.3	566±54.7	47.10±6.29	67.89±4.22	29.84±4.91		22.79±2.11	4499±230
B025	Soybean, white (<i>Glycine max</i>)	1				2338	523.44	43.30	65.49	30.95		25.35	4723

C GREEN LEAFY VEGETABLES												
C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1			346	74.53	23.95	24.96	20.61		16.91	40.76
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6		18.47±4.66	143±5.4	16.15±1.99	2.57±0.38	4.74±1.26	9.09±1.70		16.05±2.51	31.26±2.04
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1		20.33	159	17.75	2.24	3.99	7.01		14.48	31.48
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4		18.37±3.07	144±12.5	19.16±3.23	2.83±0.36	5.03±1.01	7.93±1.14		12.28±3.08	32.72±2.99
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4		8.28±1.05	63.62±3.29	6.89±0.47	0.85±0.09	2.22±0.40	3.27±0.17		7.88±0.67	7.79±0.32

Table 7. Fatty Acid Profile

104

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated	Total Mono	Total Poly
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	Fatty Acids	Fatty Acids	Unsaturated
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
B013	Lentil dal (<i>Lens culinaris</i>)	6				266±15.4				91.02±3.30	112±7.6	336±18.9
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6				221±8.1				81.22±2.82	102±5.3	277±9.7
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2				217				76.17	92.18	274
B016	Moth bean (<i>Vigna aconitifolia</i>)	6				609±18.7				434±10.8	72.25±5.74	848±24.6
B017	Peas, dry (<i>Pisum sativum</i>)	6				728±31.5				242±9.7	398±31.2	873±41.5
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2				386				238	105	927
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6				344±7.7				242±14.1	91.76±2.33	896±26.7
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3				374±20.7				256±10.9	87.84±14.82	931±28.9
B021	Red gram, dal (<i>Cajanus cajan</i>)	6				600±29.5				257±14.3	89.94±4.43	651±36.2
B022	Red gram, whole (<i>Cajanus cajan</i>)	6				585±40.3				277±13.1	78.55±6.71	637±41.6
B023	Ricebean (<i>Vigna umbellata</i>)	1				62.93				172	357	62.93
B024	Soybean, brown (<i>Glycine max</i>)	6	35.99±5.33			9969±135				3092±75.9	4558±230	11279±188
B025	Soybean, white (<i>Glycine max</i>)	1	68.10			9754				3002	4817	11071

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1			125		407		490	57.67	532
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	1.57±0.20		111±8.6		247±10.9		194±3.2	48.87±2.73	358±17.3
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	1.39		112		214		210	47.34	326
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	1.59±0.28		118±11.1		214±13.8		197±14.8	46.59±2.31	332±23.5
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	0.34±0.10	0.45±0.10	39.00±2.30		147±10.4		85.13±4.42	16.46±0.79	186±10.8

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			mg											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2			9.54	64.58	6.35	0.70	1.61	3.19		9.50	7.36	
C007	Basella leaves (<i>Basella alba</i>)	2				89.46	11.97					12.32	38.96	
C008	Bathua leaves (<i>Chenopodium album</i>)	2			1.87	96.94	7.52	3.51	7.48	2.74		8.61		
C009	Beet greens (<i>Beta vulgaris</i>)	6			5.11±0.11	160±0.6	11.83±0.23		5.65±0.19	5.17±0.18		7.13±0.22	72.38±0.41	
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6			24.45±2.39	175±7.4	39.33±3.06		5.21±1.10	6.02±0.97		21.36±3.47	72.07±4.38	
C011	Betel leaves, small (<i>Piper betle</i>)	4			14.65±2.55	177±10.0	37.34±2.31		4.15±0.69	5.07±1.26		17.93±2.52	64.74±3.26	
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1				187	39.75						88.69	
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1				29.26	3.76						15.97	
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1				47.57	7.61	2.19	1.77	2.73			37.19	
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6				34.59±2.95	6.02±0.60	2.29±0.30	1.60±0.12	2.05±0.29			30.05±1.84	
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2				42.43	7.59	3.24	1.99	3.17			41.14	
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6			2.76±0.27	85.30±6.47	14.28±1.21	3.92±0.24	3.31±0.43	5.33±0.56			20.80±0.81	
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6				334±7.5	52.40±3.04	17.92±1.43	14.16±2.89	7.55±0.70		17.24±2.64	30.39±2.21	
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3			44.09±6.76	370±28.2	69.53±7.14		32.64±2.89	43.59±4.28			102±8.0	
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5			22.49±2.23	130±8.6	30.27±2.37	6.85±0.63	4.44±0.67	4.67±0.34		9.09±1.23	11.06±1.16	
C021	Garden cress (<i>Lepidium sativum</i>)	2				23.82	2.32	0.49	1.28	0.76		0.93	7.30	
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4			25.70±2.61	170±7.5	27.48±2.77	6.90±1.10	7.41±1.42	6.86±0.77		16.63±0.41	21.97±1.52	
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1			27.56	173	22.69	6.81	7.64	5.80		18.49	26.39	
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2				67.77	32.78	2.48	1.42	2.39		5.84	13.07	
C025	Lettuce (<i>Lactuca sativa</i>)	3			8.22±0.57	78.22±8.55	10.96±0.96		8.47±1.09	10.15±1.25		9.05±1.53	13.16±2.32	

Table 7. Fatty Acid Profile

996

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated	Total Mono	Total Poly
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	Fatty Acids	Fatty Acids	Fatty Acids
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	0.49		0.42	36.85		131		85.96	17.77	168
C007	Basella leaves (<i>Basella alba</i>)	2				80.67		123		101	51.28	203
C008	Bathua leaves (<i>Chenopodium album</i>)	2				50.68		169		120	8.61	219
C009	Beet greens (<i>Beta vulgaris</i>)	6				101±0.6		207±0.6		188±0.5	79.51±0.62	308±0.4
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6				110±4.8		146±12.8		250±11.6	93.43±4.18	256±11.6
C011	Betel leaves, small (<i>Piper betle</i>)	4				104±8.4		172±8.9		238±15.9	82.67±2.65	277±16.9
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1				43.82		41.11		226	88.69	84.92
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1				11.68		43.33		33.01	15.97	55.01
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1				54.33		62.60		61.87	37.19	117
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6				42.80±1.94		48.61±2.63		46.54±3.63	30.05±1.84	91.40±3.88
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2				52.26		60.18		58.42	41.14	112
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6				84.83±4.23		139±9.5		115±7.7	20.80±0.81	224±11.8
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6				353±12.1		335±13.5		426±9.1	47.63±4.33	689±24.8
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3				222±54.4		446±87.7		560±41.6	102±8.0	668±52.7
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5				82.83±5.58		362±11.4		199±9.0	20.15±1.30	445±13.0
C021	Garden cress (<i>Lepidium sativum</i>)	2				34.61		24.10		28.68	8.24	58.71
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	1.25±0.40			150±5.5		434±19.0		245±10.6	39.85±1.61	584±23.3
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	1.05			132		435		243	45.93	567
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2				43.00		111		107	18.91	154
C025	Lettuce (<i>Lactuca sativa</i>)	3				74.85±12.1		134±17.8		116±11.9	22.22±3.42	208±29.6

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			$\leftarrow \text{mg} \rightarrow$											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
C026	Mustard leaves (<i>Brassica juncea</i>)	3			12.60±1.33	110±4.2	17.09±0.16		2.35±0.16			16.25±1.15	11.31±0.57	
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1		1.53	2.18	33.69	1.58						23.03	
C028	Parsley (<i>Petroselinum crispum</i>)	3			15.18±1.18	235±9.1	58.05±2.44	6.04±0.09	13.80±0.36	16.67±0.31		14.42±0.54	18.52±0.74	
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2				148	17.43	2.93	8.73	27.61		9.77	23.61	
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6			19.86±0.55	188±11.0	32.53±3.60	5.74±0.72	13.53±1.27	6.74±0.15		9.79±1.11	6.91±0.48	
C031	Radish leaves (<i>Raphanus sativus</i>)	6			9.62±0.95	110±4.6	27.54±2.05					8.05±0.66	18.88±1.89	
C032	Rumex leaves (<i>Rumex patientia</i>)	2			6.95	49.83	4.14					6.95	11.73	
C033	Spinach (<i>Spinacia oleracea</i>)	6			17.01±0.72	147±6.3	9.54±1.17	1.29±0.25	4.13±0.29	3.99±0.39		8.77±0.84	32.87±1.74	
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3			16.14±0.46	150±2.2		1.20±0.23	4.08±0.43	4.27±0.40		9.29±0.35	33.01±2.46	

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6	0.81±0.10	17.99±1.16	5.90±0.20	0.55±0.11						0.86±0.27	6.57±0.35
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1		35.75	1.84		1.72	1.77					7.45
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	3.08±0.41	191±5.4	40.33±0.41	8.93±0.31	13.20±0.25	9.38±0.64				8.72±0.25	38.09±1.54
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	2.99±0.57	78.62±5.32	50.55±3.47	2.89±0.60	3.65±0.77	5.78±0.77				1.03±0.30	4.55±0.40
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	3.35±0.46	84.32±2.23	41.25±2.34	3.09±0.44	3.44±0.20	3.74±0.64				0.96±0.33	5.36±0.39
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	4.25	86.82	40.28	3.16	3.47	4.14				1.05	3.91
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	1.32±0.23	31.30±3.01	4.35±0.55	0.70±0.12	2.22±0.30	1.54±0.22					3.54±0.58

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			← mg →									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
C026	Mustard leaves (<i>Brassica juncea</i>)	3				83.12±3.94			240±8.7	142±4.4	27.56±1.48	323±12.4
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1				60.03			77.96	38.98	23.03	138
C028	Parsley (<i>Petroselinum crispum</i>)	3				221±4.7			255±4.2	345±11.8	32.94±1.09	476±8.6
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2				107			143	204	33.38	250
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	0.97±0.07			14.95±1.29			298±9.3	267±12.6	17.67±1.38	313±8.6
C031	Radish leaves (<i>Raphanus sativus</i>)	6				45.49±4.42			203±10.7	147±6.9	26.93±1.99	248±13.5
C032	Rumex leaves (<i>Rumex patientia</i>)	2				45.68			143	60.92	18.68	188
C033	Spinach (<i>Spinacia oleracea</i>)	6	1.19±0.12			75.06±4.22			220±8.3	183±8.1	42.83±2.54	295±12.2
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3				76.79±1.82			230±3.5	176±3.1	42.30±2.81	306±1.9

898

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6				74.89±5.14			1.58±0.24	25.26±1.06	7.43±0.40	76.47±5.06
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1				42.23			9.24	41.09	7.45	51.46
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5				203±2.3			227±1.5	266±6.1	46.81±1.57	429±3.7
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6		2.50±0.38	17.74±1.99				23.04±1.87	144±8.3	8.08±0.53	40.78±3.79
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4		1.29±0.14	17.50±0.86				37.70±1.93	139±4.0	7.61±0.46	55.20±2.65
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1		1.68	22.75				36.50	142	6.63	59.25
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6				40.31±3.41			24.63±2.30	41.44±3.93	3.54±0.58	64.94±5.35

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			← mg →										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5			1.30±0.32	30.78±1.18	4.54±0.26	0.71±0.12	2.13±0.19	1.61±0.05			3.47±0.54
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1			2.25	30.94	5.22	0.57	1.83	1.22		6.12	2.93
D010	Brinjal-1 (<i>Solanum melongena</i>)	1				50.39	34.59	5.96	1.90	1.69			27.94
D011	Brinjal-2 (<i>Solanum melongena</i>)	1				43.46	34.71	6.53	1.93	1.49			16.80
D012	Brinjal-3 (<i>Solanum melongena</i>)	2				39.19	25.72	4.67	1.41	1.35			21.05
D013	Brinjal-4 (<i>Solanum melongena</i>)	4				36.90±3.89	22.79±2.22	4.34±0.60	1.60±0.40	1.27±0.21			25.20±3.49
D014	Brinjal-5 (<i>Solanum melongena</i>)	3				35.38±10.09	25.00±9.38	5.27±2.03	1.82±0.78	1.77±1.06			18.56±2.24
D015	Brinjal-6 (<i>Solanum melongena</i>)	2				38.35	24.82	4.81	1.68	1.33			16.94
D016	Brinjal-7 (<i>Solanum melongena</i>)	1				41.45	22.97	4.46	1.30	1.54			22.92
D017	Brinjal-8 (<i>Solanum melongena</i>)	3				35.37±3.38	24.72±5.85	4.66±2.18	1.92±0.16	1.50±0.11			25.32±4.52
D018	Brinjal-9 (<i>Solanum melongena</i>)	2				42.11	29.38	5.86	1.55	1.59			25.08
D019	Brinjal-10 (<i>Solanum melongena</i>)	2				34.80	24.25	4.35	1.37	1.23			21.91
D020	Brinjal-11 (<i>Solanum melongena</i>)	6				35.70±7.89	24.58±6.59	4.79±1.63	1.61±0.47	1.47±0.50			21.59±5.15
D021	Brinjal-12 (<i>Solanum melongena</i>)	2				35.21	25.17	5.17	1.57	1.41			17.14
D022	Brinjal-13 (<i>Solanum melongena</i>)	1				40.89	33.26	5.71	1.49	1.61			15.45
D023	Brinjal-14 (<i>Solanum melongena</i>)	3				31.02±14.22	21.11±11.42	4.42±2.22	1.38±0.75	1.22±0.66			16.76±7.52
D024	Brinjal-15 (<i>Solanum melongena</i>)	4				36.27±6.79	23.11±4.70	4.37±0.45	1.69±0.44	1.64±0.55			24.66±5.89
D025	Brinjal-16 (<i>Solanum melongena</i>)	1				44.99	29.80	5.53	1.51	1.82			21.95
D026	Brinjal-17 (<i>Solanum melongena</i>)	1				45.54	26.97	5.06	1.96	1.60			28.21
D027	Brinjal-18 (<i>Solanum melongena</i>)	3				35.91±17.94	25.50±11.77	4.58±2.43	1.86±0.93	1.32±0.54			20.71±11.35

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5				40.53±3.68		22.12±2.98	0.82±0.07	41.07±1.27	3.47±0.54	63.46±6.66
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1				32.96		19.35	0.61	42.04	9.05	52.92
D010	Brinjal-1 (<i>Solanum melongena</i>)	1				171		38.73		94.53	27.94	210
D011	Brinjal-2 (<i>Solanum melongena</i>)	1				132		35.10		88.11	16.80	167
D012	Brinjal-3 (<i>Solanum melongena</i>)	2				143		27.38		72.34	21.05	171
D013	Brinjal-4 (<i>Solanum melongena</i>)	4				137±18.0		21.11±2.58		66.91±6.06	25.20±3.49	158±20.4
D014	Brinjal-5 (<i>Solanum melongena</i>)	3				121±20.0		26.20±10.62		69.24±23.29	18.56±2.24	147±29.2
D015	Brinjal-6 (<i>Solanum melongena</i>)	2				117		27.38		70.99	16.94	144
D016	Brinjal-7 (<i>Solanum melongena</i>)	1				136		17.62		71.72	22.92	153
D017	Brinjal-8 (<i>Solanum melongena</i>)	3				135±8.9		23.15±3.45		68.17±11.36	25.32±4.52	159±12.4
D018	Brinjal-9 (<i>Solanum melongena</i>)	2				147		23.60		80.49	25.08	170
D019	Brinjal-10 (<i>Solanum melongena</i>)	2				117		15.18		66.00	21.91	132
D020	Brinjal-11 (<i>Solanum melongena</i>)	6				119±23.6		20.90±6.40		68.14±16.35	21.59±5.15	140±28.6
D021	Brinjal-12 (<i>Solanum melongena</i>)	2				111		19.12		68.52	17.14	130
D022	Brinjal-13 (<i>Solanum melongena</i>)	1				126		23.51		82.96	15.45	150
D023	Brinjal-14 (<i>Solanum melongena</i>)	3				108±46.4		17.49±8.73		59.14±29.12	16.76±7.52	125±54.9
D024	Brinjal-15 (<i>Solanum melongena</i>)	4				131±12.0		19.20±4.01		67.08±12.14	24.66±5.89	150±10.2
D025	Brinjal-16 (<i>Solanum melongena</i>)	1				143		23.91		83.65	21.95	166
D026	Brinjal-17 (<i>Solanum melongena</i>)	1				150		28.31		81.14	28.21	179
D027	Brinjal-18 (<i>Solanum melongena</i>)	3				111±53.2		21.75±12.21		69.18±33.52	20.71±11.35	133±64.5

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			← mg →											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
D028	Brinjal-19 (<i>Solanum melongena</i>)	3				31.52±12.01	20.62±10.06	4.32±2.05	1.56±0.72	1.25±0.38			18.19±9.02	
D029	Brinjal-20 (<i>Solanum melongena</i>)	5				41.95±4.84	28.44±3.75	5.61±1.03	2.03±0.47	1.89±0.42			20.28±4.11	
D030	Brinjal-21 (<i>Solanum melongena</i>)	2				45.29	32.46	6.04	2.29	2.20			25.84	
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6				37.54±8.01	25.49±6.41	4.92±1.34	1.69±0.49	1.52±0.49			21.45±5.45	
D032	Broad beans (<i>Vicia faba</i>)	3			0.45±0.06	31.80±3.07	6.55±0.08	1.10±0.10	1.29±0.21	1.42±0.20		0.69±0.07	7.85±1.02	
D033	Capsicum, green (<i>Capsicum annuum</i>)	6			1.80±0.10	48.13±3.56	20.10±1.90	2.95±0.21	2.29±0.08	1.76±0.21		1.42±0.23	11.29±1.34	
D034	Capsicum, red (<i>Capsicum annuum</i>)	4			4.83±0.34	54.51±1.15	20.15±0.40	1.01±0.06	2.44±0.31	3.45±0.34		4.14±0.17	43.51±0.52	
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4			4.03±0.05	65.88±1.32	25.21±0.80	1.68±0.10	2.66±0.18	2.84±0.22		4.11±0.30	51.44±1.22	
D036	Cauliflower (<i>Brassica oleracea</i>)	6			1.73±0.20	88.50±5.84	15.93±1.08	4.27±0.30	2.09±0.22	4.35±0.81			24.83±1.38	
D037	Celery stalk (<i>Apium graveolens</i>)	3				56.15±7.07	6.61±0.74						5.94±0.81	
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4				64±3.49	7.86±0.96	1.30±0.05	1.90±0.18	1.19±0.04			13.30±1.26	
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6				64.93±3.40	21.69±0.93	8.46±0.47	6.62±0.79	5.24±0.49			30.24±1.96	
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1				85.69	8.24	2.10	3.98	2.93		1.86	13.12	
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5				53.81±5.81	7.73±0.93	1.42±0.21	2.51±0.42	2.06±0.41		1.42±0.16	6.37±1.14	
D042	Corn, baby (<i>Zea mays</i>)	6				180±0.6	31.08±0.93						384±2.2	
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6			0.86±0.14	50.34±6.34	8.87±0.99	0.94±0.15	1.05±0.22	2.11±0.56		1.98±0.29	8.58±1.17	
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6			1.06±0.15	52.54±6.03	8.80±0.93	1.29±0.12	1.97±0.66	2.11±0.40		1.16±0.36	7.24±0.92	
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2			1.06	55.72	9.31	1.30	2.45	2.06		1.98	5.42	
D046	Drumstick (<i>Moringa oleifera</i>)	6			0.52±0.06	19.22±1.11	3.89±0.26	1.47±0.09	2.53±0.11	1.42±0.15		1.36±0.08	45.05±3.01	
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2			3.96	131	28.05	4.46	6.20	8.04			33.91	

Table 7. Fatty Acid Profile

202

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			← mg →									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
D028	Brinjal-19 (<i>Solanum melongena</i>)	3				107±48.3		16.89±7.99		59.27±25.07	18.19±9.02	124±56.3
D029	Brinjal-20 (<i>Solanum melongena</i>)	5				140±15.9		26.55±5.05		79.91±9.82	20.28±4.11	167±14.8
D030	Brinjal-21 (<i>Solanum melongena</i>)	2				140		30.14		88.28	25.84	170
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6				127±25.2		22.65±7.19		71.15±16.08	21.45±5.45	149±30.4
D032	Broad beans (<i>Vicia faba</i>)	3				42.97±0.63		21.88±2.24		42.62±3.73	8.53±0.94	64.85±2.87
D033	Capsicum, green (<i>Capsicum annuum</i>)	6				135±11.8		37.08±5.46		77.03±4.78	12.71±1.50	172±15.8
D034	Capsicum, red (<i>Capsicum annuum</i>)	4				180±1.0		37.77±0.56		86.39±1.81	47.65±0.52	217±1.2
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4				161±1.3		39.49±0.73		102±2.2	55.55±1.49	201±1.3
D036	Cauliflower (<i>Brassica oleracea</i>)	6				99±9.9		117±8.7		117±7.8	24.83±1.38	216±14.6
D037	Celery stalk (<i>Apium graveolens</i>)	3				99±13.1		32.33±2.43		62.76±7.71	5.94±0.81	131±15.5
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4				12.60±1.51		9.98±0.81		76.12±4.59	13.30±1.26	22.58±2.22
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6				84.74±4.28		63.40±4.85		107±5.1	30.24±1.96	148±7.0
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1				113		41.36		103	14.98	154
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5				82.53±6.81		27.75±3.65		67.53±6.04	7.78±1.21	110±10.4
D042	Corn, baby (<i>Zea mays</i>)	6	7.48±0.40			433±2.0		25.69±1.05		211±1.3	392±2.5	459±2.0
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6				59.30±7.23		8.63±1.02		64.17±7.74	10.57±1.32	67.93±8.19
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6				35.73±3.80		16.10±1.90		67.77±7.52	8.40±1.02	51.83±5.32
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2				45.94		22.76		71.90	7.41	68.70
D046	Drumstick (<i>Moringa oleifera</i>)	6				19.14±1.29		8.07±1.01		29.05±1.51	46.40±2.95	27.21±2.16
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2				204		96.74		182	33.91	301

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			← mg →											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6			3.04±0.79	128±6.4	27.08±1.03	4.20±0.47	5.62±0.77	6.75±0.69			26.28±1.87	
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5			1.42±0.38	49.22±2.45	12.87±1.42	2.31±0.34	2.35±0.45	2.89±0.37		2.53±1.91	8.60±0.97	
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2			1.06	50.38	11.55	1.90	1.90			1.98	9.88	
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5			0.65±0.05	35.32±1.18	3.64±0.11	3.58±0.05	1.72±0.21	2.46±0.17		0.63±0.02	21.79±1.05	
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5				123±5.6	7.49±0.48	5.48±0.31	7.44±0.84	2.81±0.26			13.52±0.79	
D053	Knol - Khol (<i>Brassica oleracea</i>)	6				77.30±2.05	11.42±0.29	3.39±0.42	2.29±0.31	3.01±0.18		4.34±0.18	27.29±0.54	
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6			3.02±0.11	46.28±3.04	12.52±0.46	2.03±0.20	3.03±0.37	1.95±0.14		0.98±0.47	3.37±0.51	
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1			2.82	55.20	10.68	2.49	1.91	2.22		0.55	3.97	
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6			1.50±0.23	54.61±5.12	5.67±0.62	1.71±0.12	3.36±0.36	2.51±0.30		0.88±0.46	7.22±1.58	
D057	Mango, green, raw (<i>Mangifera indica</i>)	6			0.67±0.18	23.36±2.23	1.30±0.19	0.55±0.10	0.55±0.07	0.86±0.09		2.10±0.29	7.15±1.16	
D058	Onion, stalk (<i>Allium cepa</i>)	6			8.04±0.17	65.71±1.11	5.74±0.40		6.75±0.30	5.84±0.10			5.52±0.10	
D059	Papaya, raw (<i>Carica papaya</i>)	6			1.35±0.34	52.81±6.87	7.78±1.60		3.25±0.42	3.97±0.78			44.53±4.38	
D060	Parwar (<i>Trichosanthes dioica</i>)	6			2.96±0.28	72.84±3.17	14.99±1.86	2.26±0.16	1.43±0.07	1.45±0.19			13.19±0.91	
D061	Peas, fresh (<i>Pisum sativum</i>)	6				15.88±1.57	3.13±0.18						28.75±1.96	
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6			1.87±0.19	125±2.5	48.84±1.97	51.97±3.65	23.15±2.36	22.09±1.49		1.85±0.14	29.84±1.68	
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6				53.89±2.49	3.25±0.36						16.21±0.79	
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6				19.55±2.65	3.60±0.48	1.07±0.10	1.25±0.10	1.99±0.30		0.65±0.17	2.06±0.16	
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1			1.10	41.66	7.66	0.81	0.96	1.12		1.17	23.99	
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6			0.91±0.16	34.87±3.37	6.35±0.36	0.68±0.07	0.81±0.09	0.96±0.15		0.98±0.09	21.04±2.02	
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1				181	30.02						51.13	

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			← mg →									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6				195±9.5		86.04±6.95		175±7.1	26.28±1.87	281±13.8
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5				59.21±3.46		68.19±5.62		71.07±3.81	11.13±2.53	127±8.3
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2				62.83		72.13		66.80	11.85	135
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	9.38±0.34	79.52±1.02	3.94±0.23	68.67±1.56		38.57±1.44		47.36±1.50	115±2.3	107±2.9
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5		2.70±0.38		154±4.2		26.51±1.81		146±5.3	16.21±0.73	181±5.3
D053	Knol - Khol (<i>Brassica oleracea</i>)	6				59.04±0.71		71.39±2.18		97.40±2.23	31.62±0.54	130±2.3
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6				59.07±2.97		39.75±2.95		68.84±3.84	4.35±0.31	98.82±5.84
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1				83.07		29.10		75.33	4.51	112
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6				76.82±4.93		32.38±2.11		69.37±6.10	8.10±1.70	109±6.6
D057	Mango, green, raw (<i>Mangifera indica</i>)	6				17.53±1.91		12.61±2.16		27.28±2.69	9.25±1.40	30.13±3.60
D058	Onion, stalk (<i>Allium cepa</i>)	6				55.43±1.02		43.55±0.58		92.08±1.66	5.52±0.10	98.98±1.33
D059	Papaya, raw (<i>Carica papaya</i>)	6				66.04±7.94		9.60±1.94		69.15±9.33	44.53±4.38	75.64±9.60
D060	Parwar (<i>Trichosanthes dioica</i>)	6				91.87±4.02		20.35±1.26		95.93±2.64	13.19±0.91	112±5.0
D061	Peas, fresh (<i>Pisum sativum</i>)	6				46.75±3.62		9.49±0.59		19.01±1.69	28.75±1.96	56.24±4.15
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6				154±7.7		44.08±3.08		273±7.3	31.69±1.78	198±8.0
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6				72.89±2.96		33.77±2.31		57.13±2.83	16.21±0.79	107±4.7
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6				14.12±1.59		14.38±1.65		27.45±3.37	2.71±0.25	28.50±3.18
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1				38.94		26.57		53.32	25.17	65.51
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6				36.17±2.35		26.57±3.25		44.58±3.91	22.02±2.07	62.73±5.33
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1				427		47.24		211	51.13	474

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
D068	Ridge gourd (<i>Luffa acutangula</i>)	6			0.83±0.17	42.19±2.81	6.33±0.68	1.22±0.16	1.56±0.18	2.37±0.15		0.82±0.11	1.75±0.12
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3			0.77±0.07	30.64±2.57	6.72±0.51	1.21±0.10	1.94±0.14	1.81±0.11		0.87±0.13	2.08±0.31
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6				72.23±2.64	11.64±1.09	3.77±0.23	4.33±0.38	2.94±0.16			4.89±0.85
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2				72.09	11.77	4.36	4.87	2.78			4.77
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1				76.61	10.02	3.87	5.04	4.41			2.96
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6			1.59±0.16	36.25±2.47	7.41±1.55	0.93±0.14	1.41±0.22	1.60±0.08		0.90±0.17	5.75±1.20
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6				33.68±0.98	10.37±0.70	1.36±0.08	0.72±0.01	0.77±0.03		0.64±0.02	35.51±1.06
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6				35.23±2.83	9.50±0.96	1.27±0.10	0.86±0.05	0.79±0.15		0.64±0.10	29.25±3.48
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6				58.47±2.78	16.77±1.47	1.94±0.13	1.23±0.11	1.17±0.14		1.22±0.15	56.55±6.33
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2		3.29		98.79	16.94					2.88	36.38
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2		1.51		49.25	6.08					1.45	19.87

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6		103±1.8	39.27±0.63	11.40±0.55							51.13±0.74
E002	Apple, green (<i>Malus domestica</i>)	6		77.85±0.61	28.51±1.14	9.74±0.36							40.99±0.84
E003	Apple, small (<i>Malus domestica</i>)	6		90.18±6.12	33.40±1.55	10.58±0.96	8.68±1.10	6.23±0.63					46.96±6.37
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1		105	40.72	12.27	10.36	7.98					50.63
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6		168±5.3	32.58±3.32								118±3.4
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3		155±5.9	30.05±2.29								23.33±3.37
E007	Avocado fruit (<i>Persea sp.</i>)	1		1237							495	8215	

Table 7. Fatty Acid Profile

206

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated	Total Mono	Total Poly
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	Fatty Acids	Fatty Acids	Fatty Acids
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
D068	Ridge gourd (<i>Luffa acutangula</i>)	6				28.66±1.37				54.49±3.62	2.57±0.22	55.08±2.08
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3				29.79±2.44				43.07±3.45	2.95±0.44	57.98±4.32
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6				42.96±3.58				94.90±3.25	4.89±0.85	97.54±6.66
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2				45.65				95.87	4.77	99.36
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1				34.56				100	2.96	105
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6				46.46±5.00				48.97±5.84	6.28±1.61	76.11±9.46
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6			0.77±0.16	95.45±3.03				46.91±0.99	36.91±1.04	109±2.6
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6			0.62±0.10	104±12.8				47.65±3.66	30.50±3.59	119±13.4
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6			0.89±0.23	185±12.9				79.56±4.04	58.66±6.57	208±13.4
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2				98.72				119	37.83	251
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2				43.00				56.92	21.32	114

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6			249±0.8					154±2.0	51.13±0.74	282±0.5
E002	Apple, green (<i>Malus domestica</i>)	6			173±1.0					116±1.5	40.99±0.84	223±1.1
E003	Apple, small (<i>Malus domestica</i>)	6			195±18.4					149±9.0	46.96±6.37	224±20.0
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1			211					176	50.63	253
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6			206±9.6					200±5.6	118±3.4	286±9.3
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3			165±8.6					185±7.7	23.33±3.37	319±6.7
E007	Avocado fruit (<i>Persea sp.</i>)	1			1078					1237	8710	1141

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
E008	Bael fruit (<i>Aegle marmelos</i>)	1	0.45	2.81	3.38	103	18.55	1.58	0.93		4.17	107	
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1				103	6.80				5.65	8.73	
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2				105	8.02				3.83	28.45	
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1				96.58	9.74				6.45	11.32	
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6				106±3.6	8.15±1.46				6.61±0.44	14.28±1.77	
E013	Black berry (<i>Rubus sp.</i>)	5			5.89±0.46	134±0.9	30.33±1.74	7.71±1.33	5.86±0.92	11.65±1.36	6.15±0.53	81.56±4.26	
E014	Cherries, red (<i>Prunus cerasus</i>)	4				83.81±5.30	33.98±1.52	6.81±0.69				95.85±2.36	
207	Currants, black (<i>Ribes nigrum</i>)	1				51.94	24.41		2.05	4.93		298	
	Custard apple (<i>Annona squamosa</i>)	1				90.45	30.45	5.67	3.87	7.56		4.89	34.85
	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6				78.83±3.65	18.20±1.50						30.43±3.94
	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2				91.15	22.69						21.00
	Dates, processed (<i>Phoenix dactylifera</i>)	2				115	34.16						46.88
	Fig (<i>Ficus carica</i>)	6				71.61±0.74	7.19±0.20	8.46±0.13	3.48±0.13	2.26±0.17			41.38±1.12
	Gooseberry (<i>Emblica officinalis</i>)	5				26.48±3.16	11.99±0.26						23.93±1.89
	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4				72.49±3.32	15.26±1.74	4.45±0.15	8.15±1.27	5.60±1.35			12.73±2.37
	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5				62.35±3.72	12.95±0.85	3.74±0.25	7.38±0.66	6.01±0.50			11.10±1.44
	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5				66.06±1.13	14.28±0.24	3.79±0.22	6.27±0.91	4.77±0.20			12.18±0.22
	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5				31.45±3.84	9.99±0.89	1.96±0.63	2.21±0.65				33.96±0.80
	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5				63.79±2.99	15.71±1.40	3.61±1.46	3.99±0.57				9.33±1.22

Table 7. Fatty Acid Profile

208

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
E008	Bael fruit (<i>Aegle marmelos</i>)	1				87.01		66.18		190	112	154
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1				68.33		63.24		110	14.38	132
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2				65.50		69.67		113	32.29	135
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1				61.66		46.23		106	17.78	108
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6				53.50±2.61		73.44±1.80		114±4.4	20.89±1.70	127±2.8
E013	Black berry (<i>Rubus sp.</i>)	5				153±1.9		80.24±2.19		195±5.6	87.71±4.44	234±1.7
E014	Cherries, red (<i>Prunus cerasus</i>)	4				116±4.3		71.55±3.27		125±5.9	95.85±2.36	187±4.2
E015	Currants, black (<i>Ribes nigrum</i>)	1	3.22			30.58		8.47		83.33	302	39.06
E016	Custard apple (<i>Annona squamosa</i>)	1				78.56		53.47		138	39.74	132
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6				140±8.4		19.49±1.13		97.03±4.87	30.43±3.94	159±9.4
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2				129		16.35		114	21.00	145
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2				124		11.63		149	46.88	136
E020	Fig (<i>Ficus carica</i>)	6				50.57±0.50		46.52±0.54		89.44±9.07	41.38±1.12	97.09±0.80
E021	Gooseberry (<i>Emblica officinalis</i>)	5				47.41±2.23		27.83±2.51		38.48±3.26	23.93±1.89	75.24±4.62
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4				94.88±6.61		44.44±2.81		106±6.7	12.73±2.37	139±8.6
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5				82.21±4.28		36.68±2.24		92.42±3.73	11.10±1.44	119±6.3
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5				83.32±0.24		39.64±1.05		92.04±4.41	12.18±0.22	123±1.0
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5				172±1.3		11.29±1.01		45.63±5.51	33.96±0.80	183±1.9
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5				80.70±1.11		32.12±0.79		87.11±4.50	9.33±1.22	113±1.8

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5				86.20±0.29	17.98±0.07	6.88±0.20	9.73±0.24	8.05±0.16			12.97±0.07
E028	Guava, white flesh (<i>Psidium guajava</i>)	5			0.70±0.07	28.95±2.42	16.48±1.53	1.97±0.30	0.55±0.06	0.65±0.06			35.08±3.38
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5				17.96±2.31	9.22±0.63						13.97±2.14
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5				30.69±2.30	1.70±0.26	1.77±0.17	2.35±0.35	1.15±0.13		0.75±0.13	9.34±1.06
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2				43.42	19.46	3.62				3.17	17.56
E032	Karonda fruit (<i>Carissa carandas</i>)	1				42.89	20.47	3.45				3.64	20.48
E033	Lemon, juice (<i>Citrus limon</i>)	6				147±5.2	27.67±1.91		27.55±4.69				47.40±6.45
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6				65.42±3.97	10.98±0.66					8.30±0.93	26.88±1.81
E035	Litchi (<i>Litchi chinensis</i>)	4				68.53±3.97	14.13±0.14		2.64±0.41	6.19±0.77		4.04±0.37	41.60±3.12
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6			7.01±1.49	150±6.1	7.12±0.55		1.90±0.23	3.96±0.64		52.48±6.23	81.18±8.57
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	2.33	16.50	147	8.20	1.71	1.59	3.26			55.42	89.08
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3		5.81±0.78	154±2.7	6.63±0.30		2.01±0.13	4.99±0.27			60.51±0.90	73.42±3.26
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4		5.71±0.83	152±8.6	7.36±0.43		2.06±0.18	5.15±0.45			63.91±2.81	105±6.5
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	3.08	17.21	141	6.64	2.44	1.87	5.59			56.63	89.89
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	2.33	34.58	137	6.26	1.33	1.32	3.27			69.02	122.79
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	2.43	21.79	136	7.56	1.44	1.53	3.96			70.57	97.56
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	2.54	22.48	135	7.85	1.58	2.01	4.12			69.87	95.47
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1			20.98	3.54	0.97	1.07	1.25				33.45
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5			76.84±3.38	16.10±1.58						7.32±0.96	17.86±1.61
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6			62.61±3.89	16.39±1.48						5.75±0.28	15.37±1.64

200

Table 7. Fatty Acid Profile

Table 7. Fatty Acid Profile

210

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			← mg →									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5				109±0.4		52.81±0.21		129±0.4	12.97±0.07	162±0.6
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	0.64±0.08			165±13.4		11.08±1.05		49.30±3.97	35.72±3.43	176±14.4
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5				84.36±6.35		7.29±0.56		27.18±2.05	13.97±2.14	91.65±6.38
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	3.86±0.60	28.77±3.05	1.56±0.24	22.63±2.96		15.44±1.58		37.66±2.83	44.27±4.43	38.07±4.41
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2				42.40		6.37		66.49	20.73	48.77
E032	Karonda fruit (<i>Carissa carandas</i>)	1				45.12		7.48		66.81	24.12	52.60
E033	Lemon, juice (<i>Citrus limon</i>)	6				270±9.5		83.53±3.97		202±7.3	47.40±6.45	353±13.4
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6				67.81±3.12		16.60±1.75		76.40±4.34	35.18±2.49	84.41±4.19
E035	Litchi (<i>Litchi chinensis</i>)	4				51.98±4.49		26.91±1.89		91.48±4.93	45.63±3.45	78.89±6.36
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6				30.72±2.87		101±5.5		170±6.6	134±10.3	132±7.5
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2				27.91		71.39		180	145	99.30
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3				16.00±1.74		111±9.1		174±3.3	134±4.2	127±10.2
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4				24.29±1.83		90.87±8.77		172±8.1	169±9.2	115±10.4
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2				16.56		98.95		178	147	116
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2				20.40		65.92		186	192	86.32
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1				18.64		70.06		175	168	88.71
E043	Mangosteen (<i>Garcinia mangostana</i>)	1				20.48		68.12		176	165	88.60
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1				6.01		13.48		27.81	33.45	19.49
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5				97.34±6.29		61.33±2.46		92.94±4.13	25.18±2.14	159±7.2
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6				72.56±4.65		41.54±2.55		79.00±5.34	21.12±1.78	114±7.1

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
E047	Orange, pulp (<i>Citrus aurantium</i>)	6				29.46±4.92	7.66±1.10				4.27±0.79	14.99±1.78	
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1			2.45	22.45	8.46				5.47	32.85	
E049	Papaya, ripe (<i>Carica papaya</i>)	6			5.52±0.62	45.26±4.02	5.30±0.61				9.53±0.95	16.83±1.70	
E050	Peach (<i>Prunus communis</i>)	1			0.32	17.24	5.98	0.03			0.03	1.32	207
E051	Pear (<i>Pyrus</i> sp.)	6				47.91±5.65	15.80±2.38	4.52±0.59	4.73±0.98	2.98±0.55			24.26±3.22
E052	Phalsa (<i>Grewia asiatica</i>)	2			2.18	107	45.72	4.21	3.06	2.17	5.70	162	
E053	Pineapple (<i>Ananas comosus</i>)	6				42.57±5.87	8.52±1.57						31.15±4.54
E054	Plum (<i>Prunus domestica</i>)	3				16.00±0.07	4.05±0.11				4.09±0.22	166±0.5	
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	1.14±0.18	0.48±0.12	22.64±3.44	13.25±2.35	2.90±0.56	1.33±0.26	0.77±0.21				35.30±4.74
E056	Pummelo (<i>Citrus maxima</i>)	3				88.03±0.05	19.32±0.32		3.66±0.20	4.27±0.30	8.70±0.34	32.30±0.31	
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6				46.97±2.24	15.49±0.72						46.53±3.32
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6				95.25±7.47	25.94±2.83						32.64±1.74
E059	Rambutan (<i>Nephelium lappaceum</i>)	1				120	24.12				14.25	145	
E060	Sapota (<i>Achras sapota</i>)	6				343±5.4	45.33±3.97				35.05±4.86	220±9.8	
E061	Soursop (<i>Annona muricata</i>)	1				89	28.84	4.98	4.01	7.98	4.56	33.98	
E062	Star fruit (<i>Averrhoa carambola</i>)	1				10.23	10.54				3.50	30.12	
E063	Strawberry (<i>Fragaria x ananassa</i>)	6				50.68±4.43	10.62±0.38	3.81±0.56	1.11±0.11				77.87±0.85
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6				20.58±0.51	3.14±0.38	1.02±0.05	1.05±0.05	1.46±0.25			34.89±0.45
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6				32.40±2.17	7.31±0.63						24.84±1.71
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6				42.94±2.12	7.39±0.99						10.96±0.61

Table 7. Fatty Acid Profile

212

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
E047	Orange, pulp (<i>Citrus aurantium</i>)	6				36.52±6.20		11.11±1.73		37.11±5.94	19.26±2.41	47.63±7.82
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1				50.64		25.78		33.36	38.32	76.42
E049	Papaya, ripe (<i>Carica papaya</i>)	6				10.33±0.91		37.91±3.34		56.08±5.03	26.35±2.27	48.24±3.59
E050	Peach (<i>Prunus communis</i>)	1	0.30			62.16		0.44		23.90	209	62.61
E051	Pear (<i>Prunus persica</i>)	6				84.54±10.16		16.58±2.38		75.94±8.40	24.26±3.22	101±12.4
E052	Phalsa (<i>Grewia asiatica</i>)	2				362		18.66		164	167	381
E053	Pineapple (<i>Ananas comosus</i>)	6				17.75±2.51		30.00±3.84		51.09±7.38	31.15±4.54	47.76±6.32
E054	Plum (<i>Prunus sp</i>)	3				59.08±1.47				20.05±0.03	170±0.3	59.08±1.47
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	3.22±0.74			39.16±5.95		1.82±0.52		42.50±6.80	38.51±5.16	40.99±5.90
E056	Pummelo (<i>Citrus maxima</i>)	3				134±0.6		53.21±0.30		115±0.2	41.00±0.09	187±0.3
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6				147±10.0		11.91±1.51		62.47±2.78	46.53±3.32	159±10.7
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6				93.96±5.67		30.87±2.60		121±9.7	32.64±1.74	125±8.2
E059	Rambutan (<i>Nephelium lappaceum</i>)	1				160		202		144	160	362
E060	Sapota (<i>Achras sapota</i>)	6				233±6.8		125±4.4		389±6.0	255±6.4	358±10.6
E061	Soursop (<i>Annona muricata</i>)	1				77.98		54.02		135	38.54	132
E062	Star fruit (<i>Averrhoa carambola</i>)	1				151		39.90		20.77	33.62	191
E063	Strawberry (<i>Fragaria x ananassa</i>)	6				179±0.9		112±6.1		66.21±4.91	77.87±0.85	291±6.2
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6				4.99±0.72		12.86±0.91		27.26±0.67	34.89±0.45	17.85±0.38
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6				51.90±3.73		15.55±0.97		39.70±2.75	24.84±1.71	67.46±4.22
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6				54.86±2.89		10.52±1.13		50.33±2.79	10.96±0.61	65.38±3.29

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
E067	Wood Apple (<i>Limonia acidissima</i>)	3				657±19	162±14.0	28.01±4.59	16.23±2.07	12.98±0.13		35.39±5.97	559±19.0
E068	Zizyphus (<i>Zizyphus jujube</i>)	1		1.92	5.34	85.73	17.22	3.14	1.95	3.65		13.76	110

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6			27.82±2.97	1.57±0.14		0.70±0.09	1.08±0.16			21.96±2.57
F002	Carrot, orange (<i>Ducus carota</i>)	6			72.82±2.63	6.87±0.57	3.03±0.42	2.91±0.40	2.08±0.44			21.01±1.26
F003	Carrot, red (<i>Daucus carota</i>)	4			70.77±1.63	8.40±0.40	3.94±0.11	3.41±0.31	2.67±0.20			18.27±0.53
F004	Colocasia (<i>Colocasia esculenta</i>)	6			38.35±2.80	3.49±0.43						22.92±1.60
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3			215±16.5	33.32±6.83						84.12±3.38
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6			36.34±1.32	7.21±0.68					9.75±1.66	4.06±0.33
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1			36.29	7.74					4.57	7.37
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1			32.95	6.92					12.38	2.53
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3			33.13±2.78	5.52±0.77	1.31±0.21	1.35±0.07	1.35±0.27		1.11±0.15	6.17±0.65
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6			34.72±2.68	5.15±0.83	1.39±0.34	1.25±0.31	1.38±0.18		1.20±0.18	7.94±0.71
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1			37.24	4.69	0.97	1.26	1.93		1.25	4.82
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2			34.12	3.97	0.86	0.84	1.36		1.17	11.47
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	7.39±0.73		48.29±2.45	10.42±1.43						4.10±0.60
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	11.17±0.84		72.86±4.19	17.06±1.03						9.35±1.72
F015	Tapioca (<i>Manihot esculenta</i>)	3	3.59±0.06		42.10±2.24	13.82±0.38						9.20±0.72
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	0.29	1.82	65.00	14.52	2.68	1.55	1.56		0.88	100

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
E067	Wood Apple (<i>Limonia acidissima</i>)	3				799±19.0		636±46.2		877±4.3	595±24.7	1435±27.7
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	2.33			27.18		8.07		119	126	35.25

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6			57.23±5.65		6.98±0.71		31.17±3.30	21.96±2.57	64.21±6.24
F002	Carrot, orange (<i>Ducus carota</i>)	6			241±10.5		24.38±1.90		87.71±3.56	21.01±1.26	266±12.0
F003	Carrot, red (<i>Daucus carota</i>)	4			246±0.3		24.10±0.25		88.91±1.03	18.27±0.53	270±0.3
F004	Colocasia (<i>Colocasia esculenta</i>)	6			69.01±5.43		8.40±0.39		41.84±2.89	22.92±1.60	77.41±5.53
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3			291±23.3		123±8.9		249±20.3	84.12±3.38	414±31.1
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6			97.45±6.16		31.84±2.68		43.56±1.88	13.82±1.65	129±8.2
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1			54.34		73.68		44.03	11.94	128
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1			92.44		28.78		39.87	14.91	121
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3			23.71±1.6		33.02±4.55		42.65±3.07	7.29±0.74	56.73±5.71
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6			21.64±2.09		32.00±1.60		43.88±3.78	9.14±0.86	53.64±3.41
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1			21.18		54.67		46.08	6.08	75.85
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2			15.71		46.49		41.15	12.64	62.20
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4			96.29±7.72		19.52±0.67		66.10±3.26	4.10±0.60	116±8.3
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3			154±7.2		25.92±2.35		101±4.4	9.35±1.72	180±6.1
F015	Tapioca (<i>Manihot esculenta</i>)	3			78.47±5.88		12.83±0.98		59.50±2.11	9.20±0.72	91.29±6.85
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	2.08	1.52	97.81		6.16		87.42	105	104

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6				31.01 \pm 3.20	4.72 \pm 0.52						6.75 \pm 0.92
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4				39.42 \pm 1.05	3.21 \pm 0.38						13.04 \pm 1.03
F019	Yam, wild (<i>Dioscorea villosa</i>)	2				67.83	11.68						22.66

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5		4.96 \pm 0.79	90.78 \pm 4.58	20.64 \pm 2.19	3.80 \pm 0.91	2.89 \pm 0.55	2.63 \pm 0.63		3.72 \pm 0.65	34.47 \pm 3.22
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3		6.20 \pm 1.91	91.42 \pm 7.84	21.54 \pm 4.36	4.16 \pm 0.97	4.08 \pm 0.53	3.96 \pm 0.67		4.85 \pm 0.79	28.54 \pm 2.23
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5		5.62 \pm 0.96	91.98 \pm 3.96	24.00 \pm 3.63	3.98 \pm 0.70	3.72 \pm 0.76	3.38 \pm 0.48		3.88 \pm 0.33	27.86 \pm 2.88
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3		6.02 \pm 1.15	92.27 \pm 4.73	29.74 \pm 3.89	6.91 \pm 0.73	6.21 \pm 0.97	6.75 \pm 1.48		5.19 \pm 0.87	24.06 \pm 3.21
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2		4.26 \pm 0.52	76.39 \pm 4.94	18.31 \pm 1.25	3.60 \pm 0.82	3.06 \pm 0.99	3.30 \pm 1.00		3.87 \pm 1.15	23.10 \pm 2.20
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1		8.14	80.61	18.97	4.87	4.50	4.16		4.67	22.90
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1		4.28	65.01	21.57	3.58	3.96	3.72		3.89	25.77
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6		5.58 \pm 1.41	88.25 \pm 8.70	22.68 \pm 4.67	4.43 \pm 1.35	4.00 \pm 1.27	3.94 \pm 1.53		4.32 \pm 0.88	27.88 \pm 4.64
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6		18.14 \pm 1.33	144 \pm 11.6	49.06 \pm 4.06	3.05 \pm 0.33	6.52 \pm 0.90	6.77 \pm 0.74			8.31 \pm 0.49
G010	Curry leaves (<i>Murraya koenigii</i>)	6			236 \pm 27.4	30.80 \pm 2.54						44.57 \pm 5.15
G011	Garlic, big clove (<i>Allium sativum</i>)	6			26.56 \pm 3.24	3.16 \pm 0.72	1.03 \pm 0.27	1.74 \pm 0.27	1.03 \pm 0.26			14.24 \pm 2.48
G012	Garlic, small clove (<i>Allium sativum</i>)	3			25.14 \pm 0.92	3.41 \pm 0.22	1.09 \pm 0.30	2.02 \pm 0.58	0.97 \pm 0.24			13.55 \pm 0.78
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1			28.56	2.19	1.36	1.35	1.31			10.83
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	24.21 \pm 3.10	11.05 \pm 1.24	176 \pm 6.2	19.86 \pm 1.24						67.97 \pm 8.76
G015	Mango ginger (<i>Curcuma amada</i>)	3			146 \pm 6.6	30.59 \pm 1.78						52.26 \pm 3.28

215

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	mg		
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6				57.08±7.02		16.44±2.18		35.72±3.38	6.75±0.92	73.52±8.96
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4				56.32±3.93		16.02±0.85		42.63±1.24	13.04±1.03	72.34±4.73
F019	Yam, wild (<i>Dioscorea villosa</i>)	2				111		30.93		79.51	22.66	142

216

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5			384±12.5		43.99±6.11		126±8.3	38.19±2.86	428±14.3
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3			391±19.6		41.73±4.99		131±14.9	33.39±2.72	433±24.1
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5			372±17.4		45.49±5.89		133±7.3	31.74±3.10	418±15.2
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3			364±7.9		47.37±0.69		148±5.9	29.25±2.42	412±7.8
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2			342±19.8		42.60±4.91		109±2.8	26.97±3.30	384±23.0
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1			329		34.57		121	27.57	363
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1			303		28.91		102	29.66	332
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6			370±26.7		43.14±5.96		129±14.9	32.20±4.48	413±29.5
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	0.75±0.12		151±10.6		169±20.1		228±16.0	9.06±0.59	320±29.4
G010	Curry leaves (<i>Murraya koenigii</i>)	6			152±19.6		417±39.3		267±29.4	44.57±5.15	569±58.4
G011	Garlic, big clove (<i>Allium sativum</i>)	6			60.62±7.90		6.28±0.63		33.52±4.39	14.24±2.48	66.90±8.48
G012	Garlic, small clove (<i>Allium sativum</i>)	3			56.95±3.67		4.86±0.88		32.63±2.10	13.55±0.78	61.82±4.48
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1			73.10		9.31		34.76	10.83	82.40
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6			302±14.0		78.99±9.71		231±7.4	67.97±8.76	381±16.4
G015	Mango ginger (<i>Curcuma amada</i>)	3			256±16.8		78.26±2.34		177±8.3	52.26±3.28	334±14.6

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
G016	Mint leaves (<i>Mentha spicata</i>)	4			2.18±0.18	105±8.6	17.59±1.10						13.23±1.01
G017	Onion, big (<i>Allium cepa</i>)	6				47.96±0.96	4.65±0.34		3.80±0.29	4.40±0.32			39.36±0.89
G018	Onion, small (<i>Allium cepa</i>)	5				32.07±2.47	4.08±0.41		2.50±0.21	2.37±0.42			15.83±1.73

G CONDIMENTS AND SPICES-DRY

G019	Asafoetida (<i>Ferula assa-foetida</i>)	6		5.04±0.97	191±4.3	45.89±3.99						5.91±0.71	236±7.9
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6			557±22.5	66.70±6.98						32.49±5.63	858±65.5
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4			430±6.3	62.50±0.85						39.53±0.59	1043±13.7
G022	Chillies, red (<i>Capsicum annum</i>)	6		60.26±6.53	890±41.5	141±5.1	21.09±0.77	15.91±0.82	13.52±0.83			22.41±1.65	646±66.3
G023	Cloves (<i>Syzygium aromaticum</i>)	6			2020±33.4	659±23.8							605±47.7
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6		54.98±10.72	631±20.6	141±5.8	31.53±4.31	56.26±5.65	36.98±3.68			27.35±3.65	10702±135
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6			500±12.4	98.2±3.04	20.46±1.89					35.01±0.95	8344±88.0
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6			501±12.2	188±5.3	50.12±2.25	18.60±1.44	11.78±1.27				663±24.1
G027	Mace (<i>Myristica fragrans</i>)	6		362±38	8120±304	767±200	54.30±13.98					404±35.2	8898±398
G028	Nutmeg (<i>Myristica fragrans</i>)	6	783±18.0		2372±102	204±32.7						47.77±9.28	1562±117
G029	Omum (<i>Trachyspermum ammi</i>)	6		16.93±2.62	895±10.9	177±10.0	23.26±0.90					26.83±0.98	13810±152
G030	Pippali (<i>Piper longum</i>)	6			436±11.7	165±10.0						38.18±1.88	289±15.1
G031	Pepper, black (<i>Piper nigrum</i>)	6			548±23.3	106±5.9							463±24.8
G032	Poppy seeds (<i>Papaver somniferum</i>)	6		10.16±0.81	1644±46.6	397±11.0	22.27±1.91					27.62±2.90	2311±106
G033	Turmeric powder (<i>Curcuma domestica</i>)	6			769±42.7	691±44.7	174±16.1						448±83.7

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	α -Linolenic (C18:3n3)	Arachidonic (C20:4n6)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			mg									
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
G016	Mint leaves (<i>Mentha spicata</i>)	4				65.09±4.74		286±20.5		125±9.7	13.23±1.01	352±25.2
G017	Onion, big (<i>Allium cepa</i>)	6				100±1.5		6.63±0.54		60.81±0.53	39.36±0.89	107±1.9
G018	Onion, small (<i>Allium cepa</i>)	5				66.60±4.12		4.55±0.46		41.01±2.60	15.83±1.73	71.16±4.41

218

G CONDIMENTS AND SPICES-DRY

G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	7.35±1.74		470±15.7		43.79±6.93		242±4.2	250±6.5	514±13.6
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6			411±9.4		172±7.3		624±24.3	891±68.8	583±16.1
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4			320±0.5		197±5.8		493±5.4	1083±14.3	517±5.6
G022	Chillies, red (<i>Capsicum annum</i>)	6	6.75±0.23		43.11±5.25	3081±111	182±14.3		1141±44.1	718±64.0	3263±101
G023	Cloves (<i>Syzygium aromaticum</i>)	6			2737±71.8		691±36.4		2679±52.7	605±47.7	3428±83.6
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	40.02±2.30		2203±60.9		44.01±5.39		952±10.1	10769±134	2247±62.1
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6			4269±48.2		44.00±3.65		619±16.3	8379±88.6	4313±47.1
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	12.15±1.86		2051±23.7		1082±13.6		770±17.5	675±23.4	3133±35.9
G027	Mace (<i>Myristica fragrans</i>)	6			4571±233		159±33.1		9304±214	9302±370	4731±260
G028	Nutmeg (<i>Myristica fragrans</i>)	6	26.66±2.85		299±21.9		79.30±7.33		3359±88.8	1637±107	379±25.5
G029	Omum (<i>Trachyspermum ammi</i>)	6	42.03±3.51		5116±127		76.71±4.77		1112±18.0	13879±152	5193±128
G030	Pippali (<i>Piper longum</i>)	6			587±10.8		299±9.3		602±9.7	327±15.5	885±10.9
G031	Pepper, black (<i>Piper nigrum</i>)	6			818±5.8		258±10.7		654±24.1	463±24.8	1076±15.2
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	14.09±1.15		13742±91.3		106±9.2		2074±56.7	2353±110	13847±94.7
G033	Turmeric powder (<i>Curcuma domestica</i>)	6			1563±22.9		377±44.9		1634±46.8	448±83.7	1940±32.3

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)
			mg										
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9
H NUTS AND OIL SEEDS													
H001	Almond (<i>Prunus amygdalus</i>)	6			30.36±3.96	3553±20.3	717±24.8	57.98±10.77			281±6.5	38012±162	
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6		524±17.5	1527±27.0	487±8.8	56.30±2.94	9.72±0.46				461±21.5	
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3		236±13.8	833±22.4	498±15.4	94.80±6.23	12.14±0.73				980±16.7	
H004	Arecanut, fresh (<i>Areca catechu</i>)	2		586	2093	628	68.65	13.31				582	
H005	Cashew nut (<i>Anacardium occidentale</i>)	6				4033±59	3447±89.3	233±5.2	47.13±1.73	56.25±3.84	163±7.9	27678±303	
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	2674±33.6	24525±379	10243±145	4322±185	1373±74.3	0.00±0.00	0.00±0.00	0.00±0.00		3710±133	
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	1699±59.3	15442±303	6736±195	3067±157	1043±166	32.77±8.25	10.93±1.65	17.37±2.38		2434±59.5	
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5			32.71±4.62	2190±36.2	730±21.6	800±24.0	219±12.4	130±7.6	55.48±2.08	5166±261	
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6				3735±151	2230±164	263±11.9	51.25±6.32	38.42±6.09	62.24±4.91	15475±432	
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4				3826±66.6	2090±46.5	251±3	47.61±8.43	35.87±1.72	56.96±2.60	15866±282	
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5				3883±17.2	2206±143	256±22.8	50.85±10.31	33.17±5.10	55.87±7.22	16001±330	
H012	Ground nut (<i>Arachis hypogea</i>)	6				4520±84.5	1303±96.2	598±66.3	1247±133	478±70	242±22.6	17719±562	
H013	Mustard seeds (<i>Brassica nigra</i>)	6				856±29.4	389.3±38	289±27.8	348±31.2	230±36	69.74±7.52	4012±549	
H014	Linseeds (<i>Linum usitatissimum</i>)	6				1503±68.1	1323±65.6	59.74±4.28	51.21±3.89	31.93±2.83	25.61±1.29	5049±303	
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4			100±2.0	4750±57.7	951±52.8	91.53±2.82	23.39±1.53	27.87±2.13	98.16±5.18	8813±417	
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5			136±28.3	6061±180	2651±104	250±25.2	386±147	253±17.2	131±19.7	4013±149	
H017	Pine seed (<i>Pinus sp.</i>)	5			19.65±1.31	2640±69.1	791±67.9	246±22.5	74.80±5.21	30.03±3.06	31.06±1.90	18261±172	
H018	Pistachio nuts (<i>Pistacia vera</i>)	6			39.96±3.16	3473±81.9	425±34.4	49.82±2.80	38.10±7.85	18.11±3.13	285±12.9	18478±209	
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5			28.06±1.91	1789±132	546±21.4	90.69±5.27	58.62±3.79	36.13±3.31	17.08±2.37	3487±27	
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5			47.49±10.65	3215±109	2166±179	175±7.7	411±33.7	145±12.2	71.56±7.04	17649±467	

Table 7. Fatty Acid Profile

220

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	mg		
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
H NUTS AND OIL SEEDS												
H001	Almond (<i>Prunus amygdalus</i>)	6	43.69±6.16			13183±153		32.04±3.78		4358±22.4	38336±159	13215±156
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	4.87±0.65			396±23.1		7.42±0.62		2605±38.3	466±21.3	403±23.3
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	7.24±0.47			901±22.5		16.78±0.07		1674±29.9	987±16.3	918±22.5
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	16.44			506		15.67		3389	599	522
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	66.58±3.22			7427±205		55.04±6.90		7816±148	27907±309	7482±203
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	0.00±0.00			929±37.7				43138±268	3710±133	929±37.7
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	15.62±0.99			639±40.1				28048±174	2449±59.3	639±40.1
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	2699±52.1		211±9.3	2839±50.1	141±8.8	7484±246		4101±69.3	8131±242	10464±234
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	67.66±4.99			19123±472		136±32.3		6317±169	15605±437	19259±477
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	66.30±2.49			18966±202		112±12.7		6250±36.6	15989±279	19078±208
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	67.54±4.43			18477±495		120±14.1		6430±189	16124±329	18597±490
H012	Ground nut (<i>Arachis hypogea</i>)	6	376±30.0			11584±426		0.00±0.00		8144±214	18337±552	11584±426
H013	Mustard seeds (<i>Brassica nigra</i>)	6	1838±84.9	14468±820	644±33.6	4932±112	245±39.3	3341±379		2112±41.7	21032±503	8910±540
H014	Linseeds (<i>Linum usitatissimum</i>)	6	36.60±1.43			3191±144		12956±467		2968±48.4	5112±303	16147±378
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	122±11.5			21871±500		64.5±3.15		5945±88.9	9033±422	21935±499
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	308±42.3			23300±300		265±23.6		9737±189	4452±129	23564±289
H017	Pine seed (<i>Pinus</i> sp.)	5	332±7.4			23874±310	140±27.5	188±10.1		3801±123	18624±177	24202±303
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	144±2.7		13.87±1.80	11776±277		171±5.2		4043±94.4	18922±207	11946±281
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	49.34±1.37		36.44±2.22	18760±227		21.90±0.73		2548±115	3589±26.7	18781±226
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	82.25±11.93			25545±308		35.6±5.78		6159±310	17803±471	25580±305

Food code	Food Name	No. of Regions	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Myristoleic (C14:1)	Palmitoleic (C16:1)	Oleic (C18:1n9)	
			← mg →											
			F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	F14D1	F16D1	F18D1N9	
H021	Walnut (<i>Juglans regia</i>)	6				3661±50.6	1502±36.3	44.18±21.48			39.95±6.12	11168±799		
I SUGARS														
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6				45.00±3.15	24.23±1.77						21.67±1.45	
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6				119±4.4	20.80±2.38						29.70±2.99	
J MUSHROOMS														
J001	Button mushroom, fresh (<i>Agaricus sp.</i>)	1			1.83	40.06	12.95	5.07	2.98			1.23	5.25	
J002	Chicken mushroom, fresh (<i>Lactiporus sp.</i>)	1			0.79	54.83	3.99					0.62	2.40	
J003	Shiitake mushroom, fresh (<i>Lentinula sp.</i>)	1			3.25	72.70	18.44	9.17	5.21			2.05	9.73	
J004	Oyster mushroom, dried (<i>Pleurotus sp.</i>)	1			12.67	256	91.79	36.78	20.76			7.94	38.44	
K MISCELLANEOUS FOODS														
K001	Toddy (<i>Borassus flabellifer</i>)	10			2.10±0.38	21.04±0.93	7.50±0.40					4.19±0.81	30.49±1.14	
K002	Coconut Water (<i>Cocos nucifera</i>)	6		47.14±3.52	24.62±2.06	16.18±0.97	5.56±1.10						10.78±0.38	
L MILK AND MILK PRODUCTS														
L001	Milk, whole, Buffalo	6	158±6.6	220±3.3	806±16.9	1776±63.6	943±58.7				47.08±7.37	61.97±4.34	1671±103	
L002	Milk, whole, Cow	6	172±8.8	98±3.08	451±11.8	1033±40.3	518±15.7					37.90±2.11	1176±30.3	
L003	Paner	6	230±10.0	340±29.6	1600±60.9	4792±199	1755±166	88.14±15.40	28.73±6.32	17.14±2.69		385±33.5	3914±206	
L004	Khoa	6	259±21.1	375±19.4	1932±112	7138±290	3099±286	61.24±12.26	43.03±15.56	28.18±7.46		398±57.1	5266±422	

Table 7. Fatty Acid Profile

Food code	Food Name	No. of Regions	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic	Arachidonic	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)	(C20:4n6)	mg		
			F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3	F20D4N6	FASAT	FAMS	FAPU
H021	Walnut (<i>Juglans regia</i>)	6	108±13.5			36205±626		8710±238		5208±74.2	11316±796	44915±830
I SUGARS												
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6				33.10±2.09				69.23±4.91	21.67±1.45	33.10±2.09
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6				145±12.5		28.34±4.27		140±3.1	29.70±2.99	173±16.1
J MUSHROOMS												
J001	Button mushroom, fresh (<i>Agaricus sp.</i>)	1	0.34			263				62.89	6.82	263
J002	Chicken mushroom, fresh (<i>Lactiporus sp.</i>)	1				111		26.43		59.60	3.02	137
J003	Shiitake mushroom, fresh (<i>Lentinula sp.</i>)	1	0.55			417	63.63			116	12.33	480
J004	Oyster mushroom, dried (<i>Pleurotus sp.</i>)	1	27.58			1491	301			422	73.96	1792
K MISCELLANEOUS FOODS												
K001	Toddy (<i>Borassus flabellifer</i>)	10				44.90±1.71		20.28±0.78		30.65±0.93	34.68±0.79	65.18±2.11
K002	Coconut Water (<i>Cocos nucifera</i>)	6				3.73±0.91				93.49±4.64	24.11±32.54	3.73±0.91
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6	139±2.8			132±5.4		34.76±2.06	21.78±0.89	4630±93.9	1919±106	200±7.8
L002	Milk, whole, Cow	6				106±2.9		20.52±2.24	7.03±0.49	2707±29.9	1214±29.4	138±2.6
L003	Paneer	6				206±69.1		233±14.6		8851±136	4300±202	439±59.0
L004	Khoa	6				525±124		265±76.8		12936±221	5664±462	790±53.1

Food Code	Food Name	No. of Regions	Undecanoic (C11:0)	Lauric (C12:0)	Myristic (C14:0)	Pentadecanoic (C15:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$								
			F11D0	F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0
M EGG AND EGG PRODUCTS											
M001	Egg, poultry, whole, raw	6			35.05 \pm 2.25		2167 \pm 44.9	596 \pm 28.9	10.22 \pm 0.56	137 \pm 7.4	11.99 \pm 1.23
M002	Egg, poultry, white, raw	6									
M003	Egg, poultry, yolk, raw	6			95.82 \pm 2.85		6236 \pm 107	1797 \pm 151	30.51 \pm 2.96	385 \pm 21.2	36.31 \pm 2.27
M004	Egg, poultry, whole, boiled	6			40.12 \pm 3.58		2524 \pm 112	713 \pm 54.2	13.50 \pm 0.80	157 \pm 12.4	16.48 \pm 2.66
M005	Egg, poultry, white, boiled	6									
M006	Egg, poultry, yolk, boiled	6			105 \pm 7.6		6448 \pm 64.3	1800 \pm 130	30.23 \pm 4.27	401 \pm 33.5	34.76 \pm 2.89
M007	Egg, poultry, omlet	3			39.43 \pm 1.66		2335 \pm 26.9	653 \pm 9.5	10.40 \pm 0.57	126 \pm 12.8	14.05 \pm 0.64
M008	Egg, country hen, whole, raw	1			35.26		2730	1020	6.51		
M009	Egg, country hen, whole, boiled	1			33.61		2917	1117	5.89		
M010	Egg, country hen, omlet	1			47.23		3463	1366	9.59		
M011	Egg, duck, whole, boiled	1	1.12	3.38	37.51	1.14	2791	713	33.49	17.38	
M012	Egg, duck, whole, raw	1	1.12	4.51	38.65	1.14	2640	632	36.95	18.54	
M013	Egg, duck, whole, omlet	1	1.20	6.03	42.55	1.22	2983	775	40.76	21.07	
M014	Egg, quail, whole, raw	1	0.93	1.87	71.59	2.79	2049	637	9.57	14.40	
M015	Egg, quail, whole, boiled	1	0.93	1.97	73.73	2.18	2083	535	11.52	15.42	
N POULTRY											
N001	Chicken, poultry, leg, skinless	4			22.52 \pm 2.93		827 \pm 51.7	272 \pm 9.5	5.66 \pm 0.88	13.14 \pm 0.97	17.23 \pm 2.74
N002	Chicken, poultry, thigh, skinless	6			22.25 \pm 2.82		794 \pm 18.8	234 \pm 16.5	4.84 \pm 1.24	7.97 \pm 1.11	7.88 \pm 1.00
N003	Chicken, poultry, breast, skinless	5			14.36 \pm 3.18		586 \pm 17.1	189 \pm 6.3	3.66 \pm 0.24	11.95 \pm 0.32	11.21 \pm 1.47

Table 7. Fatty Acid Profile

224

Food Code	Food Name	No. of Regions	Myristoleic	Palmitoleic	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α-Linolenic
			(C14:1)	(C16:1)	(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)
			mg								
			F14D1	F16D1	F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3
M EGG AND EGG PRODUCTS											
M001	Egg, poultry, whole, raw	6		318±10.3	3090±36.1	24.55±2.12		47.43±8.16	1022±45.8		28.06±3.24
M002	Egg, poultry, white, raw	6									
M003	Egg, poultry, yolk, raw	6		941±43.1	8919±58.8	68.58±3.61		139±22.6	2919±127		64.43±7.92
M004	Egg, poultry, whole, boiled	6		333±29.3	3573±92.5	26.62±1.90		58.25±7.43	1169±90.3		29.40±4.07
M005	Egg, poultry, white, boiled	6									
M006	Egg, poultry, yolk, boiled	6		897±51.9	9525±182	70.89±2.46		150±23.7	3009±147		63.64±8.26
M007	Egg, poultry, omlet	3		291±14.7	4247±26.5	30.49±0.64		46.96±1.69	2679±18.3		34.36±6.04
M008	Egg, country hen, whole, raw	1		254	4765	42.32			1518	17.36	39.95
M009	Egg, country hen, whole, boiled	1		273	5433	41.19			1401	15.30	29.28
M010	Egg, country hen, omlet	1		338	6031	54.81			1773	23.29	47.72
M011	Egg, duck, whole, boiled	1	7.95	445	5623	5.77	16.22		1495		45.95
M012	Egg, duck, whole, raw	1	10.22	399	5638	5.77	10.43		1453		45.94
M013	Egg, duck, whole, omlet	1	9.72	488	5963	7.41	14.87		1579		61.43
M014	Egg, quail, whole, raw	1	18.83	446	3717	24.87	3.84		2112		42.84
M015	Egg, quail, whole, boiled	1	21.73	427	3919	21.12	2.89		2137		41.07
N POULTRY											
N001	Chicken, poultry, leg, skinless	4		205±27.5	1342±88.5	13.35±0.81			627±35.4		25.97±5.33
N002	Chicken, poultry, thigh, skinless	6		185±11.5	1263±43.6	12.79±1.77			490±21.1		22.52±6.11
N003	Chicken, poultry, breast, skinless	5		120±6.3	862±32	9.10±0.31			346±13.8		12.63±0.88

Food Code	Food Name	No. of Regions	Eicosatrienoic (C20:3n6)	Arachidonic (C20:4n6)	Eicosapentaenoic (C20:5n3)	Docosahexaenoic (C22:6n3)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)	Cholesterol
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$							
			F20D3N6	F20D4N6	F20D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
M EGG AND EGG PRODUCTS										
M001	Egg, poultry, whole, raw	6	25.95±2.47			75.70±3.60	2958±51.8	3481±48.8	1152±39.8	366±2.6
M002	Egg, poultry, white, raw	6								
M003	Egg, poultry, yolk, raw	6	73.72±5.76			180±30.1	8580±203	10068±43.8	3238±139	1076±2.9
M004	Egg, poultry, whole, boiled	6	29.73±2.17			65.26±20.53	3464±131	3991±103	1294±91.7	365±1.8
M005	Egg, poultry, white, boiled	6								
M006	Egg, poultry, yolk, boiled	6	74.14±5.99			187±25.6	8819±128	10643±174	3333±149	1085±2.4
M007	Egg, poultry, omlet	3	28.27±1.68	380±63.9		46.76±1.69	3179±28.4	4615±27.1	3168±53.0	316±1.4
M008	Egg, country hen, whole, raw	1	13.01			92.46	3792	5061	1936	355
M009	Egg, country hen, whole, boiled	1	15.29	301		120	4074	5747	1882	369
M010	Egg, country hen, omlet	1	20.54	329		124	4886	6424	2317	318
M011	Egg, duck, whole, boiled	1		153	35.29	15.04	3598	6098	1745	856
M012	Egg, duck, whole, raw	1		133	35.97	16.20	3373	6063	1684	839
M013	Egg, duck, whole, omlet	1		185	41.93	18.57	3871	6483	1886	815
M014	Egg, quail, whole, raw	1		192	30.20	22.06	2788	4210	2399	833
M015	Egg, quail, whole, boiled	1		173	22.05	30.79	2726	4391	2403	855
N POULTRY										
N001	Chicken, poultry, leg, skinless	4	8.33±1.08				1157±61.0	1560±115	661±37.7	84.25±1.38
N002	Chicken, poultry, thigh, skinless	6	7.36±1.97				1071±29.1	1461±48.5	520±24.4	91.93±1.10
N003	Chicken, poultry, breast, skinless	5	7.82±0.38				816±23.7	991±37.4	367±14.5	61.55±0.93

225

Table 7. Fatty Acid Profile

226

Food Code	Food Name	No. of Regions	Undecanoic (C11:0)	Lauric (C12:0)	Myristic (C14:0)	Pentadecanoic (C15:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)
			← mg →								
			F11D0	F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0
N004	Chicken, poultry, wing, skinless	5			24.51±2.38		914±38.4	274±24.8	5.68±1.37	11.85±1.68	10.85±1.73
N005	Poultry, chicken, liver	1					677	651			
N006	Poultry, chicken, gizzard	1			9.91		495	256	5.92	4.36	
N007	Country hen, leg, with skin	1			13.27	2.11	362	174	2.63		
N008	Country hen, thigh, with skin	1			18.74	2.73	421	167			
N009	Country hen, breast, with skin	1			10.33	1.35	286	122			
N010	Country hen, wing, with skin	1			19.17	2.94	467	199			
N011	Duck, meat, with skin	1					287	58			
N012	Emu, meat, skinless	1			3.36		137	60			
N013	Guinea fowl, meat, with skin	1	0.90	1.81	17.07	7.03	508	556	17.03	9.63	2.49
N014	Pigeon, meat, with skin	1			10.72		939	879			
N015	Quail, meat, skinless	1			44.53	6.70	1463	479	23.18		8.54
N016	Turkey, leg, with skin	1					667	313			
N017	Turkey, thigh, with skin	1					681	334			
N018	Turkey, breast, with skin	1					647	286			
N019	Turkey, wing, with skin	1					604	275			

O	ANIMAL MEAT								
O001	Goat, shoulder	6	45.17±38.01	376±238		2638±337	2331±160	18.08±3.57	35.45±26.72
O002	Goat, chops	6	16.34±10.05	202±93.7		1383±160	1252±111	12.19±4.91	11.48±6.13
O003	Goat, legs	6	24.30±15.82	263±105		1795±154	1522±157	18.61±5.01	41.99±34.76

Food Code	Food Name	No. of Regions	Myristoleic	Palmitoleic	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic
			(C14:1)	(C16:1)	(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)
			mg								
			F14D1	F16D1	F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3
N004	Chicken, poultry, wing, skinless	5		238±14.9	1524±63	15.00±1.25			623±20.6		27.64±5.06
N005	Poultry, chicken, liver	1			681				680		140
N006	Poultry, chicken, gizzard	1		98	604	13.85			342		
N007	Country hen, leg, with skin	1		59	616	5.59			273	3.45	11.45
N008	Country hen, thigh, with skin	1		57	687	6.05			287		12.91
N009	Country hen, breast, with skin	1		28	422	3.65			182		7.26
N010	Country hen, wing, with skin	1		65	763	7.94			305		14.03
N011	Duck, meat, with skin	1		1467	748				217		86.54
N012	Emu, meat, skinless	1		20	221	1.00			90		7.97
N013	Guinea fowl, meat, with skin	1	1.52	21	879	17.33	1.86	6.23	816		30.49
N014	Pigeon, meat, with skin	1		283	2305				958		
N015	Quail, meat, skinless	1		392	2364	14.13		12.52	788		22.50
N016	Turkey, leg, with skin	1			938				908		150
N017	Turkey, thigh, with skin	1			927				904		131
N018	Turkey, breast, with skin	1			884				886		170
N019	Turkey, wing, with skin	1			826				787		126

227

Table 7. Fatty Acid Profile

O ANIMAL MEAT

O001	Goat, shoulder	6	251±54.2	4563±318	87.48±42.27		432±149	33.28±10.52
O002	Goat, chops	6	113±27.3	2193±170	39.47±12.04		184±42.1	16.12±8.80
O003	Goat, legs	6	156±22.5	2805±340	77.43±30.80		374±74.8	21.85±2.70

Table 7. Fatty Acid Profile

228

Food Code	Food Name	No. of Regions	Eicosatrienoic	Arachidonic	Eicosa-	Docosa-	Total	Total Mono	Total Poly	
			(C20:3n6)	(C20:4n6)	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated	
							mg	Fatty Acids	Fatty Acids	Cholesterol
			F20D3N6	F20D4N6	F20D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
N004	Chicken, poultry, wing, skinless	5	7.31±0.38				1241±55.1	1777±73.9	658±22.3	54.52±0.78
N005	Poultry, chicken, liver	1				194	1328	681	1013	268
N006	Poultry, chicken, gizzard	1		122			772	716	464	57.24
N007	Country hen, leg, with skin	1	6.24	90		15.98	534	681	400	87.95
N008	Country hen, thigh, with skin	1	3.63	48		7.63	610	750	360	91.81
N009	Country hen, breast, with skin	1		72			419	453	262	66.03
N010	Country hen, wing, with skin	1	6.75	87	12.90	25.09	688	836	451	55.42
N011	Duck, meat, with skin	1					345	2215	304	81.76
N012	Emu, meat, skinless	1		34	5.94	5.26	200	242	144	72.69
N013	Guinea fowl, meat, with skin	1		1	45.45	102	1138	928	995	87.48
N014	Pigeon, meat, with skin	1		200	94.93	29.29	1828	2588	1282	107
N015	Quail, meat, skinless	1					2024	2789	810	77.87
N016	Turkey, leg, with skin	1					980	938	1058	83.44
N017	Turkey, thigh, with skin	1					1015	927	1035	85.35
N018	Turkey, breast, with skin	1					934	884	1055	81.28
N019	Turkey, wing, with skin	1					897	826	913	80.01

O ANIMAL MEAT

O001	Goat, shoulder	6	178±54.8		5444±803	4902±415	643±214	82.18±3.33
O002	Goat, chops	6	59.35±12.87		2877±386	2346±210	259±63.7	88.37±7.14
O003	Goat, legs	6	172±52.3		3665±471	3038±393	567±130	82.52±5.47

Food Code	Food Name	No. of Regions	Undecanoic (C11:0)	Lauric (C12:0)	Myristic (C14:0)	Pentadecanoic (C15:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$									
			F11D0	F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	
O004	Goat, brain	5			32.63 \pm 6.10		1007 \pm 97.9	1013 \pm 57.5	28.88 \pm 3.12	22.73 \pm 3.77	33.49 \pm 7.60	
O005	Goat, tongue	4		37.79 \pm 18.66	388 \pm 150		2556 \pm 325	1976 \pm 377	21.00 \pm 2.75		49.13 \pm 42.98	
O006	Goat, lungs	4		16.42 \pm 20.30	95.79 \pm 52.64		907 \pm 156	513 \pm 122	12.42 \pm 8.43		20.21 \pm 12.37	
O007	Goat, heart	5		10.26 \pm 7.38	128 \pm 70.9		763 \pm 183	1017 \pm 273	6.51 \pm 2.66		13.97 \pm 13.54	
O008	Goat, liver	6		3.97 \pm 1.08	37.41 \pm 14.69		735 \pm 173	944 \pm 137			49.82 \pm 39.91	
O009	Goat, tripe	5		16.61 \pm 12.79	155 \pm 96.5		828 \pm 144	661 \pm 139	9.66 \pm 0.82		12.66 \pm 4.47	
O010	Goat, spleen	4		9.23 \pm 3.32	56.89 \pm 9.62		555 \pm 51.2	553 \pm 138	9.47 \pm 4.33		17.09 \pm 9.01	
O011	Goat, kidneys	4		7.80 \pm 3.94	70.83 \pm 36.59		557 \pm 61.7	470 \pm 66.4	5.20 \pm 1.56		32.65 \pm 23.84	
O012	Goat, tube (small intestine)	3		28.28 \pm 23.62	294 \pm 258		1961 \pm 184	2103 \pm 792	24.09 \pm 6.81		35.02 \pm 35.16	
O013	Goat, testis	2		3.15	33.66		899	259	5.88		14.56	
O014	Sheep, shoulder	5		48.54 \pm 32.58	603 \pm 320		3569 \pm 629	2595 \pm 598	30.32 \pm 14.36		70.13 \pm 106	
O015	Sheep, chops	4		18.76 \pm 13.09	221 \pm 123		1323 \pm 484	1190 \pm 331	10.63 \pm 2.76		9.19 \pm 2.99	
O016	Sheep, leg	5		30.98 \pm 14.68	282 \pm 152		1797 \pm 145	1591 \pm 512	20.00 \pm 9.49		24.42 \pm 12.81	
O017	Sheep, brain	1			24.69		938	990	23.43	14.85	49.24	
O018	Sheep, tongue	1		251	408		2533	2384				
O019	Sheep, lungs	2		11.61	33.99		640	442	6.31		4.82	
O020	Sheep, heart	1		20.40	186		773	690				
O021	Sheep, liver	4			24.79 \pm 14.41		681 \pm 103	1078 \pm 168			38.64 \pm 47.47	
O022	Sheep, tripe	2		13.91	154		989	789	7.63		8.62	
O023	Sheep, spleen	1		10.04	74.93		663	753	9.72		22.65	
O024	Sheep, kidneys	2		7.08	60.88		505	543	4.56		5.57	

Table 7. Fatty Acid Profile

230

Food Code	Food Name	No. of Regions	Myristoleic	Palmitoleic	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic
			(C14:1)	(C16:1)	(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)
			\leftarrow mg \rightarrow								
			F14D1	F16D1	F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3
O004	Goat, brain	5		23.08 \pm 5.65	1304 \pm 88	119 \pm 83.2			43.20 \pm 16.81		80.48 \pm 72.83
O005	Goat, tongue	4		289 \pm 34.9	4498 \pm 607	129 \pm 54.1			504 \pm 134		67.38 \pm 29.75
O006	Goat, lungs	4		43.19 \pm 6.3	836 \pm 186	15.22 \pm 3.36			135 \pm 15.8		13.74 \pm 7.83
O007	Goat, heart	5		37.69 \pm 10.44	953 \pm 210	35.14 \pm 3.75			292 \pm 83.0		9.52 \pm 2.65
O008	Goat, liver	6		42.04 \pm 12.85	879 \pm 337				368 \pm 67.1		56.53 \pm 24.71
O009	Goat, tripe	5		63.87 \pm 26.62	1063 \pm 234	27.10 \pm 7.84			154 \pm 50.1		11.70 \pm 4.47
O010	Goat, spleen	4		25.25 \pm 3.79	575 \pm 114	15.79 \pm 5.62			143 \pm 17.3		10.56 \pm 4.54
O011	Goat, kidneys	4		23.91 \pm 8.08	523 \pm 42.7	19.00 \pm 9.32			236 \pm 6.5		10.37 \pm 5.92
O012	Goat, tube (small intestine)	3		113 \pm 27.1	2339 \pm 327	51.10 \pm 34.11			340 \pm 203		33.46 \pm 7.08
O013	Goat, testis	2		21.27	552	16.51			88.56		9.27
O014	Sheep, shoulder	5		329 \pm 195	4598 \pm 970	169 \pm 54.9			717 \pm 147		141 \pm 206
O015	Sheep, chops	4		92.36 \pm 46.71	1766 \pm 727	57.91 \pm 24.42			220 \pm 80.0		25.59 \pm 6.62
O016	Sheep, leg	5		126 \pm 44.9	2377 \pm 162	103 \pm 22.3			472 \pm 254		33.55 \pm 9.35
O017	Sheep, brain	1		28.00	1060	94.94			41		85.88
O018	Sheep, tongue	1		618	4999	258			397		471
O019	Sheep, lungs	2		22.22	730	15.63			124		8.92
O020	Sheep, heart	1		37.52	815	20.02			206		29.15
O021	Sheep, liver	4		30.36 \pm 13.93	742 \pm 145				346 \pm 46.4		74.97 \pm 25.31
O022	Sheep, tripe	2		85.72	1417	31.48			134		13.10
O023	Sheep, spleen	1		26.60	716	20.83			168		14.37
O024	Sheep, kidneys	2		20.68	540	27.78			222		8.25

Food Code	Food Name	No. of Regions	Eicosatrienoic (C20:3n6)	Arachidonic (C20:4n6)	Eicosapentaenoic (C20:5n3)	Docosahexaenoic (C22:6n3)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)	Cholesterol
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$							
			F20D3N6	F20D4N6	F20D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
O004	Goat, brain	5		300±21.5		516±52.1	2138±176	1447±176	939±163	1340±21.6
O005	Goat, tongue	4		187±93.8			5028±917	4916±696	758±257	206±1.8
O006	Goat, lungs	4		226±48.9			1564±372	894±196	374±72.5	448±5.6
O007	Goat, heart	5		125±55.6			1939±551	1025±224	427±141	122±1.8
O008	Goat, liver	6		362±80.1		138±64.0	1770±365	921±350	924±236	415±26.4
O009	Goat, tripe	5		80.27±33.71			1682±397	1154±268	246±88.3	113±3.5
O010	Goat, spleen	4		199±46.8			1200±215	616±123	352±68.7	243±10.4
O011	Goat, kidneys	4		233±22.0			1143±194	566±60.1	480±34.4	419±10.3
O012	Goat, tube (small intestine)	3		245±277			4445±1300	2504±388	619±487	176±3.6
O013	Goat, testis	2		284			1215	590	382	118
O014	Sheep, shoulder	5		240±99			6916±1700	5096±1221	1099±451	74.72±2.97
O015	Sheep, chops	4		62.73±25.59			2773±866	1916±796	309±100	86.14±3.09
O016	Sheep, leg	5		164±120			3745±846	2605±229	669±383	84.84±2.53
O017	Sheep, brain	1		289		449	2040	1183	866	1336
O018	Sheep, tongue	1		69.76			5576	5875	938	210
O019	Sheep, lungs	2		167			1138	767	301	431
O020	Sheep, heart	1		84.05	13.62		1677	873	332	112
O021	Sheep, liver	4		364±88		229±31.7	1822±333	772±159	1014±192	430±10.7
O022	Sheep, tripe	2		63.32			1962	1534	210	113
O023	Sheep, spleen	1		283			1533	764	466	262
O024	Sheep, kidneys	2		233			1127	588	463	299

Table 7. Fatty Acid Profile

232

Food Code	Food Name	No. of Regions	Undecanoic	Lauric	Myristic	Pentadecanoic	Palmitic	Stearic	Arachidic	Behenic	Lignoceric
			(C11:0)	(C12:0)	(C14:0)	(C15:0)	(C16:0)	(C18:0)	(C20:0)	(C22:0)	(C24:0)
			$\xleftarrow{\hspace{1cm}} \text{mg} \hspace{1cm} \xrightarrow{\hspace{1cm}}$								
			F11D0	F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0
O025	Beef, shoulder	6		32.91±2.41	392±160		3772±410	2768±554	41.78±11.66		39.47±17.43
O026	Beef, chops	4		14.18±1.20	168±65.4		1625±193	1188±218	18.13±5.57		17.01±7.72
O027	Beef, round (leg)	6		13.58±1.50	135±16.2		1732±197	1023±136	42.45±4.10		52.78±6.67
O028	Beef, brain	4			67.09±33.46		1131±90.0	1188±149	19.51±3.09		84.15±13.23
O029	Beef, tongue	4		24.35±2.26	364±42.7		3197±262	2663±402	25.09±2.92		13.19±4.30
O030	Beef, lungs	3		3.95±0.23	71.64±69.29		625±123	468±78.5	14.22±9.86		13.92±8.94
O031	Beef, heart	5		5.69±1.23	44.89±16.77		614±121	787±119	9.39±2.42		19.06±11.57
O032	Beef, liver	6		5.86±0.74	34.29±13.79		664±179	806±119	6.72±1.34		26.54±17.71
O033	Beef, tripe	5		4.83±1.70	80.33±26.92		653±179	619±277	9.13±5.37		4.84±1.46
O034	Beef, spleen	6		4.08±0.89	26.85±7.72		505±70.9	592±69.2	10.29±1.57		22.43±8.41
O035	Beef, kidneys	3		5.50±0.61	56.58±13.40		777±44.6	892±189	6.79±0.71		5.40±4.90
O036	Calf, shoulder	2		13.57	133		1649	1646	22.73		45.09
O037	Calf, chops	2		3.39	60.78		830	1036	15.26		20.25
O038	Calf, round (leg)	2		7.65	85.35		1189	893	41.78		45.74
O039	Calf, brain	2			53.44		1048	1064	17.15		18.83
O040	Calf, tongue	2		18.97	320		2813	2415	22.44		40.10
O041	Calf, heart	1		5.23	46.27		602	814	9.22		12.28
O042	Calf, liver	1		5.46	28.39		666	898	9.71		8.59
O043	Calf, spleen	1		3.43	27.07		486	498	5.85		9.81
O044	Calf, kidneys	2		4.25	52.12		660	734	7.18		6.04
O045	Mithun, shoulder	1			96.92		1427	2772	60.51		79.49

Food Code	Food Name	No. of Regions	Myristoleic	Palmitoleic	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α -Linolenic
			(C14:1)	(C16:1)	(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)
			\leftarrow mg \rightarrow								
			F14D1	F16D1	F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3
O025	Beef, shoulder	6		486±151	5669±825	72.41±34.10			575±325		153±44.0
O026	Beef, chops	4		209±63.6	2440±351	30.87±13.32			249±142		66.06±18.97
O027	Beef, round (leg)	6		207±34.6	3026±253	46.84±4.27			201±21.0		67.90±6.17
O028	Beef, brain	4		37.16±8.99	1653±128	178±63.1			39.04±14.09		56.26±9.07
O029	Beef, tongue	4		351±86.8	4302±421	88.41±16.12			341±64.2		56.10±6.72
O030	Beef, lungs	3		41.34±5.15	588±63.5	17.58±5.02			92.04±24.05		6.14±1.51
O031	Beef, heart	5		39.33±17.31	780±199	28.50±24.56			351±91.7		11.43±6.51
O032	Beef, liver	6		51.37±16.51	740±171	33.85±14.75			236±52.0		8.51±2.53
O033	Beef, tripe	5		56.14±19.48	767±194	10.65±2.12			49.93±15.98		9.64±5.00
O034	Beef, spleen	6		25.01±8.71	442±119	13.83±2.95			127±24.4		12.22±3.88
O035	Beef, kidneys	3		33.01±20.72	790±47	12.02±6.18			148±14.79		8.72±3.48
O036	Calf, shoulder	2		166	2452	29.26			388		69.72
O037	Calf, chops	2		50.00	966	17.69			311		32.78
O038	Calf, round (leg)	2		180	2207	46.47			213		51.96
O039	Calf, brain	2		46.39	1357	56.90			45		45.48
O040	Calf, tongue	2		308	4050	47.58			434		46.48
O041	Calf, heart	1		19.68	656	20.82			563		11.84
O042	Calf, liver	1		30.8	618	21.19			271		14.64
O043	Calf, spleen	1		26.95	474	11.50			118		9.70
O044	Calf, kidneys	2		31.46	613	15.59			243		8.65
O045	Mithun, shoulder	1		108	2049				2339		385

Table 7. Fatty Acid Profile

234

Food Code	Food Name	No. of Regions	Eicosatrienoic	Arachidonic	Eicosapentaenoic	Docosahexaenoic	Total Saturated	Total Mono	Total Poly	
			(C20:3n6)	(C20:4n6)	(C20:5n3)	(C22:6n3)	Fatty Acids (TSFA)	Unsaturated Fatty Acids (TMUFA)	Unsaturated Fatty Acids (TPUFA)	Cholesterol
							mg			
			F20D3N6	F20D4N6	F20D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
O025	Beef, shoulder	6		280±168			7046±1155	6227±1010	1008±536	66.36±4.77
O026	Beef, chops	4		122±74.7			3031±491	2680±428	437±236	45.97±5.89
O027	Beef, round (leg)	6		211±12.7			2998±361	3280±291	480±40	55.81±1.96
O028	Beef, brain	4		321±77.3		432±99.1	2490±289	1869±200	848±200	1668±28.5
O029	Beef, tongue	4		86.44±28.31			6287±716	4741±524	484±99	141±1.1
O030	Beef, lungs	3		146±85.9			1198±290	647±73.6	244±111	334±8.8
O031	Beef, heart	5		128±38			1479±273	848±240	490±136	92.73±5.29
O032	Beef, liver	6		218±79.7		103±27.5	1543±331	826±202	566±162	261±9.9
O033	Beef, tripe	5		35.70±4.88			1371±491	833±216	95.26±25.86	82.66±4.33
O034	Beef, spleen	6		254±84.3			1160±159	480±130	393±113	353±8.3
O035	Beef, kidneys	3		135±4.91			1743±124	835±74	291±123	439±3.8
O036	Calf, shoulder	2		231			3510	2647	689	58.27
O037	Calf, chops	2		105			1966	1034	449	62.05
O038	Calf, round (leg)	2		233			2263	2433	497	50.10
O039	Calf, brain	2		264		249	2202	1460	603	1345
O040	Calf, tongue	2		256			5630	4406	737	107
O041	Calf, heart	1		198			1489	696	773	130
O042	Calf, liver	1		265		92.00	1616	670	643	306
O043	Calf, spleen	1		269			1030	513	397	360
O044	Calf, kidneys	2		239			1464	660	491	271
O045	Mithun, shoulder	1		889			4436	2157	3613	45.07

Food Code	Food Name	No. of Regions	Undecanoic (C11:0)	Lauric (C12:0)	Myristic (C14:0)	Pentadecanoic (C15:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	
			$\leftarrow \text{mg} \rightarrow$									
			F11D0	F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	
O046	Mithun, chops	1			65.47		859	1748	34.94		28.37	
O047	Mithun, round (leg)	1			41.28		491	817	36.27		57.04	
O048	Pork, shoulder	6			259±107		4438±899	2151±502	39.02±23.54			
O049	Pork, chops	6			157±20.5		3080±135	1531±483	33.99±16.58			
O050	Pork, ham	6			269±63.7		4510±482	2101±467	59.11±57.10			
O051	Pork, lungs	4			34.48±12.10		776±70.9	431±73.4	6.29±4.17			
O052	Pork, heart	4			47.89±24.92		858±192	660±148	8.55±3.25			
O053	Pork, liver	5			15.29±4.18		549±33.6	753±85.0	6.89±0.71			
O054	Pork, stomach	1			102		1864	1342	19.31			
O055	Pork, spleen	3			27.99±8.02		691±190	520±144	6.41±2.90			
O056	Pork, kidneys	5			29.58±13.59		672±123	461±87.9	6.33±3.02			
O057	Pork, tube (small intestine)	1			126		2318	1639	25.50			
O058	Hare, shoulder	1			183		2202	313				
O059	Hare, chops	1			80.96		827	121				
O060	Hare, leg	1			59.34		754	97				
O061	Rabbit, shoulder	1			282		2634	227				
O062	Rabbit, chops	1			180		1606	121				
O063	Rabbit, leg	1			163		1295	117				

Table 7. Fatty Acid Profile

236

Food Code	Food Name	No. of Regions	Myristoleic	Palmitoleic	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	α-Linolenic
			(C14:1)	(C16:1)	(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C18:3n3)
			← mg →								
			F14D1	F16D1	F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F18D3N3
O046	Mithun, chops	1		70.10	1206				1095		160
O047	Mithun, round (leg)	1		48.11	1870				1056		186
O048	Pork, shoulder	6		418±106	7696±1111				1839±775		170±115
O049	Pork, chops	6		242±12.2	4731±361				521±141		112±41.5
O050	Pork, ham	6		466±108	7600±769				1598±387		163±107
O051	Pork, lungs	4		32.88±10.53	834±103				326±40.8		21.91±17.54
O052	Pork, heart	4		46.51±14.55	1201±335				725±243		38.38±27.92
O053	Pork, liver	5		21.63±6.99	678±206				494±186		26.57±13.51
O054	Pork, stomach	1		127	2563				841		94.61
O055	Pork, spleen	3		34.64±7.32	785±276				237±35.1		23.79±18.93
O056	Pork, kidneys	5		28.23±12.20	817±162				474±80.5		26.28±13.50
O057	Pork, tube (small intestine)	1		190	2984				638		85.90
O058	Hare, shoulder	1		240	1366				1261		267
O059	Hare, chops	1		90	523				496		105
O060	Hare, leg	1		75	439				407		57.78
O061	Rabbit, shoulder	1		504	1828				1242		365
O062	Rabbit, chops	1		310	1170				737		252
O063	Rabbit, leg	1		268	935				609		184

Food Code	Food Name	No. of Regions	Eicosatrienoic (C20:3n6)	Arachidonic (C20:4n6)	Eicosapentaenoic (C20:5n3)	Docosahexaenoic (C22:6n3)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)	Cholesterol
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$							
			F20D3N6	F20D4N6	F20D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
O046	Mithun, chops	1		340			2736	1276	1596	46.99
O047	Mithun, round (leg)	1		458			1442	1918	1700	44.01
O048	Pork, shoulder	6		121±134			6887±1531	8114±1217	2129±1024	44.38±2.76
O049	Pork, chops	6		26.53±10.54			4803±655	4972±373	660±193	46.98±3.18
O050	Pork, ham	6		114±72.8			6938±1069	8065±876	1875±567	47.08±1.64
O051	Pork, lungs	4		121±91.6			1247±161	867±113	469±150	232±11.0
O052	Pork, heart	4		255±119			1575±367	1247±350	1019±391	134±4.2
O053	Pork, liver	5		376±85			1325±123	700±213	896±285	216±1.4
O054	Pork, stomach	1		154			3327	2690	1090	187
O055	Pork, spleen	3		137±23.9			1245±345	820±283	397±78	201±70.8
O056	Pork, kidneys	5		214±36.5			1169±228	846±174	714±130	267±2.1
O057	Pork, tube (small intestine)	1		168			4109	3174	892	180
O058	Hare, shoulder	1		191			2698	1606	1720	79.93
O059	Hare, chops	1		89			1028	613	690	77.70
O060	Hare, leg	1		90			910	514	555	78.81
O061	Rabbit, shoulder	1		205			3142	2332	1813	82.56
O062	Rabbit, chops	1		94			1907	1480	1083	79.17
O063	Rabbit, leg	1		85			1575	1203	877	76.70

Table 7. Fatty Acid Profile

Food Code	Fish Name	No. of Regions	Lauric	Myristic	Pentadecanoic	Palmitic	Stearic	Arachidic	Behenic	Lignoceric	Palmitoleic
			(C12:0)	(C14:0)	(C15:0)	(C16:0)	(C18:0)	(C20:0)	(C22:0)	(C24:0)	(C16:1)
			$\leftarrow \text{mg} \rightarrow$								
			F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	F16D1
P MARINE FISH											
P001	Allathi (<i>Elops machnata</i>)	1		36.99	5.65	205	90.69	3.48	2.17	1.87	49.07
P002	Aluva (<i>Parastromateus niger</i>)	3		46.21	17.84	479	197	9.56	5.53		56.73
P003	Anchovy (<i>Stolephorus indicus</i>)	2		14.33	4.16	178	51.19				20.17
P004	Ari fish (<i>Aprion virescens</i>)	1		19.68	7.17	251	122	5.11	2.52		25.05
P005	Betki (<i>Lates calcarifer</i>)	1	1.82	5.33		56.47	22.78				16.28
P006	Black snapper (<i>Macolor niger</i>)	1		52.75		312	106				87.36
P007	Bombay duck (<i>Harpodon nehereus</i>)	2		45.49		283	70.16				69.09
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3		145	25.20	793	261	10.96	1.72		254
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1		39.00	12.62	485	249	6.85			86.44
P010	Chakla (<i>Rachycentron canadum</i>)	5		60.90	11.16	392	182	6.68	1.08		87.08
P011	Chappal (<i>Aluterus monoceros</i>)	1		5.76		130	63.46				7.31
P012	Chelu (<i>Elagatis bipinnulata</i>)	2		11.18	2.74	148	64.54	1.77	0.65	0.62	18.24
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1		61.97	8.54	461	155	7.13	5.48		92.54
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1		66.39	19.03	445	189	13.49	5.45		74.18
P015	Gobro (<i>Epinephelus diacanthus</i>)	2		22.46	5.10	177	81.09	3.44			39.29
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1		1.53	1.16	68.68	41.53	0.71			3.57
P017	Hilsa (<i>Tenualosa ilisha</i>)	2	17.71	1650		6091	1468	35.64	23.62		2225
P018	Jallal (<i>Arius sp.</i>)	1		36.18	8.83	323	142	5.39	3.69		74.02
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	1.05	61.34	10.16	559	191	7.98	6.24		91.30
P020	Kadal bral (<i>Synodus indicus</i>)	1		54.74	8.22	298	108	5.33	3.34		76.91

Food Code	Fish Name	No. of Regions	Oleic (C18:1n9)	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Nervonic (C24:1n9)	Linoleic (C18:2n6)	Eicosadienoic (C20:2)	Docosadienoic (C22:2)	α-Linolenic (C18:3n3)	Eicosatrienoic (C20:3n6)
			$\leftarrow \text{mg} \rightarrow$								
			F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F22D2	F18D3N3	F20D3N6
P MARINE FISH											
P001	Allathi (<i>Elops machnata</i>)	1	108	4.33		3.19	9.62	1.85			1.93
P002	Aluva (<i>Parastromateus niger</i>)	3	199	18.37	6.90	6.69	19.37	4.26			2.66
P003	Anchovy (<i>Stolephorus indicus</i>)	2	28.5			1.61	7.13				
P004	Ari fish (<i>Apriion virescens</i>)	1	126	7.8	3.06	4.42	21.32	3.05			2.33
P005	Betki (<i>Lates calcarifer</i>)	1	36.98				9.67	4.12			2.69
P006	Black snapper (<i>Macolor niger</i>)	1	163				22.35	8.43			6.43
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	102				10.25				
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	407	31.72	2.39	6.61	35.74	11.91			9.25
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	327	16.84			22.11	7.03			
P010	Chakla (<i>Rachycentron canadum</i>)	5	249	10.42	0.63	4.88	23.29	4.23			0.63
P011	Chappal (<i>Aluterus monoceros</i>)	1	67.20				17.09				
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	81.83	2.28	0.34	0.88	10.42	0.48			0.51
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	254	12.89	5.02	4.73	13.59	5.15			2.88
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	235	15.94	6.33	8.64	33.47	8.58			
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	92.53	5.81			14.46				
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	32.65	0.29		0.36	7.11	0.91			0.73
P017	Hilsa (<i>Tenualosa ilisha</i>)	2	3695	101			136	209	104		49.10
P018	Jallal (<i>Arius sp.</i>)	1	217	14.21	2.70	3.45	20.97	5.14			3.55
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	415	9.74		3.33	17.71	4.64			
P020	Kadal bral (<i>Synodus indicus</i>)	1	102	6.77		6.14	14.47	3.33			

Table 7. Fatty Acid Profile

Food Code	Fish Name	No. of Regions	Arachidonic	Eicosa	Docosa	Docosa	Total	Total Mono	Total Poly	Cholesterol											
			(C20:4n6)	pentaenoic	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated												
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$																		
F20D4N6 F20D5N3 F22D5N3 F22D6N3 FASAT FAMS FAPU CHOLC																					
P MARINE FISH																					
P001	Allathi (<i>Elops machnata</i>)	1	30.50	54.35	21.54	141	346	165	261	13.98											
P002	Aluva (<i>Parastromateus niger</i>)	3	90.30	77.61	70.40	226	755	288	490	21.97											
P003	Anchovy (<i>Stolephorus indicus</i>)	2	26.26	60.00	10.15	187	248	50.36	290	29.56											
P004	Ari fish (<i>Aprion virescens</i>)	1	58.12	18.53	21.75	194	408	166	319	15.99											
P005	Betki (<i>Lates calcarifer</i>)	1	20.38	5.74		14.76	86.40	53.27	57.36	18.99											
P006	Black snapper (<i>Macolor niger</i>)	1	49.55	41.48		165	470	251	293	30.45											
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	43.72	61.27		137	398	171	252	46.43											
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	79.66	116	128	214	1238	701	594	44.68											
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	133	75.24	61.60	320	792	430	619	18.36											
P010	Chakla (<i>Rachycentron canadum</i>)	5	74.42	76.10	39.35	204	654	352	422	30.39											
P011	Chappal (<i>Aluterus monoceros</i>)	1	36.64	16.28	8.92	129	199	74.51	208	10.84											
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	19.95	20.13	8.79	118	229	104	179	22.64											
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	59.85	99.82	49.26	209	700	369	440	10.86											
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	88.36	95.68	53.02	387	739	340	666	13.17											
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	41.11	30.09	28.02	138	289	138	251	21.38											
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	30.26	11.92	5.69	86.04	114	36.87	143	10.48											
P017	Hilsa (<i>Tenualosa ilisha</i>)	2	146	925		232	9286	6021	1801	82.42											
P018	Jallal (<i>Arius sp.</i>)	1	64.74	69.13	42.00	184	519	311	389	19.26											
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	41.76	35.89	27.75	166	837	519	294	19.98											
P020	Kadal bral (<i>Synodus indicus</i>)	1	42.90	95.53	34.93	244	478	192	436	26.09											

Food Code	Fish Name	No. of Regions	Lauric	Myristic	Pentadecanoic	Palmitic	Stearic	Arachidic	Behenic	Lignoceric	Palmitoleic
			(C12:0)	(C14:0)	(C15:0)	(C16:0)	(C18:0)	(C20:0)	(C22:0)	(C24:0)	(C16:1)
			← mg →								
			F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	F16D1
P021	Kadali (<i>Nemipterus mesoprion</i>)	1		152	23.58	936	469	17.05	12.93		154
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2		403	35.00	1242	394	21.37	11.41		417
P023	Kalava (<i>Epinephelus coioides</i>)	1		37.86	8.41	267	133	4.99	3.44		57.29
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2		23.79	4.18	125	52.05	3.14	1.19		22.96
P025	Kannadi paarai (<i>Alectis indicus</i>)	3		20.27	24.65	291	137	3.57	2.50		46.51
P026	Karimeen (<i>Etorplus suratensis</i>)	1		42.45	13.14	355	158	4.47	3.22		69.74
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1		11.52	4.51	170	68.25				20.12
P028	Kayrai (<i>Thunnus albacores</i>)	2		102	21.89	664	290	8.01	9.38		139
P029	Kiriyan (<i>Atule mate</i>)	1		226	31.67	1275	523	29.07	17.16		276
P030	Kite fish (<i>Mobula kuhlii</i>)	1		3.27	8.29	96.98	60.88				6.93
P031	Korka (<i>Terapon jarbua</i>)	1		157	28.23	881	312	18.35	10.26		203
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1		130	25.86	878	366	9.05	11.03	10.74	184
P033	Maagaa (<i>Polynemus plebeius</i>)	1		14.28	3.96	124	54.85	1.82	1.43		26.84
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3		48.67	10.05	351	180	7.34	4.24	3.17	78.69
P035	Manda clathi (<i>Naso reticulatus</i>)	1		28.79	6.56	207	87.83	3.87	2.62		55.63
P036	Matha (<i>Acanthurus mata</i>)	2		25.00	6.94	191	66.74	4.59	1.89		22.06
P037	Milk fish (<i>Chanos chanos</i>)	1		15.37	4.42	231	106	4.21	4.14		18.02
P038	Moon fish (<i>Mene maculata</i>)	1		293	67.40	1751	721	40.94	32.96	23.61	336
P039	Mullet (<i>Mugil cephalus</i>)	3		54.67	18.50	305	114	1.99	1.53		84.01
P040	Mural (<i>Tylosurus crocodilus</i>)	1		26.63	8.10	242	72.52				35.46
P041	Myil meen (<i>Istiophorus platypterus</i>)	2		5.94	0.56	89.37	51.87	1.84			9.19

Table 7. Fatty Acid Profile

242

Food Code	Fish Name	No. of Regions	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	Docosadienoic	α -Linolenic	Eicosatrienoic
			(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C22:2)	(C18:3n3)	(C20:3n6)
			\leftarrow mg \rightarrow								
			F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F22D2	F18D3N3	F20D3N6
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	602	34.85		27.45	71.26	12.12			13.25
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	604	39.48	6.17	12.74	62.64	9.20			10.24
P023	Kalava (<i>Epinephelus coioides</i>)	1	182	7.24		2.76	11.88	3.52	2.06	3.50	2.05
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	75.04	8.85	2.45	3.65	6.06	1.53			0.88
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	175	9.30	1.52	1.62	7.57	2.11			1.12
P026	Karimeen (<i>Etroplus suratensis</i>)	1	207	13.41			52.96	6.76			
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	61.06			4.08	8.70				
P028	Kayrai (<i>Thunnus albacores</i>)	2	401	16.02		26.88	41.99	10.68			6.40
P029	Kiriyan (<i>Atule mate</i>)	1	747	21.80	6.86	16.35	52.33	9.83			6.83
P030	Kite fish (<i>Mobula kuhlii</i>)	1	55.16	5.53			10.33	4.08			
P031	Korka (<i>Terapon jarbua</i>)	1	428	27.37	12.07	15.74	41.31	12.03			5.41
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	458	15.51	6.16	15.29	49.85	8.72			7.43
P033	Maagaa (<i>Polynemus plebeius</i>)	1	61.92	4.00	1.12	2.24	9.83	1.73			
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	123	6.76	2.64	4.78	28.10	1.25			7.56
P035	Manda clathi (<i>Naso reticulatus</i>)	1	107	6.56		2.55	9.67	3.40			2.13
P036	Matha (<i>Acanthurus mata</i>)	2	67.56	9.82	3.37	3.19	8.97	1.25			0.74
P037	Milk fish (<i>Chanos chanos</i>)	1	152	12.81		4.59	7.77				
P038	Moon fish (<i>Mene maculata</i>)	1	527	26.86	8.13	34.34	56.87				
P039	Mullet (<i>Mugil cephalus</i>)	3	125	7.60		1.63	16.03	1.85			
P040	Mural (<i>Tylosurus crocodilus</i>)	1	42.48			2.82	5.88				
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	44.24	1.81			7.49	0.30			0.31

Food Code	Fish Name	No. of Regions	Arachidonic	Eicosa	Docosa	Docosa	Total	Total Mono	Total Poly	Cholesterol
			(C20:4n6)	pentaenoic	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated	
			F20D4N6	(C20:5n3)	(C22:5n3)	(C22:6n3)	Fatty Acids	Fatty Acids	Fatty Acids	
← mg →										
			F20D4N6	F20D5N3	F22D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	259	116	130	740	1611	818	1342	19.88
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	110	289	130	295	2107	1079	907	28.79
P023	Kalava (<i>Epinephelus coioides</i>)	1	53.08	40.36	29.63	129	455	250	275	20.59
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	23.16	21.90	16.80	97.85	209	113	168	22.07
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	56.43	39.73	29.33	193	479	234	329	18.56
P026	Karimeen (<i>Etroplus suratensis</i>)	1	40.90	26.57	46.90	100	577	290	274	15.62
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	36.10	42.63	15.53	198	255	85.26	301	35.40
P028	Kayrai (<i>Thunnus albacores</i>)	2	106	170	62.91	581	1096	583	980	29.85
P029	Kiriyan (<i>Atule mate</i>)	1	106	248	129	518	2102	1068	1069	11.15
P030	Kite fish (<i>Mobula kuhlii</i>)	1	40.10	4.34	10.67	73.54	169	67.62	143	15.01
P031	Korka (<i>Terapon jarbua</i>)	1	112	154	119	455	1407	687	898	107
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	119	211	72.89	638	1430	678	1107	55.40
P033	Maagaa (<i>Polynemus plebeius</i>)	1	20.27	23.82	13.74	76.47	201	96.12	146	7.24
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	54.37	72.72	47.11	259	604	216	470	46.48
P035	Manda clathi (<i>Naso reticulatus</i>)	1	47.05	42.06	35.57	138	337	171	278	21.03
P036	Matha (<i>Acanthurus mata</i>)	2	39.13	27.57	10.64	100	297	106	188	20.55
P037	Milk fish (<i>Chanos chanos</i>)	1	68.80	16.56	33.07	194	366	188	321	21.38
P038	Moon fish (<i>Mene maculata</i>)	1	45.16	57.92	52.58	161	2929	932	374	68.88
P039	Mullet (<i>Mugil cephalus</i>)	3	48.89	72.91	41.83	196	495	219	378	18.30
P040	Mural (<i>Tylosurus crocodilus crocodilus</i>)	1	28.93	68.62	23.25	228	349	80.76	354	17.43
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	31.36	17.03	8.59	114	150	55.25	179	21.72

Table 7. Fatty Acid Profile

244

Food Code	Fish Name	No. of Regions	Lauric	Myristic	Pentadecanoic	Palmitic	Stearic	Arachidic	Behenic	Lignoceric	Palmitoleic
			(C12:0)	(C14:0)	(C15:0)	(C16:0)	(C18:0)	(C20:0)	(C22:0)	(C24:0)	(C16:1)
			$\xleftarrow{\hspace{1cm}} \text{mg} \xrightarrow{\hspace{1cm}}$								
			F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	F16D1
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1		18.45	3.48	151	62.80	2.51			31.42
P043	Narba (<i>Caranx sexfasciatus</i>)	2		29.59	9.57	338	213	7.45	2.44	2.58	41.23
P044	Paarai (<i>Caranx heberi</i>)	1		63.05	13.28	413	216	8.38	6.03		70.25
P045	Padayappa (<i>Canthidermis maculata</i>)	1		3.51	2.88	95.50	67.48				6.50
P046	Pali kora (<i>Panna microdon</i>)	1		59.38	10.90	547	129	9.02	6.55		172
P047	Pambada (<i>Lepturacanthus savala</i>)	2		214	35.05	1226	451	17.67	9.97	6.56	248
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1		10.89	2.92	117	64.25				17.03
P049	Parava (<i>Lactarius lactarius</i>)	1		82.46	12.71	798	265	16.27	9.99		138
P050	Parcus (<i>Psettosodes erumei</i>)	1		4.84	2.36	101	57.55				9.45
P051	Parrot fish (<i>Scarus ghobban</i>)	1		10.07	1.81	122	37.08	1.17	2.34		18.24
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1		13.14		185	91.47				16.89
P053	Phopat (<i>Coryphaena hippurus</i>)	4		34.95	9.00	259	136	2.86			50.32
P054	Piranha (<i>Pygopristis</i> sp.)	1		79.47	8.32	1460	419	6.93			392
P055	Pomfret, black (<i>Parastromateus niger</i>)	2		115		1428	622	45.61	18.49		157
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2		5.86	1.67	92.19	44.27	1.50			6.31
P057	Pomfret, white (<i>Pampus argenteus</i>)	2		258	41.43	1598	532	45.58	19.93	174	851
P058	Pranel (<i>Gerres</i> sp.)	1		61.61	17.66	525	212	7.48	3.59		95.01
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1		35.67	7.52	372	173	4.46			53.92
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3		69.84	11.18	413	190	2.14	4.26	3.01	93.60
P061	Raai fish (<i>Lobotes surinamensis</i>)	2		51.00	8.47	414	174	6.01			79.09
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1		80.47	17.01	536	209	10.03	5.89	5.33	113

Food Code	Fish Name	No. of Regions	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	Docosadienoic	α-Linolenic	Eicosatrienoic
			(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C22:2)	(C18:3n3)	(C20:3n6)
			$\leftarrow \text{mg} \rightarrow$								
			F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F22D2	F18D3N3	F20D3N6
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1	88.99	4.86		1.93	6.80				
P043	Narba (<i>Caranx sexfasciatus</i>)	2	199	9.95		8.93	18.28	2.29			
P044	Paarai (<i>Caranx heberi</i>)	1	190	8.06		7.16	22.66	5.06			3.00
P045	Padayappa (<i>Canthidermis maculata</i>)	1	77.16				8.70				
P046	Pali kora (<i>Panna microdon</i>)	1	163	9.79		8.29	20.89	3.88			2.33
P047	Pambada (<i>Lepturacanthus savala</i>)	2	564	21.14	4.83	18.76	56.78	5.36			4.81
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	69.08	3.52			6.30				
P049	Parava (<i>Lactarius lactarius</i>)	1	464	9.95		9.04	17.88	3.88			
P050	Parcus (<i>Psettodes erumei</i>)	1	58.44	2.65			9.57				
P051	Parrot fish (<i>Scarus ghobban</i>)	1	113	2.26		0.90	2.79	1.01			0.47
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	79.22	4.70			9.75				
P053	Phopat (<i>Coryphaena hippurus</i>)	4	143	4.66			14.55	1.31			1.03
P054	Piranha (<i>Pygopristis</i> sp.)	1	1941	24.26			475			12.81	
P055	Pomfret, black (<i>Parastromateus niger</i>)	2	716	98.65			51.50	37.96			10.52
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	59.76	4.90		1.79	4.81				
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	98.93	40.22	25.27	33.66	14.07	4.20			5.82
P058	Pranel (<i>Gerres</i> sp.)	1	254	19.02	5.38		17.80	14.62			6.98
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	149	5.51			15.81	3.54			2.89
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	221	8.57		9.00	20.40	6.04			3.34
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	205	20.08	3.51	3.70	18.79				
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	268	22.89	4.94	14.47	24.10	5.67			4.35

245

Table 7. Fatty Acid Profile

Table 7. Fatty Acid Profile

246

Food Code	Fish Name	No. of Regions	Arachidonic	Eicosa	Docosa	Docosa	Total	Total Mono	Total Poly	Cholesterol
			(C20:4n6)	pentaenoic	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated	
							Fatty Acids	Fatty Acids	Fatty Acids	
			←	mg				→		
			F20D4N6	F20D5N3	F22D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
P042	Nalla bontha (<i>Epinephelus</i> sp.)	1	28.64	17.49	15.84	97.29	238	127	166	15.00
P043	Narba (<i>Caranx sexfasciatus</i>)	2	61.54	39.57	55.82	310	603	259	487	16.06
P044	Paarai (<i>Caranx heberi</i>)	1	77.56	80.85	38.83	350	720	276	578	23.29
P045	Padayappa (<i>Canthidermis maculata</i>)	1	68.29	26.69	12.24	132	169	83.65	248	9.65
P046	Pali kora (<i>Panna microdon</i>)	1	50.32	105	30.86	219	761	352	431	33.18
P047	Pambada (<i>Lepturacanthus savala</i>)	2	116	220	161	620	1959	857	1185	54.63
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	42.95	20.37	19.69	92.80	195	89.63	182	26.43
P049	Parava (<i>Lactarius lactarius</i>)	1	54.33	117	44.29	372	1184	621	610	26.20
P050	Parcus (<i>Psettodes erumei</i>)	1	34.99	15.04	9.42	128	166	70.55	197	10.03
P051	Parrot fish (<i>Scarus ghobban</i>)	1	11.50	9.48	7.06	45.69	174	135	78.00	9.95
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	51.34	31.69	18.23	167	290	101	278	17.24
P053	Phopat (<i>Coryphaena hippurus</i>)	4	65.13	63.93	35.03	275	441	198	456	13.53
P054	Piranha (<i>Pygopristis</i> sp.)	1	53.43	7.91	6.95	33.75	1973	2357	589	97.50
P055	Pomfret, black (<i>Parastromateus niger</i>)	2	252	244		565	2229	972	1161	48.16
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	26.07	6.29	13.32	77.16	145	72.77	128	7.48
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	130	167	174	423	2669	1049	919	41.56
P058	Pranel (<i>Gerres</i> sp.)	1	85.41	55.68	58.34	180	827	374	419	29.01
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	70.56	154	24.08	234	593	208	505	47.79
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	62.12	100	44.63	299	693	332	536	21.93
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	75.89	59.25	53.96	257	654	311	465	24.95
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	65.02	59.33	69.42	368	864	423	596	21.98

Food Code	Fish Name	No. of Regions	Lauric	Myristic	Pentadecanoic	Palmitic	Stearic	Arachidic	Behenic	Lignoceric	Palmitoleic
			(C12:0)	(C14:0)	(C15:0)	(C16:0)	(C18:0)	(C20:0)	(C22:0)	(C24:0)	(C16:1)
			← mg →								
			F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	F16D1
P063	Rani (<i>Pink perch</i>)	1	10.46	207		1869	790	31.55	17.92		409
P064	Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1				100	86.38				8.55
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1		44.11	7.38	290	130	5.91	3.24	3.59	63.93
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1		99.01	25.83	528	194	8.45	6.06		119
P067	Sadaya (<i>Platax orbicularis</i>)	1		27.81	12.00	601	407	11.09			51.61
P068	Salmon (<i>Salmo salar</i>)	1		384	90.84	2697	1057	51.90	23.76		667
P069	Sangada (<i>Nemipterus japonicus</i>)	1		78.25	25.16	659	336	17.22	12.31		126
P070	Sankata paarai (<i>Caranx ignobilis</i>)	1		352	47.55	2069	767	39.77	19.60	21.07	495
P071	Sardine (<i>Sardinella longiceps</i>)	1		215		765	246	15.52	7.79		289
P072	Shark (<i>Carcharhinus sorrah</i>)	2		21.83	2.34	156	94.89				35.41
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1		7.35		143	110		4.35		15.15
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1		20.61	4.05	142	83.13	2.75			35.19
P075	Shelavu (<i>Sphyraena jello</i>)	4		99.11	10.42	411	145	8.58	2.62		126
P076	Silan (<i>Silonia silondia</i>)	1		284		2641	667	15.26	7.25		84.03
P077	Silk fish (<i>Beryx sp.</i>)	1		54.36	10.70	295	127	6.97	3.50		77.19
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	11.09	247		1318	220	17.51	11.87		615
P079	Sole fish (<i>Cynoglossus arel</i>)	1		31.31	13.72	227	138	6.13			36.41
P080	Stingray (<i>Dasyatis pastinaca</i>)	1		10.96		150	129				14.47
P081	Tarlava (<i>Drepane punctata</i>)	2		43.41	8.13	328	117	5.19	3.17		72.27
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2		78.58	15.88	557	190	8.64	3.46	2.91	107

Table 7. Fatty Acid Profile

248

Food Code	Fish Name	No. of Regions	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	Docosadienoic	α-Linolenic	Eicosatrienoic
			(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C22:2)	(C18:3n3)	(C20:3n6)
			$\leftarrow \text{mg} \rightarrow$								
			F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F22D2	F18D3N3	F20D3N6
P063	Rani (<i>Pink perch</i>)	1	1408	60.70			58.64	64.54			14.87
P064	Ray fish, bow head, spotted (<i>Rhina aenyllostoma</i>)	1	90.15				21.44				
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	217	11.92		6.06	19.08	4.01			
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	278	9.65			35.43	6.63			
P067	Sadaya (<i>Platax orbicularis</i>)	1	377	15.31			35.21	13.72			
P068	Salmon (<i>Salmo salar</i>)	1	1682	55.53	12.79	34.82	119	25.48			17.29
P069	Sangada (<i>Nemipterus japonicus</i>)	1	343	27.12	4.50	11.87	34.50	12.97			5.42
P070	Sankata paari (<i>Caranx ignobilis</i>)	1	1295	41.15	13.30	30.89	80.54	14.64			18.12
P071	Sardine (<i>Sardinella longiceps</i>)	1	327	13.37			42.33	16.50			8.29
P072	Shark (<i>Carcharhinus sorrah</i>)	2	83.76	6.85			6.05	3.39			
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	88.26				11.86				
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	97.68	4.04			8.77				
P075	Shelavu (<i>Sphyraena jello</i>)	4	219	7.66	1.07	14.41	11.86	1.62			3.56
P076	Silan (<i>Silonia silondia</i>)	1	3015	99.55			860	49.53	36.12		64.19
P077	Silk fish (<i>Beryx sp.</i>)	1	185	7.35	4.01	7.53	32.87	5.93			2.71
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	1283	65.76			194	256	13.72		48.70
P079	Sole fish (<i>Cynoglossus arel</i>)	1	101			30.56	17.45				
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	159				38.98				
P081	Tar lava (<i>Drepane punctata</i>)	2	124	7.65	3.72		11.98	1.84			1.38
P082	Tholam (<i>Plectorrhinchus schotaf</i>)	2	367	20.25	2.43	13.22	22.18	6.41			7.23

Food Code	Fish Name	No. of Regions	Arachidonic	Eicosa	Docosa	Docosa	Total	Total Mono	Total Poly	Cholesterol
			(C20:4n6)	pentaenoic	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated	
					mg		Fatty Acids	Fatty Acids	Fatty Acids	
			F20D4N6	F20D5N3	F22D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
P063	Rani (<i>Pink perch</i>)	1	163	317		494	2926	1878	1112	69.04
P064	Ray fish, bow head, spotted (<i>Rhina aenyllostoma</i>)	1	64.36	15.87	27.42	93.05	187	98.70	222	13.91
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	57.90	40.85	31.73	172	485	299	325	132
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	89.21	162	33.67	406	861	407	734	38.42
P067	Sadaya (<i>Platax orbicularis</i>)	1	316	86.49	94.23	582	1059	444	1128	61.97
P068	Salmon (<i>Salmo salar</i>)	1	209	406	329	1192	4305	2453	2297	61.27
P069	Sangada (<i>Nemipterus japonicus</i>)	1	99.19	127	88.66	338	1128	513	706	75.77
P070	Sankata paari (<i>Caranx ignobilis</i>)	1	204	398	197	834	3317	1876	1746	64.34
P071	Sardine (<i>Sardinella longiceps</i>)	1	88.19	297		317	1250	630	770	49.12
P072	Shark (<i>Carcharhinus sorrah</i>)	2	34.77	35.47	28.68	121	275	126	230	24.40
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	48.70	23.08		148	264	103	232	55.81
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	39.42	23.66	19.30	77.52	253	137	169	13.75
P075	Shelavu (<i>Sphyraena jello</i>)	4	47.67	116	43.52	207	677	369	431	30.50
P076	Silan (<i>Silonia silondia</i>)	1	60.16	22.45		47.48	3615	3199	1140	58.93
P077	Silk fish (<i>Beryx sp.</i>)	1	58.25	82.20	38.02	286	497	281	506	10.71
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	86.03	171		125	1826	1964	894	68.54
P079	Sole fish (<i>Cynoglossus arel</i>)	1	53.78	78.35	44.56	176	416	167	370	16.00
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	39.38	20.07		75.62	289	173	174	62.47
P081	Tarlava (<i>Drepane punctata</i>)	2	66.49	55.77	60.03	67.22	504	207	265	18.94
P082	Tholam (<i>Plectorrhinchus schotaf</i>)	2	51.15	72.74	65.02	257	856	510	481	59.73

249

Table 7. Fatty Acid Profile

Table 7. Fatty Acid Profile

250

Food Code	Fish Name	No. of Regions	Lauric	Myristic	Pentadecanoic	Palmitic	Stearic	Arachidic	Behenic	Lignoceric	Palmitoleic
			(C12:0)	(C14:0)	(C15:0)	(C16:0)	(C18:0)	(C20:0)	(C22:0)	(C24:0)	(C16:1)
			← mg →								
			F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	F16D1
P083	Tilapia (<i>Oreochromis niloticus</i>)	1		61.56		270	76.21	4.72			113
P084	Tuna (<i>Euthynnus affinis</i>)	5		53.12	11.08	399	184	8.50	3.75		76.97
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1		30.58	8.29	243	137	5.87			35.30
P086	Valava (<i>Chirocentrus nudus</i>)	1		33.97	7.72	262	96.64	3.31			29.78
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2		325	33.96	1352	464	28.87	17.73	7.74	431
P088	Vela meen (<i>Aprion virescens</i>)	1		50.60		1255	528	11.77	11.42		103
P089	Vora (<i>Siganus javus</i>)	2	44.09	144	29.09	767	197	15.68	8.16	1.14	143
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1		22.76	5.18	164	69.44	3.06	2.07		43.98
P091	Xiphinis (<i>Xiphias gladius</i>)	1		39.39	5.47	235	73.36	6.43	3.36		27.21
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1		67.15		1206	526	5.72	12.81		197

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	10.85		131	71.80					29.24
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	5.70	1.01	63.49	57.40	0.99				20.35
Q003	Lobster, brown (<i>Thenu s orientalis</i>)	1	6.83	2.32	56.45	37.70	2.26				19.88
Q004	Lobster, king size (<i>Thenu s orientalis</i>)	1	7.51		95.24	71.66					28.21
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	4.36		52.71	38.05					17.87
Q006	Oyster (<i>Crassostrea sp.</i>)	1	126	27.48	736	190	8.39				137
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	7.19	3.11	65.63	43.57	1.20				25.87
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	5.20	5.31	94.05	72.64					24.59

Food Code	Fish Name	No. of Regions	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	Docosadienoic	α-Linolenic	Eicosatrienoic
			(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C22:2)	(C18:3n3)	(C20:3n6)
			$\leftarrow \text{mg} \rightarrow$								
			F18D1N9	F20D1N9	F22D1N9	F24D1N9	F18D2N6	F20D2	F22D2	F18D3N3	F20D3N6
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	134	7.52			49.44	32.45			7.95
P084	Tuna (<i>Euthynnus affinis</i>)	5	207	8.72	1.69	5.46	23.05	4.76			1.98
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	133				25.61				
P086	Valava (<i>Chirocentrus nudus</i>)	1	73.60	3.48			16.91				
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	603	26.17	6.59	12.16	59.97	9.87			11.94
P088	Vela meen (<i>Aprion virescens</i>)	1	685	46.68		15.80	16.40				
P089	Vora (<i>Siganus javus</i>)	2	278	27.36	7.74	10.31	23.58	5.64			4.76
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	84.28	5.18		2.01	7.65	2.69			1.69
P091	Xiphinis (<i>Xiphias gladius</i>)	1	130	16.28	6.73	3.72	3.95	1.30			0.89
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	905	23.32			290	98.50	18.91		72.11

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	111			16.26					
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	41.99		1.99	5.83	2.42				1.26
Q003	Lobster, brown (<i>Thenu s orientalis</i>)	1	49.96	1.25		1.65	19.92	2.23			1.40
Q004	Lobster, king size (<i>Thenu s orientalis</i>)	1	101			15.75					
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	48.75			11.56	3.26				
Q006	Oyster (<i>Crassostrea sp.</i>)	1	90.00	71.16		55.37					7.36
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	48.27	2.40		12.55	2.04				0.99
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	58.66	5.05		20.99					

Table 7. Fatty Acid Profile

252

Food Code	Fish Name	No. of Regions	Arachidonic	Eicosa	Docosa	Docosa	Total	Total Mono	Total Poly	Cholesterol
			(C20:4n6)	pentaenoic	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated	
			F20D4N6	(C20:5n3)	(C22:5n3)	(C22:6n3)	Fatty Acids	Fatty Acids	Fatty Acids	
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	35.03	14.76		59.16	413	254	199	26.36
P084	Tuna (<i>Euthynnus affinis</i>)	5	69.44	90.61	40.23	345	660	300	575	46.10
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	37.61	40.39	11.68	191	424	168	306	64.06
P086	Valava (<i>Chirocentrus nudus</i>)	1	33.28	38.19	14.57	233	403	107	336	15.60
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	140	422	115	626	2229	1078	1384	67.71
P088	Vela meen (<i>Aprion virescens</i>)	1	190	136	94.40	761	1857	851	1199	35.85
P089	Vora (<i>Siganus javus</i>)	2	102	54.20	123	333	1207	467	647	19.34
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	37.20	33.44	28.12	109	266	135	220	25.33
P091	Xiphinis (<i>Xiphias gladius</i>)	1	16.88	24.11	25.23	61.55	363	184	134	27.59
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	223	156		577	1818	1125	1436	269

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	49.09	82.64		108	214	140	256	53.87
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	31.72	30.35	6.97	67.91	129	64.32	146	23.18
Q003	Lobster, brown (<i>Thenu s orientalis</i>)	1	26.66	23.17	4.72	40.06	106	72.73	118	32.64
Q004	Lobster, king size (<i>Thenu s orientalis</i>)	1	54.59	67.46		68.32	174	129	206	41.13
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	35.64	41.52	5.53	31.76	95.11	66.63	129	7.10
Q006	Oyster (<i>Crassostrea sp.</i>)	1	95.01	256	26.65	210	1087	298	651	32.45
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	22.95	19.83	6.63	35.72	121	76.53	101	70.80
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	54.81	69.78	8.28	50.40	177	88.30	204	19.47

Food Code	Fish Name	No. of Regions	Lauric (C12:0)	Myristic (C14:0)	Pentadecanoic (C15:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	Palmitoleic (C16:1)
			mg								
			F12D0	F14D0	F15D0	F16D0	F18D0	F20D0	F22D0	F24D0	F16D1
R MARINE MOLLUSKS											
R001	Clam, green shell (<i>Perna viridis</i>)	1		42.42	14.06	185	42.78	1.35			57.16
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1		36.15	10.27	256	132	5.94			52.47
R003	Octopus (<i>Octopus vulgaris</i>)	1		17.36		173	135				23.57
R004	Squid, black (<i>Loligo</i> sp.)	1		19.70		201	65.78				6.59
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1		12.75	3.64	135	74.11	1.60			13.13
R006	Squid, red (<i>Loligo duvaucelii</i>)	2		31.31	6.46	323	87.45				12.49
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1		15.78		182	106				6.79
S FRESHWATER FISH AND SHELLFISH											
S001	Cat fish (<i>Tandanus tanaeus</i>)	2	28.88	177		1554	395	16.30	11.03		538
S002	Catla (<i>Catla catla</i>)	6		162		1162	330	15.51			273
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	8.87	94.91		640	217	14.44	5.84		204
S004	Gold fish (<i>Carassius auratus</i>)	2	7.45	77.02		647	154	8.78	3.43		260
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6		58.54		635	161	7.82			132
S006	Rohu (<i>Labeo rohita</i>)	6	6.94	337		2234	571	13.83	19.47		123
S007	Crab (<i>Pachygrapsus</i> sp.)	1		10.85		131	71.80				29.24
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1		4.50		53.55	28.81				14.59
S009	Prawns, small (<i>Macrobrachium</i> sp.)	3		10.71		133	53.52				22.05
S010	Tiger prawns (<i>Macrobrachium</i> sp.)	2		4.78		83.75	45.91				16.21

Table 7. Fatty Acid Profile

254

Food Code	Fish Name	No. of Regions	Oleic	Eicosenoic	Erucic	Nervonic	Linoleic	Eicosadienoic	Docosadienoic	α-Linolenic	Eicosatrienoic											
			(C18:1n9)	(C20:1n9)	(C22:1n9)	(C24:1n9)	(C18:2n6)	(C20:2)	(C22:2)	(C18:3n3)	(C20:3n6)											
			mg																			
F18D1N9 F20D1N9 F22D1N9 F24D1N9 F18D2N6 F20D2 F22D2 F18D3N3 F20D3N6																						
R MARINE MOLLUSKS																						
R001	Clam, green shell (<i>Perna viridis</i>)	1	18.53	16.55			19.74	2.38														
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	60.30	14.05			16.94	29.48														
R003	Octopus (<i>Octopus vulgaris</i>)	1	46.38				9.32															
R004	Squid, black (<i>Loligo</i> sp.)	1	36.20	13.63			8.46															
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	37.90	10.63			3.25	2.32														
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	61.11	9.77			17.81	1.87														
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	37.64	18.13			8.22															
S FRESHWATER FISH AND SHELLFISH																						
S001	Cat fish (<i>Tandanus tanaeus</i>)	2	1428	88.89			458	132	36.82		51.98											
S002	Catla (<i>Catla catla</i>)	6	910	53.36			214	89.97			26.26											
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	493	35.62			190	90.12	20.95		24.90											
S004	Gold fish (<i>Carassius auratus</i>)	2	715	102			302	26.52			24.29											
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6	510	71.60			221	57.41			16.97											
S006	Rohu (<i>Labeo rohita</i>)	6	2401	93.13			531	46.60			44.91											
S007	Crab (<i>Pachygrapsus</i> sp.)	1	111				16.26															
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1	39.93	2.25			17.75	3.91														
S009	Prawns, small (<i>Macrobrachium</i> sp.)	3	130				41.37	14.44														
S010	Tiger prawns (<i>Macrobrachium</i> sp.)	2	95.76	7.92			29.27															

Food Code	Fish Name	No. of Regions	Arachidonic	Eicosa	Docosa	Docosa	Total	Total Mono	Total Poly	Cholesterol
			(C20:4n6)	pentaenoic	pentaenoic	hexaenoic	Saturated	Mono Unsaturated	Poly Unsaturated	
				(C20:5n3)	(C22:5n3)	(C22:6n3)	Fatty Acids	Fatty Acids	Fatty Acids	
← mg →										
			F20D4N6	F20D5N3	F22D5N3	F22D6N3	FASAT	FAMS	FAPU	CHOLC
R MARINE MOLLUSKS										
R001	Clam, green shell (<i>Perna viridis</i>)	1	41.76	80.79	9.94	108	285	92.24	263	43.74
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	47.16	85.90	21.13	217	441	127	418	23.98
R003	Octopus (<i>Octopus vulgaris</i>)	1	121	72.24		181	325	69.95	383	118
R004	Squid, black (<i>Loligo</i> sp.)	1	47.53	70.73		261	287	56.42	388	231
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	57.49	48.52	14.05	178	227	61.67	303	60.32
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	72.08	82.28	29.27	342	448	83.36	545	126
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	67.70	95.50		269	304	62.57	441	324
S FRESHWATER FISH AND SHELLFISH										
S001	Cat fish (<i>Tandanus tanaeus</i>)	2	80.31	78.77		140	2182	2055	978	84.01
S002	Catla (<i>Catla catla</i>)	6	120	123		242	1670	1237	815	64.42
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	137	17.91		119	981	733	600	58.64
S004	Gold fish (<i>Carassius auratus</i>)	2	130	69.13		73.36	1077	625	0.85	
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	6	66.70	42.15		106	863	714	510	66.89
S006	Rohu (<i>Labeo rohita</i>)	6	53.52	23.61		46.72	2047	2618	747	47.72
S007	Crab (<i>Pachygrapsus</i> sp.)	1	49.09	82.64		108	214	140	256	52.91
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	1	17.87	27.14		27.94	86.86	56.77	94.61	87.28
S009	Prawns, small (<i>Macrobrachium</i> sp.)	3	39.35	58.02		12.73	197	152	166	112
S010	Tiger prawns (<i>Macrobrachium</i> sp.)	2	53.06	36.11		17.38	134	120	136	78.87

Table 8

AMINO ACID PROFILE



Table 8. AMINO ACID PROFILE

(All values are expressed in g per 100g protein)

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Luecine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			← g →									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
A CEREALS AND MILLETS												
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	1.86	2.82	4.83	5.45	1.86	1.60	3.98	3.02	1.50	4.34
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	1.98±0.50	2.85±0.04	4.94±0.17	5.50±0.35	1.95±0.12	1.51±0.15	4.75±0.41	2.99±0.21	1.69±0.10	4.30±0.27
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	2.15±0.37	3.45±0.74	8.52±0.86	3.19±0.49	2.11±0.50	1.23±0.33	4.82±1.18	3.55±0.40	1.33±0.30	4.79±1.04
A004	Barley (<i>Hordeum vulgare</i>)	6	2.13±0.23	3.63±0.40	6.49±0.41	3.42±0.19	1.86±0.04	2.20±0.27	4.88±0.44	3.30±0.14	1.28±0.07	4.78±0.49
A005	Jowar (<i>Sorghum vulgare</i>)	6	2.07±0.20	3.45±0.63	12.03±1.51	2.31±0.40	1.52±0.50	1.06±0.30	5.10±0.50	2.96±0.17	1.03±0.21	4.51±0.71
A006	Maize, dry (<i>Zea mays</i>)	6	2.70±0.21	3.67±0.22	12.24±0.57	2.64±0.18	2.10±0.17	1.55±0.14	5.14±0.29	3.23±0.29	0.57±0.12	5.41±0.71
A007	Maize, tender, local (<i>Zea mays</i>)	6	2.15±0.47	3.55±0.21	10.09±1.65	2.02±0.39	1.67±0.06	1.18±0.32	3.95±1.15	2.97±0.42	0.58±0.07	3.54±0.37
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	2.16±0.18	3.45±0.08	10.61±0.71	2.06±0.17	1.76±0.09	1.36±0.15	3.05±0.21	2.88±0.53	0.70±0.05	3.88±0.29
A009	Quinoa(<i>Chenopodium quinoa</i>)	1	2.98	3.75	6.08	5.55	2.24	1.85	4.35	3.01	1.25	4.55
A010	Ragi (<i>Eleusine coracana</i>)	5	2.37±0.46	3.70±0.44	8.86±0.54	2.83±0.34	2.74±0.27	1.48±0.23	5.70±1.27	3.84±0.45	0.91±0.30	5.65±0.44
A011	Rice flakes (<i>Oryza sativa</i>)	6	2.28±0.10	3.62±0.79	8.05±0.64	3.62±0.27	2.11±0.51	1.65±0.47	5.22±0.24	3.17±0.40	1.11±0.13	5.40±1.23
A012	Rice puffed (<i>Oryza sativa</i>)	6	2.11±0.13	3.68±0.88	7.75±0.47	3.14±0.21	2.00±0.32	1.34±0.13	5.33±0.27	3.03±0.44	1.07±0.29	5.37±1.33
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	2.36±0.18	4.08±0.51	8.40±0.55	3.63±0.29	2.39±0.26	2.02±0.12	5.50±0.49	3.38±0.25	1.00±0.17	6.72±0.36
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	2.35±0.18	4.14±0.08	8.08±0.06	3.42±0.10	2.48±0.24	2.15±0.08	5.14±0.10	3.24±0.12	1.15±0.06	6.26±0.13
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	2.45±0.30	4.29±0.23	8.09±0.40	3.70±0.39	2.60±0.34	1.84±0.18	5.36±0.43	3.28±0.27	1.27±0.14	6.06±0.02
A016	Samai (<i>Panicum miliare</i>)	6	2.35±0.18	4.14±0.08	8.08±0.06	2.42±0.10	2.21±0.10	1.85±0.14	6.14±0.10	4.24±0.12	1.35±0.10	5.31±0.16
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	2.14±0.07	4.55±0.22	11.96±1.65	1.42±0.17	2.69±0.16	1.92±0.05	6.27±0.34	3.89±0.16	1.32±0.19	5.49±0.23
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	1.95±0.23	3.19±0.27	6.22±0.46	2.05±0.18	1.64±0.20	2.03±0.27	4.29±0.28	2.34±0.08	1.04±0.16	4.01±0.44
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	2.56±0.25	3.78±0.21	6.13±0.48	2.42±0.22	1.77±0.08	2.24±0.18	5.03±0.14	2.58±0.14	0.99±0.16	5.12±0.48

Table 8. AMINO ACID PROFILE

(All values are expressed in g per 100g protein)

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
			$\xleftarrow{\text{g}} \xrightarrow{\text{g}}$							
A CEREALS AND MILLETS										
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	4.26	7.77	12.57	16.12	8.50	3.76	7.79	2.85
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	3.83±0.64	7.21±0.91	12.70±2.25	17.39±1.68	8.28±0.35	3.83±0.45	7.27±0.46	3.10±0.34
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	7.68±1.01	4.54±0.62	7.77±1.29	17.42±1.69	3.52±0.17	5.30±0.26	4.44±0.41	2.67±0.51
A004	Barley (<i>Hordeum vulgare</i>)	6	4.20±0.79	5.22±0.20	6.51±0.61	26.75±1.15	4.03±0.61	9.79±0.87	4.80±0.55	2.68±0.41
A005	Jowar (<i>Sorghum vulgare</i>)	6	9.19±1.12	3.96±0.43	7.09±0.86	21.54±2.81	3.08±0.25	6.99±0.92	4.02±0.43	3.61±0.25
A006	Maize, dry (<i>Zea mays</i>)	6	7.73±0.46	4.20±0.24	6.55±0.59	19.39±0.70	3.27±0.15	7.88±0.71	4.58±0.44	3.71±0.18
A007	Maize, tender, local (<i>Zea mays</i>)	6	9.90±5.07	3.05±0.42	9.24±1.45	20.05±2.14	4.50±2.09	7.91±0.97	6.07±0.91	3.15±0.37
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	7.61±0.20	3.63±0.21	8.55±1.21	18.72±1.81	4.65±0.37	8.60±0.11	5.62±0.12	3.26±0.22
A009	Quinoa(<i>Chenopodium quinoa</i>)	1	4.35	7.85	8.40	13.75	4.80	5.67	4.56	1.98
A010	Ragi (<i>Eleusine coracana</i>)	5	6.71±0.80	4.33±0.48	6.40±0.53	20.22±0.73	3.59±0.35	5.42±0.42	4.81±0.57	3.37±0.80
A011	Rice flakes (<i>Oryza sativa</i>)	6	6.34±0.96	7.62±0.40	9.20±0.82	18.60±1.02	4.35±0.30	4.27±0.36	4.78±0.93	3.75±0.51
A012	Rice puffed (<i>Oryza sativa</i>)	6	6.19±1.01	7.04±0.50	8.79±1.05	17.96±0.97	4.03±0.39	4.04±0.55	4.62±0.55	4.13±0.54
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	6.60±0.75	7.69±0.37	8.68±0.46	18.75±1.03	4.28±0.19	4.33±0.39	4.64±0.62	4.36±0.36
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	5.60±0.10	7.95±0.10	8.51±0.29	19.22±0.24	4.19±0.14	4.04±0.10	4.60±0.09	4.43±0.09
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	5.51±0.40	7.72±0.55	8.73±0.80	18.92±1.76	4.18±0.16	4.31±0.78	4.95±0.21	4.36±0.41
A016	Samai (<i>Panicum miliare</i>)	6	8.60±0.10	5.96±0.11	5.51±0.29	20.22±0.24	3.43±0.33	6.04±0.10	5.60±0.09	3.43±0.09
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	11.00±0.36	3.18±0.19	5.61±0.88	18.25±1.87	3.12±0.29	7.33±0.53	5.50±0.31	3.87±0.38
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	2.98±0.37	3.49±0.28	4.63±0.39	31.57±1.80	3.21±0.20	9.23±0.64	4.77±0.39	2.62±0.15
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	3.88±1.11	4.70±0.21	5.06±0.16	29.61±2.08	3.76±0.56	10.27±0.84	4.73±0.49	2.10±0.06

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	2.65±0.31	3.83±0.20	6.81±0.33	3.13±0.26	1.75±0.21	2.35±0.23	4.75±0.38	3.01±0.17	1.40±0.10	5.11±0.05
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	2.23±0.25	3.48±0.28	6.61±0.66	2.42±0.10	1.62±0.36	1.96±0.05	4.46±2.10	2.46±0.34	1.11±0.15	4.28±0.25
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	2.38±0.27	3.43±0.26	6.71±0.59	2.54±0.13	1.57±0.23	1.79±0.03	4.77±0.32	2.71±0.15	1.04±0.12	4.47±0.39
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	1.76±0.11	1.56±0.56	5.23±1.23	1.83±0.04	1.17±0.14	1.83±0.02	4.90±1.74	2.26±0.16	1.07±0.09	3.54±1.35
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	1.63±0.23	1.46±0.13	5.63±0.24	1.54±0.30	1.15±0.08	1.85±0.08	4.96±2.06	2.25±0.28	0.99±0.14	3.71±0.24

B GRAIN LEGUMES

261

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	2.39±0.34	4.25±0.26	6.91±0.65	6.06±0.52	1.12±0.31	0.84±0.14	5.97±1.06	3.24±0.34	1.09±0.25	4.09±0.41
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	2.51±0.18	4.34±0.23	7.40±0.31	6.59±0.25	1.16±0.16	1.27±0.09	6.26±0.70	3.55±0.31	0.95±0.07	4.58±0.51
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	2.64±0.11	3.75±0.92	7.93±0.45	6.22±0.21	1.31±0.35	0.49±0.04	5.68±0.91	2.99±0.19	1.07±0.12	4.61±1.06
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	2.85±0.08	3.42±0.82	7.58±0.62	6.35±0.53	1.17±0.38	0.58±0.12	5.90±0.38	2.87±0.63	0.98±0.14	4.11±0.88
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	2.93±0.42	4.10±0.58	7.49±1.23	6.67±1.26	1.38±0.16	0.57±0.09	5.47±0.49	3.80±0.61	1.05±0.03	4.87±0.59
B006	Cowpea, white (<i>Vigna catjang</i>)	1	3.25	4.40	7.96	7.14	1.53	0.60	5.63	4.10	0.92	5.31
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	3.21	4.57	8.91	6.79	1.36	0.59	5.88	4.12	0.73	5.24
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	3.23	4.59	8.88	6.75	1.38	0.52	5.72	3.97	0.78	5.16
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	2.82±0.76	4.41±0.36	8.48±0.66	6.13±0.68	1.40±0.18	0.57±0.09	5.76±0.32	3.97±0.31	0.89±0.07	4.96±0.36
B010	Green gram, dal (<i>Vigna radiata</i>)	6	2.55±0.26	4.07±1.11	7.90±0.99	6.09±1.06	1.05±0.23	0.43±0.10	6.20±0.61	3.36±0.60	1.24±0.42	5.21±1.28
B011	Green gram, whole (<i>Vigna radiata</i>)	6	2.85±0.26	4.17±0.37	7.45±0.50	6.60±0.33	1.21±0.20	0.74±0.03	6.21±0.39	3.20±0.18	1.02±0.14	5.45±0.37
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	2.70±0.28	3.72±0.83	6.79±0.81	6.24±0.57	0.73±0.30	0.75±0.19	8.08±0.60	3.32±0.10	1.08±0.25	4.16±0.96
B013	Lentil dal (<i>Lens culinaris</i>)	6	1.93±0.32	3.74±0.91	7.10±0.86	6.12±0.71	0.54±0.19	0.55±0.07	5.10±0.73	3.31±0.24	0.81±0.07	5.02±0.39
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	2.07±0.14	4.17±0.05	7.36±0.34	6.78±0.51	0.84±0.03	1.18±0.04	4.61±0.68	3.35±0.05	0.76±0.04	4.85±0.06
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	2.26	4.12	7.47	6.43	0.84	1.06	4.67	3.49	0.75	4.75

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	3.64±0.21	5.13±0.33	5.44±0.33	27.06±1.76	4.19±0.23	10.25±1.49	4.80±0.14	3.12±0.31
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	3.48±0.42	5.36±0.54	5.15±0.19	30.48±5.06	4.27±0.19	10.49±0.52	4.87±0.17	2.46±1.23
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	3.46±0.35	4.34±0.20	4.94±0.21	31.05±1.75	3.50±0.11	9.49±0.84	4.44±0.67	3.00±0.24
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	3.59±0.13	2.98±0.43	5.39±0.97	31.96±1.20	4.54±1.77	9.89±1.65	5.33±0.62	2.18±0.76
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	3.74±0.55	2.84±0.49	4.78±0.75	34.08±0.60	4.35±0.47	9.43±0.72	5.35±0.41	1.92±0.82

B GRAIN LEGUMES

262	B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	4.11±0.36	8.83±0.53	11.73±0.80	16.52±0.10	3.46±0.24	3.53±0.25	4.56±0.45	2.72±0.29
	B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	4.67±0.56	8.59±0.58	11.78±1.60	17.27±1.08	3.95±0.16	3.74±0.19	5.10±0.65	2.88±0.15
	B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	4.73±0.57	6.25±0.47	11.96±0.71	18.38±1.37	3.38±0.26	3.73±0.28	5.54±0.61	3.04±0.23
	B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	4.64±0.82	6.06±0.49	13.12±1.60	19.00±1.10	3.80±0.41	4.03±0.13	5.29±0.69	3.06±0.17
	B005	Cowpea, brown (<i>Vigna catjang</i>)	6	4.24±0.57	7.10±1.36	10.11±1.15	19.02±2.19	4.69±0.51	4.60±0.28	4.44±0.18	2.83±0.26
	B006	Cowpea, white (<i>Vigna catjang</i>)	1	5.06	7.44	11.01	18.20	4.09	4.05	4.80	3.25
	B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	5.47	7.49	10.47	17.14	4.74	4.43	5.76	4.00
	B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	5.37	7.71	10.07	17.28	4.25	4.43	5.61	3.85
	B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	5.19±0.37	7.01±0.73	10.61±0.60	16.59±2.32	4.04±0.28	4.24±0.31	5.51±0.40	3.84±0.21
	B010	Green gram, dal (<i>Vigna radiata</i>)	6	4.59±0.33	6.51±0.58	12.10±2.16	17.43±2.22	3.70±0.53	3.67±0.67	5.01±0.53	2.95±0.44
	B011	Green gram, whole (<i>Vigna radiata</i>)	6	4.94±0.77	6.62±0.30	10.99±0.94	18.59±1.15	3.78±0.39	4.07±0.49	5.50±0.82	2.83±0.27
	B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	4.60±0.75	5.87±0.27	11.24±1.19	18.54±1.69	4.03±0.34	3.72±0.34	5.19±0.75	3.18±0.26
	B013	Lentil dal (<i>Lens culinaris</i>)	6	4.45±0.70	7.92±0.44	12.69±1.67	18.31±0.61	3.67±0.26	3.63±0.31	4.90±0.64	2.95±0.21
	B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	5.75±0.61	7.44±2.06	12.48±1.70	17.25±1.68	4.78±0.08	5.01±1.49	5.51±0.21	2.40±0.77
	B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	5.59	7.74	12.93	16.48	4.89	4.50	5.68	2.81

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	2.80±0.29	4.17±0.57	7.85±0.73	6.63±0.60	0.97±0.20	0.43±0.06	5.85±0.70	3.63±0.11	0.92±0.04	4.90±0.47
B017	Peas, dry (<i>Pisum sativum</i>)	6	2.34±0.09	3.87±0.46	7.02±0.38	7.12±0.51	0.68±0.19	0.82±0.15	4.76±0.23	3.65±0.15	0.86±0.19	4.67±0.66
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	2.44	3.91	6.84	6.01	0.79	0.72	5.32	3.91	1.22	4.83
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	2.71±0.22	4.27±0.50	7.93±0.43	6.67±0.18	0.97±0.26	0.62±0.21	5.91±0.56	4.35±0.21	1.04±0.13	5.21±0.69
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	2.70±0.30	4.23±0.38	7.78±0.71	6.71±0.81	0.88±0.40	0.70±0.18	5.90±0.56	4.18±0.65	1.05±0.27	5.07±0.71
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	3.16±0.27	3.42±0.43	6.73±0.56	6.16±0.28	0.87±0.22	0.67±0.12	8.76±1.02	3.26±0.17	0.71±0.11	4.38±0.30
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	3.28±0.13	3.38±0.49	6.88±0.48	7.07±0.37	0.92±0.32	0.91±0.07	8.71±0.82	3.38±0.21	0.75±0.17	4.17±0.65
B023	Ricebean (<i>Vigna umbellata</i>)	1	3.23	3.80	7.86	6.75	1.12	1.02	7.56	3.52	0.82	5.23
B024	Soybean, brown (<i>Glycine max</i>)	6	2.40±0.28	4.57±0.33	8.27±0.17	7.67±0.11	1.46±0.11	1.56±0.08	4.73±0.77	3.47±0.17	1.59±0.26	5.04±0.59
B025	Soybean, white (<i>Glycine max</i>)	1	2.55	4.59	8.14	7.18	1.55	1.44	5.01	3.88	1.68	5.53

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	2.39	2.80	7.58	7.62	1.28	0.85	6.03	5.39	1.77	5.99
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	2.12±0.35	4.39±0.65	8.04±0.79	5.48±0.35	1.38±0.06	0.82±0.14	5.68±0.65	4.16±0.36	1.01±0.08	5.03±0.82
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	2.01	4.31	8.20	5.58	1.63	0.96	4.77	4.04	1.20	5.24
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	2.15±0.15	4.33±1.25	8.40±0.89	5.26±1.33	1.44±0.39	1.06±0.22	5.88±0.10	4.39±0.60	1.08±0.11	4.98±1.37
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	1.95±0.24	4.05±0.18	7.66±0.48	4.99±0.15	1.25±0.03	0.71±0.09	5.00±0.82	4.40±0.30	0.89±0.21	4.18±1.06
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	1.90	3.03	7.57	4.74	1.10	0.75	4.34	4.44	1.17	4.12
C007	Basella leaves (<i>Basella alba</i>)	2	2.20	3.30	7.68	5.16	0.90	0.79	4.17	4.01	1.88	3.88
C008	Bathua leaves (<i>Chenopodium album</i>)	2	1.76	4.83	8.99	3.77	1.77	0.89	5.73	4.95	1.08	6.07
C009	Beet greens (<i>Beta vulgaris</i>)	6	1.59±0.16	2.62±0.14	5.17±0.20	4.34±0.65	0.76±0.24	0.92±0.06	3.63±0.05	3.76±0.40	0.82±0.15	4.27±0.07

Table 8. Amino Acid Profile

264

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	5.00±0.42	7.68±0.76	10.54±0.81	16.89±1.33	3.68±0.31	3.95±0.48	5.04±0.38	2.92±0.37
B017	Peas, dry (<i>Pisum sativum</i>)	6	4.51±0.44	8.09±0.30	11.34±0.72	17.52±0.81	4.19±0.16	3.73±0.19	4.83±0.38	3.25±0.19
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	4.68	5.81	12.96	18.89	3.42	3.23	5.10	3.10
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	4.59±0.34	5.96±0.25	11.35±0.95	16.60±0.73	3.90±0.12	3.63±0.27	5.81±0.44	3.24±0.14
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	4.57±0.53	6.10±0.85	10.50±0.85	16.01±2.17	3.78±0.49	3.40±0.58	5.74±0.90	3.12±0.37
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	4.49±0.87	5.87±0.34	10.26±1.05	21.50±1.33	3.23±0.18	3.94±0.53	4.26±0.43	2.32±0.25
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	4.35±0.41	5.98±0.33	10.41±0.95	20.27±0.94	3.33±0.25	3.93±0.47	4.40±0.41	2.54±0.25
B023	Ricebean (<i>Vigna umbellata</i>)	1	4.76	5.58	10.12	17.32	4.28	4.20	4.83	3.12
B024	Soybean, brown (<i>Glycine max</i>)	6	4.32±0.61	6.62±0.50	11.47±1.19	18.27±1.26	3.79±0.31	4.40±0.20	4.91±0.66	3.21±0.30
B025	Soybean, white (<i>Glycine max</i>)	1	4.33	7.33	11.40	16.78	3.89	3.24	4.62	3.32

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	7.22	4.58	10.61	15.78	5.47	4.63	4.44	3.76
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	6.55±0.66	6.10±0.49	9.22±0.71	12.75±1.46	5.59±0.53	4.45±0.43	4.62±0.28	3.69±0.38
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	6.56	5.83	9.14	12.86	5.12	4.07	4.50	3.01
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	7.89±0.65	6.61±1.05	9.91±1.40	13.04±2.34	5.93±0.67	4.93±0.67	4.89±0.15	3.76±0.13
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	8.42±1.34	5.78±0.81	10.87±1.05	11.77±0.21	6.10±0.48	5.39±0.71	5.29±0.33	3.43±0.40
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	8.34	5.40	9.74	11.98	6.10	5.31	5.23	3.42
C007	Basella leaves (<i>Basella alba</i>)	2	7.42	5.18	9.22	12.97	5.71	4.83	4.61	3.44
C008	Bathua leaves (<i>Chenopodium album</i>)	2	6.52	5.04	10.04	13.68	7.18	4.72	4.16	3.98
C009	Beet greens (<i>Beta vulgaris</i>)	6	6.19±0.32	2.91±0.50	6.91±0.71	12.10±0.67	4.25±0.13	3.96±0.13	3.76±0.52	2.96±0.20

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	0.80±0.09	2.05±0.26	7.87±0.65	2.30±0.41	0.72±0.17	0.42±0.26	4.58±1.11	4.25±0.60	1.00±0.45	3.46±0.36
C011	Betel leaves, small (<i>Piper betle</i>)	4	0.81±0.03	2.59±1.26	7.86±1.60	2.27±0.13	0.76±0.23	0.38±0.10	4.73±1.81	4.57±0.42	0.69±0.18	3.93±1.61
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	1.79	3.58	5.04	3.50	1.34	0.67	3.23	4.30	0.93	4.74
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	1.97	5.72	5.69	5.78	1.06	0.94	3.27	4.01	1.24	5.40
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	1.62	3.81	6.67	3.62	1.11	0.91	4.56	4.04	1.24	5.64
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata f. alba</i>)	6	1.56±0.36	3.56±0.61	5.31±0.79	3.12±0.88	1.06±0.22	0.90±0.23	2.56±0.64	3.76±0.56	0.93±0.04	4.83±1.23
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata f. rubra</i>)	2	1.62	3.56	5.31	2.85	0.85	0.63	2.21	2.67	0.82	5.47
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	1.88±0.19	3.37±0.16	5.36±0.29	4.01±0.08	0.99±0.09	0.68±0.04	4.16±0.41	4.01±0.04	1.12±0.34	4.93±0.38
265	C018 Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	3.40±1.66	3.51±1.02	7.45±0.50	4.26±0.62	1.79±0.48	1.07±0.30	4.43±0.74	4.53±0.25	1.01±0.30	4.64±1.52
	C019 Drumstick leaves (<i>Moringa oleifera</i>)	3	2.06±0.21	3.10±1.17	6.70±0.59	4.38±0.29	0.92±0.17	0.75±0.04	6.45±0.58	3.75±0.47	1.27±0.23	4.38±1.28
	C020 Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	2.40±0.23	4.47±0.55	7.50±0.63	5.88±1.09	1.28±0.10	0.74±0.19	5.52±0.23	4.90±0.61	0.99±0.13	6.27±0.60
	C021 Garden cress (<i>Lepidium sativum</i>)	2	1.42	4.51	9.23	4.54	1.95	0.67	4.72	4.95	1.26	6.17
	C022 Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	2.61±0.11	3.64±0.79	7.60±0.37	5.61±0.26	1.31±0.11	0.73±0.13	5.04±0.28	4.63±0.16	1.07±0.25	4.55±1.16
	C023 Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	2.72	4.34	8.60	6.03	1.76	0.86	5.65	5.10	1.04	6.02
	C024 Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	1.96	4.31	7.20	4.27	1.37	0.95	4.93	4.45	1.05	5.70
	C025 Lettuce (<i>Lactuca sativa</i>)	3	1.74±0.19	3.49±1.44	6.90±1.45	5.22±0.37	0.95±0.37	0.87±0.10	3.61±1.49	4.50±0.57	1.23±0.41	4.95±0.58
	C026 Mustard leaves (<i>Brassica juncea</i>)	3	1.91±0.23	3.22±0.15	6.57±0.01	5.42±0.34	0.74±0.09	1.02±0.13	3.53±0.67	4.08±0.57	1.31±0.14	3.52±0.43
	C027 Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	2.48	3.78	7.98	6.26	1.96	1.12	5.89	5.03	1.23	5.67
266	C028 Parsley (<i>Petroselinum crispum</i>)	3	1.76±0.16	4.78±0.24	7.82±0.82	5.75±0.86	1.32±0.13	0.87±0.05	5.31±0.39	4.91±0.39	1.68±0.06	6.19±0.33
	C029 Ponnaganni (<i>Alternanthera sessilis</i>)	2	1.87	4.89	8.77	5.01	1.58	0.93	5.41	5.35	1.18	5.95
	C030 Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	1.63±0.53	5.27±0.07	8.85±0.22	4.90±0.17	0.99±0.27	0.85±0.07	6.40±0.12	4.52±0.30	1.76±0.05	5.82±0.11

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	8.68±0.82	4.94±0.51	12.59±0.61	13.33±1.59	7.50±1.22	5.43±0.79	6.16±0.69	3.48±0.27
C011	Betel leaves, small (<i>Piper betle</i>)	4	7.61±1.58	4.59±0.57	11.69±0.47	12.99±1.39	7.88±1.42	5.13±0.87	6.21±0.96	3.37±0.28
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	4.63	7.63	12.36	20.82	4.54	8.89	5.45	2.37
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	6.37	5.84	10.84	21.42	3.82	3.76	5.82	2.05
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	7.68	4.32	11.13	21.91	5.61	5.35	4.20	2.78
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	6.26±0.95	4.57±1.62	10.55±1.92	26.30±5.17	3.24±0.74	3.98±0.85	4.02±0.76	2.11±0.29
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	6.17	4.67	11.53	28.60	3.04	4.34	4.22	2.29
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	6.82±0.41	5.89±0.88	11.76±1.28	22.09±2.64	3.96±0.14	4.63±0.51	5.14±0.16	0.77±0.99
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	9.40±2.53	5.84±0.43	8.55±3.08	15.25±1.91	4.66±0.50	5.01±0.18	4.52±0.32	3.78±0.21
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	7.18±0.84	5.56±0.61	11.94±1.80	16.87±2.55	4.60±0.17	4.00±0.37	4.79±0.55	2.87±0.23
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	6.06±1.35	5.45±0.97	13.48±2.09	11.12±2.92	5.21±0.45	4.92±0.89	3.94±0.88	3.55±0.26
C021	Garden cress (<i>Lepidium sativum</i>)	2	7.15	4.41	12.48	15.70	5.79	5.06	4.00	3.50
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	7.30±1.61	6.04±0.39	11.78±1.43	12.63±0.43	5.17±0.45	4.31±0.14	4.88±0.63	3.40±0.19
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	6.79	6.92	12.21	12.82	5.57	4.69	4.79	3.80
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	6.76	5.30	10.33	18.00	5.31	5.39	4.48	2.90
C025	Lettuce (<i>Lactuca sativa</i>)	3	6.51±1.32	4.77±0.70	11.32±1.55	16.10±3.52	5.68±0.33	4.51±0.41	3.80±1.00	3.00±0.57
C026	Mustard leaves (<i>Brassica juncea</i>)	3	6.60±0.38	5.74±1.04	10.86±1.05	18.67±1.11	5.31±0.37	4.65±0.63	5.11±0.53	3.21±0.17
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	5.86	6.58	9.58	12.86	4.87	4.76	4.61	3.48
C028	Parsley (<i>Petroselinum crispum</i>)	3	7.18±0.42	4.53±0.18	11.18±0.12	12.86±0.09	5.06±0.02	4.63±0.55	4.56±0.21	3.00±0.44
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	6.83	4.67	9.32	14.56	6.02	5.40	4.46	3.25
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	5.62±1.10	6.02±1.00	11.79±1.10	14.36±0.04	5.50±0.35	5.25±0.54	4.65±0.19	3.46±0.22

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
C031	Radish leaves (<i>Raphanus sativus</i>)	6	1.96±0.41	3.59±0.82	6.89±1.11	5.34±0.50	1.01±0.35	0.86±0.14	6.00±3.77	3.99±0.87	1.39±0.52	4.26±1.65
C032	Rumex leaves (<i>Rumex patientia</i>)	2	2.84	3.57	6.82	4.46	0.88	0.59	7.92	4.69	1.24	3.97
C033	Spinach (<i>Spinacia oleracea</i>)	6	2.18±0.16	4.31±0.29	8.70±0.59	4.68±0.13	1.33±0.05	0.84±0.06	5.38±0.46	4.70±0.26	1.53±0.11	5.83±0.38
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	2.19±0.05	4.20±0.04	8.70±0.67	4.69±0.21	1.26±0.10	0.63±0.03	4.86±0.59	4.64±0.34	1.47±0.06	5.65±0.38

D OTHER VEGETABLES

267	D001	Ash gourd (<i>Benincasa hispida</i>)	6	2.58±1.06	4.31±0.72	5.67±0.45	3.39±0.69	1.56±0.37	0.83±0.17	3.22±0.70	3.65±0.38	0.72±0.30	5.11±0.62
	D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	1.73	2.19	6.24	4.82	1.04	0.49	5.57	3.90	0.95	3.69
	D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	3.23±0.20	3.96±0.35	8.31±0.26	6.70±0.28	1.46±0.16	0.62±0.09	5.13±0.23	4.43±0.42	0.88±0.16	4.54±0.27
	D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	3.53±0.39	4.74±0.28	7.40±0.52	6.13±0.20	1.55±0.08	0.94±0.13	2.60±0.37	4.83±0.33	1.28±0.10	6.49±0.29
	D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	3.17±0.33	4.71±0.36	7.19±0.33	6.63±0.50	1.49±0.12	0.98±0.39	3.15±0.48	4.72±0.39	1.42±0.20	6.51±0.41
	D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	3.71	4.85	7.40	6.45	1.62	0.85	2.98	4.61	1.32	6.76
	D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	1.80±0.25	4.98±0.51	7.74±0.49	4.81±0.61	0.94±0.15	0.57±0.07	3.73±0.70	4.18±0.42	1.60±0.08	6.58±0.53
	D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	2.10±0.42	5.20±0.27	7.80±0.50	4.97±0.86	0.97±0.26	0.60±0.14	3.41±0.90	4.62±0.14	1.67±0.23	6.64±0.28
	D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	2.16	5.19	7.88	5.02	0.88	0.70	3.71	4.62	1.46	6.98
	D010	Brinjal-1 (<i>Solanum melongena</i>)	1	1.58	3.75	5.49	4.49	0.62	0.66	4.73	2.50	1.12	3.32
	D011	Brinjal-2 (<i>Solanum melongena</i>)	1	1.57	3.23	4.53	4.03	0.80	0.76	4.40	2.54	0.66	4.15
	D012	Brinjal-3 (<i>Solanum melongena</i>)	2	1.98	3.80	5.53	3.87	0.88	0.67	5.42	3.08	0.68	5.20
	D013	Brinjal-4 (<i>Solanum melongena</i>)	4	2.36±0.14	3.79±0.42	5.18±0.91	4.24±0.21	0.78±0.13	0.79±0.10	4.30±0.18	2.86±0.56	0.78±0.03	4.15±1.14
	D014	Brinjal-5 (<i>Solanum melongena</i>)	3	1.67±0.18	3.99±0.52	6.14±0.33	3.82±0.10	0.95±0.06	0.79±0.05	4.52±0.15	3.23±0.13	0.72±0.06	5.39±0.36

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
C031	Radish leaves (<i>Raphanus sativus</i>)	6	7.90±0.77	4.80±0.73	9.71±0.80	17.10±3.08	5.50±0.39	4.04±1.25	4.73±0.62	3.05±0.48
C032	Rumex leaves (<i>Rumex patientia</i>)	2	7.99	5.00	10.22	15.67	7.48	3.99	5.79	2.53
C033	Spinach (<i>Spinacia oleracea</i>)	6	6.78±0.42	5.41±0.36	9.24±0.71	14.77±1.57	5.70±0.25	4.70±0.59	4.40±0.22	3.95±0.32
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	6.63±0.61	5.58±0.20	8.29±1.27	13.45±1.16	5.81±0.50	4.68±0.85	4.32±0.27	3.93±0.28

D OTHER VEGETABLES

268	D001	Ash gourd (<i>Benincasa hispida</i>)	6	5.66±0.64	7.83±2.40	10.67±1.94	17.95±1.22	5.59±1.14	3.99±0.66	4.06±0.25	2.88±0.73
	D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	4.85	4.63	14.57	11.85	4.48	7.85	5.12	3.94
	D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	5.62±0.35	6.07±0.08	11.88±0.95	16.07±0.00	4.76±0.37	4.68±0.24	5.50±0.39	2.83±0.14
	D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	4.90±0.90	13.97±1.79	7.65±0.63	8.50±0.49	5.45±0.27	4.74±0.38	4.11±0.68	4.77±0.40
	D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	4.79±0.42	13.01±1.46	7.83±1.58	8.74±1.41	5.26±0.33	4.75±0.38	4.26±0.89	4.61±0.32
	D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	5.64	12.77	8.34	8.90	5.34	4.66	4.41	4.68
	D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	7.18±0.79	5.95±0.62	9.15±0.73	17.27±1.15	5.08±0.34	4.64±0.60	4.86±0.43	3.08±0.36
	D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	6.91±1.07	5.95±1.38	9.23±0.54	16.19±0.33	5.12±0.54	4.74±0.37	5.10±0.27	3.56±0.64
	D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	8.94	6.19	9.33	15.69	4.95	4.85	4.74	3.65
	D010	Brinjal-1 (<i>Solanum melongena</i>)	1	5.59	4.42	15.95	20.57	4.44	3.85	3.34	2.26
	D011	Brinjal-2 (<i>Solanum melongena</i>)	1	3.72	5.14	16.15	20.56	3.40	3.54	3.09	2.30
	D012	Brinjal-3 (<i>Solanum melongena</i>)	2	3.84	4.55	14.44	20.14	3.77	3.55	3.62	2.59
	D013	Brinjal-4 (<i>Solanum melongena</i>)	4	5.03±0.73	5.27±0.59	15.98±0.99	20.30±1.30	3.97±0.55	3.74±0.50	4.03±0.53	2.68±0.35
	D014	Brinjal-5 (<i>Solanum melongena</i>)	3	4.98±0.67	5.49±0.46	14.14±1.77	21.64±2.20	3.86±0.49	3.76±0.78	3.52±0.39	3.15±0.16

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	2.31	3.14	5.77	3.67	0.76	0.63	4.60	2.69	0.68	3.86
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	2.11	3.44	6.18	4.25	0.95	0.99	4.85	3.03	0.70	4.72
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	2.47±0.16	4.62±0.45	6.84±0.52	5.27±0.35	0.94±0.02	0.76±0.15	4.84±0.31	2.94±0.12	0.60±0.12	5.77±0.43
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	2.39	4.44	6.51	4.94	1.03	0.81	4.31	2.97	0.75	5.66
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	1.72	3.38	5.63	3.93	0.59	0.59	4.46	2.71	1.07	4.50
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	1.79±0.28	3.35±1.00	5.24±0.90	3.15±0.64	0.81±0.18	0.79±0.12	4.75±0.28	3.04±0.38	0.73±0.28	4.36±1.45
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	2.71	3.98	5.68	4.06	1.00	0.51	4.43	3.33	0.71	5.42
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	2.30	4.12	5.77	4.66	0.76	0.84	5.47	3.43	0.80	5.98
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	2.12±0.26	3.98±0.47	5.34±0.80	4.26±0.18	0.84±0.21	0.63±0.18	4.29±0.33	2.84±0.34	0.90±0.10	4.82±0.26
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	1.64±0.26	3.09±0.55	5.10±0.91	3.55±0.28	0.70±0.22	0.53±0.14	4.51±0.75	2.85±0.22	0.91±0.20	4.48±1.18
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	2.21	3.90	6.04	3.23	0.78	0.59	3.52	2.92	0.73	4.84
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	2.24	3.79	5.60	4.70	0.80	0.84	4.35	3.08	0.89	4.97
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	1.67±0.26	3.14±0.60	5.45±0.42	3.29±0.03	0.60±0.31	0.49±0.15	4.41±0.13	2.51±0.35	0.89±0.21	3.31±1.31
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	1.93±0.31	3.73±0.59	6.23±0.69	3.90±0.97	0.84±0.32	0.63±0.16	4.63±0.87	2.95±0.42	0.83±0.21	3.75±1.73
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	1.88±0.35	3.63±0.46	5.70±0.70	3.35±0.30	0.97±0.15	0.77±0.16	5.69±0.71	3.07±0.05	0.86±0.38	4.81±0.60
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	2.07	3.15	5.44	3.40	0.68	0.71	4.87	3.24	0.97	4.60
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	1.98±0.37	3.63±0.73	5.61±0.78	3.81±0.75	0.82±0.20	0.71±0.16	4.70±0.68	2.96±0.36	0.80±0.21	4.60±1.15
D032	Broad beans (<i>Vicia faba</i>)	3	3.16±0.63	4.28±0.12	7.63±0.15	5.66±0.50	0.65±0.81	0.55±0.03	3.86±0.59	3.40±0.66	0.88±0.02	5.41±0.16
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	1.72±0.79	3.79±0.95	5.68±0.57	3.47±1.08	1.24±0.40	0.98±0.04	3.49±1.26	4.05±0.56	0.96±0.15	5.17±0.78
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	1.16±0.15	3.61±0.17	5.40±0.21	3.67±0.12	1.10±0.14	1.13±0.15	3.16±0.40	4.14±0.17	0.92±0.12	5.17±0.26
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	1.13±0.23	3.92±0.20	5.29±0.28	3.80±0.33	1.18±0.20	1.19±0.21	2.98±0.19	4.31±0.71	0.99±0.22	5.24±0.48
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	1.80±0.19	3.84±0.45	6.01±0.86	4.13±0.41	1.01±0.10	0.56±0.10	3.88±0.49	4.02±0.33	1.06±0.06	5.81±0.89

Table 8. Amino Acid Profile

270

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	5.50	4.70	15.15	22.59	4.78	3.64	3.57	4.46
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	7.03	5.34	14.02	17.88	4.32	4.19	4.67	3.01
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	5.75±0.75	5.37±0.35	15.40±1.02	19.63±1.11	4.60±0.28	3.90±0.49	4.22±0.27	3.32±0.34
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	5.31	5.97	16.10	15.96	4.63	3.96	4.01	2.99
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	4.39	5.95	15.27	21.73	3.66	3.25	3.01	2.48
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	5.71±1.69	4.98±1.07	16.71±1.98	20.98±2.17	4.28±0.76	3.49±0.92	3.82±0.71	2.88±0.68
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	5.07	5.25	15.62	19.92	4.18	3.04	3.46	2.51
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	5.43	5.57	16.67	18.85	3.71	3.74	3.82	2.79
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	5.37±0.29	5.23±0.35	16.21±0.69	19.59±2.16	3.91±0.14	4.08±0.36	3.35±0.37	2.60±0.49
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	5.31±0.34	4.48±1.25	16.23±0.72	20.53±1.76	3.81±0.11	3.26±0.46	3.79±0.64	2.68±0.57
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	5.54	5.43	16.88	21.96	3.85	3.12	3.85	2.17
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	5.19	5.61	15.45	19.39	3.94	3.28	3.83	2.99
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	5.51±0.60	4.98±0.30	15.68±0.24	21.38±1.48	3.82±0.07	3.39±0.80	3.87±0.26	2.83±0.12
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	5.70±0.36	4.34±0.88	16.98±1.41	21.76±3.24	3.64±0.15	3.73±0.57	4.28±0.01	3.16±0.41
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	5.61±1.05	4.32±0.60	16.36±3.20	21.23±2.21	4.45±0.58	3.30±0.53	4.15±0.46	2.66±0.37
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	5.48	5.02	17.23	21.64	4.30	3.45	3.90	2.58
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	5.37±1.01	5.02±0.79	16.01±1.59	20.62±2.36	4.11±0.55	3.56±0.61	3.82±0.52	2.85±0.60
D032	Broad beans (<i>Vicia faba</i>)	3	6.43±0.01	7.61±0.01	14.41±0.64	13.83±0.38	4.80±0.10	4.51±0.35	4.54±0.21	2.83±0.13
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	6.43±0.79	3.07±0.97	14.89±2.12	24.82±3.73	4.86±0.62	3.83±1.39	4.30±0.65	2.91±0.93
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	6.53±0.22	3.36±0.24	14.28±1.32	25.17±0.94	5.69±0.32	2.97±0.16	4.84±0.29	2.89±0.13
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	5.34±0.26	3.84±0.36	14.95±1.18	24.51±0.15	5.22±0.43	2.45±0.14	4.96±0.25	2.93±0.19
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	7.96±1.00	4.15±0.94	10.61±1.49	20.70±2.88	4.15±0.31	3.45±0.76	5.15±0.61	2.89±0.34

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
D037	Celery stalk (<i>Apium graveolens</i>)	3	1.43±0.13	2.93±0.14	4.44±0.45	3.32±0.21	0.90±0.05	0.45±0.07	2.92±0.53	3.71±0.56	1.15±0.03	4.64±0.15
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	1.82±0.54	4.72±0.68	8.64±0.94	3.56±0.56	1.29±0.17	0.70±0.17	4.65±0.54	4.57±0.67	0.86±0.09	6.71±0.69
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	1.75±0.33	2.68±1.05	4.68±0.73	3.09±0.56	0.82±0.03	1.02±0.20	2.99±0.99	3.27±0.86	0.91±0.16	3.96±1.01
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	2.28	4.10	7.53	4.09	1.22	1.51	4.06	4.28	0.75	5.96
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	2.37±0.51	4.26±0.53	7.20±0.53	3.33±0.97	1.20±0.19	0.80±0.20	4.14±0.48	4.22±0.34	0.73±0.10	5.96±0.35
D042	Corn, baby (<i>Zea mays</i>)	6	2.13±0.16	4.35±0.28	8.03±0.30	3.36±0.39	1.59±0.29	1.27±0.13	4.85±0.17	4.83±0.34	0.96±0.18	4.87±0.33
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	1.92±0.27	4.14±0.47	6.94±0.63	3.15±0.30	1.06±0.22	0.64±0.14	3.17±0.45	3.13±0.72	0.27±0.12	6.09±0.88
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	1.84±0.28	3.77±0.47	6.11±0.37	3.38±0.29	0.87±0.15	0.79±0.22	4.14±0.05	3.14±0.16	0.66±0.14	5.22±0.38
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	1.80	4.74	6.43	3.28	0.75	0.76	4.43	3.70	0.52	6.13
D046	Drumstick (<i>Moringa oleifera</i>)	6	1.95±0.15	3.08±0.29	5.98±0.37	3.09±0.45	1.10±0.30	0.89±0.22	3.43±0.36	3.83±0.08	0.53±0.15	5.02±0.35
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	2.63	4.05	8.19	4.61	0.83	0.59	4.57	3.68	0.75	5.10
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	2.75±0.06	4.30±0.19	8.20±0.37	5.35±0.49	0.94±0.06	0.62±0.11	4.73±0.41	3.76±0.04	0.80±0.08	5.21±0.16
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	3.01±0.67	3.79±0.67	7.29±0.81	4.77±0.54	0.83±0.12	0.60±0.15	4.04±0.57	4.39±0.25	0.96±0.13	5.38±0.84
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	2.57	4.35	6.71	4.83	1.07	0.53	4.22	4.32	0.80	5.98
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	1.86±0.21	4.90±0.48	6.60±0.53	2.99±0.14	0.79±0.11	0.65±0.09	3.96±0.76	4.16±0.56	0.53±0.08	5.65±0.18
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	1.69±0.17	5.50±0.52	7.19±0.34	3.73±0.29	0.94±0.17	0.55±0.03	6.22±0.34	5.46±0.51	0.94±0.14	6.86±0.10
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	0.91±0.65	3.40±0.11	4.04±0.09	2.50±1.09	0.96±0.06	0.71±0.02	1.90±0.18	3.30±0.26	0.78±0.05	5.31±0.19
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	1.91±0.16	4.10±0.36	7.32±0.34	7.05±0.27	0.94±0.09	0.66±0.11	3.87±0.81	4.17±0.38	0.93±0.08	4.97±0.78
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	1.83	3.88	7.14	6.38	0.90	0.69	4.16	4.20	0.85	5.05
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	2.42±0.37	3.26±0.48	5.04±0.42	3.79±0.51	0.81±0.21	0.57±0.10	3.44±0.27	3.75±0.38	0.49±0.09	4.46±0.36
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	2.83±0.21	4.44±0.88	7.90±0.75	5.34±0.39	1.37±0.08	0.71±0.05	3.75±0.16	4.19±0.46	1.06±0.36	5.79±1.02

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
D037	Celery stalk (<i>Apium graveolens</i>)	3	3.07±0.10	3.53±0.51	20.42±1.44	25.87±1.94	3.61±0.13	2.85±0.40	4.29±0.28	2.21±0.04
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	7.29±0.79	4.01±1.93	13.25±2.43	16.75±1.63	4.85±0.54	4.18±0.85	5.90±0.81	3.35±0.92
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	7.08±1.05	6.48±0.49	18.73±3.01	11.00±1.56	4.44±0.51	3.90±0.42	4.15±0.77	4.17±0.84
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	7.77	4.52	13.23	16.36	5.87	4.63	5.53	3.56
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	7.37±1.23	4.70±0.63	11.84±1.78	18.86±2.51	6.69±1.43	4.14±0.75	4.94±0.80	3.08±0.47
D042	Corn, baby (<i>Zea mays</i>)	6	6.85±0.26	5.90±0.18	12.40±1.31	17.20±0.55	5.84±0.21	4.66±0.31	4.23±0.34	3.15±0.27
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	7.18±1.41	4.47±0.44	6.96±0.92	22.84±2.45	4.47±0.52	3.30±0.49	3.79±0.68	2.98±0.46
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6	7.12±0.81	4.96±1.46	7.03±0.10	24.25±3.15	4.94±0.87	3.68±0.35	3.94±0.72	2.58±0.32
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	7.19	3.42	7.48	25.58	5.51	3.94	3.53	3.11
D046	Drumstick (<i>Moringa oleifera</i>)	6	5.68±0.61	10.93±0.29	9.42±1.33	23.30±2.18	3.91±0.41	3.36±0.54	4.60±0.34	2.16±0.20
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	5.88	6.02	13.35	14.95	4.53	4.24	5.43	3.36
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	5.58±0.10	6.01±0.23	13.41±1.66	16.19±1.64	4.64±0.17	4.13±0.06	5.64±0.22	3.62±0.13
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	5.78±0.63	5.95±0.71	11.66±0.48	15.73±1.66	4.32±0.26	4.01±0.31	5.09±0.82	3.15±0.50
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	4.08	6.41	11.43	13.06	3.90	5.81	5.20	2.95
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	6.13±0.30	3.68±0.50	21.99±1.65	10.62±1.45	5.59±0.44	4.06±0.46	4.40±0.57	2.95±0.41
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	4.89±0.37	3.02±0.30	15.33±1.83	11.45±0.46	5.99±0.33	4.81±0.53	5.31±0.62	5.61±0.12
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	5.51±0.97	5.74±1.70	9.88±0.18	36.40±1.63	3.43±0.14	3.27±0.24	4.02±0.29	2.01±0.09
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	7.18±0.68	6.04±1.10	10.69±1.01	20.82±1.66	5.18±0.19	4.17±0.48	5.71±0.37	3.04±0.64
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	6.57	6.45	11.71	21.11	4.67	3.61	5.19	3.31
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	5.37±0.57	5.95±0.70	15.47±1.48	16.70±1.03	3.95±0.47	3.39±0.47	3.59±0.32	2.51±0.43
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	9.22±1.34	5.34±1.22	10.23±0.75	14.23±0.85	5.43±0.81	5.34±1.02	4.99±1.08	3.39±0.55

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
D058	Onion, stalk (<i>Allium cepa</i>)	6	2.16±0.18	4.88±0.20	8.05±0.20	6.50±0.38	1.21±0.22	0.46±0.12	4.09±0.19	4.74±0.33	1.07±0.03	5.90±0.32
D059	Papaya, raw (<i>Carica papaya</i>)	6	0.97±0.09	1.57±0.19	3.22±0.28	3.82±0.98	0.63±0.21	3.77±0.37	3.91±1.94	2.85±0.80	1.00±0.10	3.16±0.23
D060	Parwar (<i>Trichosanthes dioica</i>)	6	1.75±0.27	4.41±0.59	7.22±0.30	5.89±0.91	1.33±0.33	0.86±0.10	3.86±0.99	3.82±0.45	0.59±0.15	5.95±0.32
D061	Peas, fresh (<i>Pisum sativum</i>)	6	2.15±0.38	3.33±1.04	7.63±0.64	5.72±0.54	0.63±0.12	0.64±0.13	5.02±0.24	4.08±0.37	0.84±0.08	4.23±0.98
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	2.31±0.14	3.63±0.50	7.06±0.47	2.81±0.20	0.81±0.19	0.65±0.15	3.68±0.31	4.43±0.20	0.81±0.10	4.75±0.55
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	2.45±0.19	2.59±0.54	4.98±0.51	3.70±0.25	0.80±0.08	0.67±0.10	5.32±1.40	2.93±0.25	0.68±0.13	5.51±0.46
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	1.91±0.58	4.92±0.41	4.59±0.32	2.99±0.64	1.57±0.34	0.99±0.21	4.50±0.78	4.86±0.50	0.67±0.11	5.84±0.62
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	2.18	4.54	5.41	3.40	0.96	0.60	2.84	3.47	0.73	5.97
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	1.68±0.10	5.00±0.36	5.32±0.34	3.20±0.48	1.03±0.13	0.68±0.06	4.91±1.13	3.85±0.43	0.77±0.19	6.05±0.50
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	3.14	3.31	4.89	6.21	0.41	0.75	8.56	3.87	0.99	4.30
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	1.87±0.14	4.60±0.14	5.34±0.09	4.78±0.37	0.98±0.08	0.40±0.10	4.21±0.38	3.68±0.11	0.72±0.09	5.95±0.30
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	2.25±0.59	4.92±0.40	5.79±0.10	4.64±0.72	1.06±0.25	0.42±0.07	4.45±0.28	4.03±0.27	0.69±0.05	5.99±0.30
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	1.64±0.12	4.11±0.62	5.22±0.07	4.13±0.28	0.90±0.13	0.65±0.05	4.11±0.36	3.40±0.37	0.60±0.09	5.66±0.48
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	1.85	4.85	5.71	5.64	0.93	0.64	3.95	3.86	0.63	5.27
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	1.35	4.06	5.66	4.91	1.13	0.61	4.25	3.12	0.63	5.40
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	1.78±0.13	4.11±0.09	6.70±0.22	4.88±0.86	0.91±0.04	0.70±0.05	3.64±0.10	3.70±0.08	0.62±0.13	5.79±0.12
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	2.26±1.19	2.69±0.26	3.62±0.37	4.35±0.52	1.01±0.16	0.80±0.07	3.47±0.59	2.62±0.37	0.73±0.07	3.09±0.15
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	1.58±0.18	2.29±0.71	4.18±0.93	2.55±0.58	0.67±0.16	0.95±0.19	4.54±0.91	2.52±0.63	0.52±0.11	2.74±0.97
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	1.36±0.27	2.69±0.38	4.71±0.57	2.33±0.38	0.68±0.34	0.94±0.14	4.30±0.77	2.71±0.40	0.64±0.07	3.26±0.63
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	1.98	4.24	5.68	4.67	0.78	0.57	4.73	3.82	0.85	5.87
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	1.74	4.25	5.50	5.03	0.75	0.68	5.54	3.81	0.86	5.71

Table 8. Amino Acid Profile

274

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
D058	Onion, stalk (<i>Allium cepa</i>)	6	5.91±0.21	4.50±0.29	9.66±0.42	14.62±0.27	7.82±0.31	5.03±0.25	4.53±0.25	3.75±0.24
D059	Papaya, raw (<i>Carica papaya</i>)	6	5.07±0.88	3.08±0.25	11.90±0.26	14.27±1.52	4.93±0.48	2.99±0.45	3.56±0.93	4.38±1.31
D060	Parwar (<i>Trichosanthes dioica</i>)	6	6.61±1.55	5.97±1.03	9.60±0.60	19.43±2.33	6.21±1.28	5.28±0.31	4.79±0.45	2.96±0.20
D061	Peas, fresh (<i>Pisum sativum</i>)	6	4.23±0.32	10.05±1.51	11.61±0.94	17.38±1.96	4.28±0.27	3.78±0.85	4.53±0.38	3.06±0.48
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	6.96±1.02	5.06±0.31	10.40±0.97	21.78±2.69	5.19±0.40	4.39±0.75	5.62±0.66	2.86±0.29
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	5.94±0.89	4.46±1.11	14.43±1.76	20.43±1.81	3.83±0.38	3.14±0.52	4.45±0.49	2.09±0.47
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	7.68±1.02	3.84±0.91	10.82±0.87	20.16±3.54	4.06±0.29	4.89±0.95	5.06±0.21	2.83±0.49
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	4.72	5.23	12.58	20.37	3.15	3.57	4.30	4.48
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	4.96±0.31	3.65±0.45	12.99±1.28	19.58±1.75	5.05±0.36	3.87±0.24	4.42±0.24	2.85±0.40
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	6.60	5.84	10.61	20.95	3.96	4.63	5.09	2.63
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	6.47±0.39	5.15±0.88	9.98±0.63	21.06±1.69	5.04±0.30	3.39±0.52	4.33±0.07	3.27±0.28
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	6.15±0.61	4.85±0.80	9.91±0.42	21.40±3.50	5.04±0.42	3.74±0.71	4.55±0.36	3.24±0.53
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	6.07±0.42	4.83±0.75	10.04±1.07	20.81±1.49	4.46±0.43	3.85±0.78	4.79±0.43	2.62±0.28
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	6.59	5.67	10.16	20.07	4.98	4.18	4.72	2.99
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	6.62	5.43	9.70	20.21	4.26	3.69	4.41	2.79
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	4.37±0.33	7.03±1.14	10.29±0.95	19.87±3.60	3.52±0.10	3.92±0.20	5.06±0.14	2.94±0.24
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	2.46±0.17	3.93±0.46	10.94±0.69	30.29±4.05	3.35±0.17	2.37±0.38	3.76±0.45	2.27±0.08
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	4.21±0.72	3.23±0.91	14.26±1.75	37.44±5.55	3.64±0.34	2.43±0.56	3.40±0.64	2.66±0.39
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	4.72±0.84	4.13±0.51	12.71±2.23	39.25±1.68	3.86±0.51	2.87±0.63	3.67±0.45	2.68±0.29
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	6.86	3.80	10.04	22.68	3.48	4.26	4.42	2.87
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	6.66	4.25	10.68	22.29	3.56	4.71	4.44	2.89

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
E FRUITS												
E001	Apple, big (<i>Malus domestica</i>)	6	2.26±0.25	3.56±0.19	5.17±0.12	3.01±0.22	1.23±0.13	0.75±0.13	3.39±0.36	3.85±0.28	0.86±0.12	3.50±0.26
E002	Apple, green (<i>Malus domestica</i>)	6	2.67±0.21	4.85±0.43	5.75±0.11	3.11±0.20	1.40±0.11	0.67±0.15	3.86±0.30	4.40±0.28	0.78±0.10	3.66±0.30
E003	Apple, small (<i>Malus domestica</i>)	6	2.36±0.43	3.86±0.47	5.71±0.72	2.86±0.21	1.27±0.13	0.71±0.13	3.74±0.19	4.07±0.62	0.85±0.06	4.38±0.31
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	2.30	4.11	6.69	3.48	1.34	0.62	4.16	4.19	0.85	4.18
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	1.21±0.29	2.25±0.31	4.22±0.08	3.28±0.19	1.19±0.30	0.86±0.11	2.73±0.41	2.48±0.16	0.70±0.07	2.31±0.33
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	1.49±0.63	2.22±0.33	4.12±0.14	4.54±0.49	0.80±0.01	0.60±0.01	2.69±0.09	2.58±0.26	0.80±0.02	2.12±0.02
E007	Avocado fruit (<i>Persea</i> sp.)	1	2.38	3.45	6.27	5.84	1.66	1.58	4.24	3.48	1.04	4.48
E008	Bael fruit (<i>Aegle marmelos</i>)	1	2.52	3.29	5.86	4.86	1.26	0.65	4.81	4.16	0.98	4.62
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	6.76	4.94	9.22	4.51	1.18	0.64	5.52	4.66	0.81	5.82
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	6.42	3.79	9.41	4.89	1.05	0.75	5.32	5.08	0.90	6.11
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	6.77	4.25	8.72	4.17	1.20	0.53	5.28	4.56	0.82	6.56
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	5.85±0.26	3.69±0.41	8.23±0.47	4.30±0.27	1.09±0.13	0.57±0.11	4.28±0.49	4.09±0.21	0.99±0.08	6.05±0.40
E013	Black berry (<i>Rubus</i> sp.)	5	3.09±0.34	4.86±0.26	7.82±0.34	4.72±0.13	1.49±0.16	0.66±0.12	5.18±0.91	4.76±0.43	0.83±0.06	6.57±0.58
E014	Cherries, red (<i>Prunus cerasus</i>)	4	1.76±0.23	3.46±0.88	5.88±1.42	3.88±0.27	1.68±0.61	0.92±0.10	4.10±1.05	4.06±0.75	0.50±0.06	4.78±1.02
E015	Currants, black (<i>Ribes nigrum</i>)	1	2.25	4.35	8.33	3.82	1.77	0.44	4.42	4.14	1.47	5.11
E016	Custard apple (<i>Annona squamosa</i>)	1	5.25	2.26	4.88	4.26	0.99	0.48	4.16	4.37	0.86	4.86
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	1.84±0.38	1.92±0.39	5.17±0.79	2.44±0.77	1.03±0.20	1.33±0.12	3.55±0.72	3.73±0.43	0.85±0.12	2.85±0.46
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	2.06	3.05	5.23	2.81	1.25	1.26	3.46	3.27	1.83	3.30
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	1.62	2.29	4.98	2.97	1.05	1.35	2.59	3.64	0.80	2.85
E020	Fig (<i>Ficus carica</i>)	6	1.16±0.05	4.84±0.20	5.80±0.19	3.19±0.18	0.90±0.14	1.68±0.12	3.36±0.28	4.24±0.35	0.85±0.03	5.34±0.14
E021	Gooseberry (<i>Emblica officinalis</i>)	5	2.40±0.26	1.94±0.34	4.25±0.42	4.06±0.50	0.73±0.17	0.61±0.16	4.85±2.04	3.30±0.69	0.75±0.08	2.99±0.39

Table 8. Amino Acid Profile

276

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
E FRUITS										
E001	Apple, big (<i>Malus domestica</i>)	6	8.22±0.20	3.19±0.21	25.16±2.09	8.92±1.09	3.58±0.43	3.28±0.16	5.64±0.20	2.67±0.25
E002	Apple, green (<i>Malus domestica</i>)	6	7.12±0.29	3.96±0.49	20.64±0.61	9.60±0.32	4.79±0.17	4.15±0.17	5.31±0.23	2.10±0.20
E003	Apple, small (<i>Malus domestica</i>)	6	6.86±0.70	2.47±0.26	22.08±2.22	9.64±0.27	4.93±0.54	3.78±0.33	5.67±0.66	2.39±0.23
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	6.12	2.52	18.40	9.78	4.11	5.45	5.53	1.58
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	4.36±0.71	3.89±0.81	18.26±4.95	9.54±1.24	3.29±0.87	8.69±0.30	3.77±1.02	3.43±0.22
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	5.29±0.13	2.54±0.34	17.38±0.70	13.44±1.15	3.32±0.43	8.60±0.78	3.81±0.02	1.96±0.54
E007	Avocado fruit (<i>Persea</i> sp.)	1	5.38	4.45	15.56	13.37	4.25	4.48	4.46	2.64
E008	Bael fruit (<i>Aegle marmelos</i>)	1	4.82	3.86	18.20	14.26	3.86	5.26	5.40	2.43
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	5.25	2.52	12.92	13.91	3.35	5.11	5.99	2.30
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	5.46	3.18	13.03	16.88	6.70	4.59	5.67	2.22
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	4.89	2.75	13.32	17.90	5.37	4.16	5.39	1.97
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	7.08±0.90	3.70±0.32	13.07±1.30	15.17±0.14	4.79±0.43	3.65±0.93	4.70±0.36	2.14±0.34
E013	Black berry (<i>Rubus</i> sp.)	5	6.40±0.24	4.31±2.14	12.08±0.69	15.66±0.50	6.02±0.65	5.55±0.42	5.36±0.50	3.03±0.26
E014	Cherries, red (<i>Prunus cerasus</i>)	4	4.99±1.97	1.77±0.53	28.46±12.91	15.62±3.07	6.51±2.15	4.22±0.96	4.61±0.88	2.20±0.41
E015	Currants, black (<i>Ribes nigrum</i>)	1	3.69	6.97	10.42	20.94	5.36	5.03	5.23	2.89
E016	Custard apple (<i>Annona squamosa</i>)	1	7.08	3.87	18.32	17.32	4.86	4.82	5.12	1.97
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	6.94±0.51	4.08±0.44	12.80±0.35	15.76±1.09	6.18±0.41	5.78±0.90	5.08±0.24	2.15±0.40
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	7.02	3.90	9.68	14.85	5.96	5.62	4.86	2.00
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	8.53	3.66	13.63	16.39	6.70	6.43	5.94	2.09
E020	Fig (<i>Ficus carica</i>)	6	5.74±0.47	2.02±0.15	20.90±0.89	19.36±1.12	4.71±0.32	4.89±0.36	4.63±0.20	2.80±0.18
E021	Gooseberry (<i>Emblica officinalis</i>)	5	6.47±1.67	3.87±0.45	14.90±2.63	23.90±2.39	5.01±0.47	4.48±0.48	4.95±0.23	2.60±0.39

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	2.59±0.25	1.98±0.37	5.92±0.81	2.15±0.18	1.13±0.31	1.17±0.02	3.59±0.35	4.90±0.39	0.49±0.03	2.60±0.18
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	2.61±0.31	2.20±0.09	6.31±0.72	2.34±0.16	1.04±0.16	1.25±0.11	3.12±0.33	5.33±0.31	0.66±0.06	2.46±0.24
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	2.34±0.19	3.49±0.30	5.86±0.40	1.92±0.13	0.94±0.16	1.14±0.12	4.14±0.53	4.87±0.72	0.69±0.13	2.83±0.25
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	2.78±0.10	2.58±0.31	7.21±0.21	1.92±0.16	1.02±0.12	1.24±0.37	3.85±0.19	5.28±0.13	0.69±0.10	2.73±0.21
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	2.87±0.32	1.98±0.12	7.15±0.15	2.38±0.12	0.91±0.01	1.33±0.17	4.17±0.16	5.25±0.21	0.69±0.18	2.70±0.03
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	2.32±0.18	2.74±0.07	6.44±0.19	2.55±0.16	0.85±0.11	1.15±0.12	4.79±0.13	5.05±0.23	0.76±0.14	2.70±0.07
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	2.04±0.07	4.08±0.82	6.77±0.86	2.55±0.19	0.96±0.05	0.97±0.12	1.34±0.13	3.15±0.46	0.83±0.12	3.27±0.21
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	1.84±0.21	3.94±0.27	6.01±0.60	2.76±0.17	0.89±0.23	1.02±0.30	1.55±0.28	3.77±0.22	0.77±0.04	3.36±0.20
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	1.63±0.23	3.49±0.55	6.76±0.90	3.32±0.40	0.54±0.13	0.50±0.09	4.49±1.06	4.35±0.71	0.62±0.51	5.18±1.28
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	2.38	5.21	8.52	1.99	1.85	0.93	5.63	5.32	0.83	6.99
E032	Karonda fruit (<i>Carissa carandas</i>)	1	3.08	2.86	4.85	1.98	1.25	1.18	3.86	3.66	0.85	4.62
E033	Lemon, juice (<i>Citrus limon</i>)	6	1.99±0.16	2.72±0.15	2.51±0.49	5.07±0.09	1.10±0.07	1.28±0.30	3.54±0.20	1.69±0.17	0.45±0.21	2.90±0.42
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	3.40±0.31	2.12±0.09	2.66±0.27	2.31±0.17	0.97±0.59	1.33±0.04	1.32±0.23	1.29±0.17	0.48±0.09	1.73±0.22
E035	Litchi (<i>Litchi chinensis</i>)	4	1.84±0.27	4.73±0.36	8.08±0.63	4.95±0.22	1.46±0.23	1.22±0.15	5.39±0.39	4.74±0.52	0.74±0.04	6.05±0.58
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	2.69±0.29	3.73±0.48	8.18±1.05	5.69±0.24	1.57±0.13	0.78±0.19	3.20±0.17	5.10±0.44	0.94±0.32	5.92±0.91
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	2.33	3.79	9.21	3.34	1.66	0.71	3.75	5.38	1.33	6.32
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	2.18±0.33	3.80±0.44	7.55±0.42	4.74±0.56	1.69±0.17	1.04±0.03	3.70±0.33	5.23±0.36	1.16±0.49	4.87±0.76
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	2.07±0.19	4.05±0.65	8.26±0.97	3.05±0.53	1.59±0.27	0.85±0.28	3.47±0.49	5.29±0.59	1.28±0.26	5.23±0.93
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	2.46	4.30	9.19	3.10	1.84	1.22	3.38	5.61	1.33	6.29
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	1.94	4.36	8.25	3.44	1.20	0.94	3.94	5.45	1.49	6.13
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	2.07	4.20	8.85	3.51	1.65	0.90	4.15	5.25	1.21	5.92

Table 8. Amino Acid Profile

278

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	6.56±0.46	5.97±0.35	9.65±0.78	22.50±3.32	3.35±0.42	4.72±0.68	4.59±0.51	2.24±0.68
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	7.11±0.65	6.58±0.22	10.41±0.69	21.65±1.32	3.44±0.28	4.29±1.41	4.61±0.48	2.34±0.61
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	6.32±1.55	6.50±0.24	10.87±0.98	19.45±0.92	3.18±0.14	4.72±0.27	4.79±0.19	2.49±0.30
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	7.26±0.33	6.86±0.19	10.39±0.48	22.33±0.97	4.27±0.61	5.39±0.26	5.26±0.49	2.01±0.16
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	7.35±0.85	7.01±0.57	10.39±0.78	21.53±0.31	3.46±0.42	4.84±2.08	4.69±0.46	2.40±0.02
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	6.05±0.18	6.46±0.35	10.60±0.36	18.37±0.78	3.76±0.27	6.93±0.17	4.83±0.37	2.06±0.19
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	6.26±0.88	3.18±0.23	19.73±3.56	15.70±1.14	6.12±0.61	5.56±0.51	3.80±0.59	2.66±0.07
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	6.52±0.86	3.31±0.27	19.16±1.61	15.59±0.74	6.98±0.98	5.67±0.35	4.19±0.33	2.63±0.33
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	6.16±0.67	3.22±0.88	26.27±5.38	9.24±1.33	5.40±1.49	4.42±0.76	5.39±1.72	3.22±1.06
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	7.04	1.54	11.99	15.22	6.59	6.09	5.54	3.23
E032	Karonda fruit (<i>Carissa carandas</i>)	1	5.62	4.21	15.38	15.62	3.85	3.82	4.85	3.12
E033	Lemon, juice (<i>Citrus limon</i>)	6	5.22±0.55	4.28±0.47	20.55±1.50	15.10±0.71	2.03±0.27	7.60±0.83	3.86±0.33	1.35±0.19
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	3.39±0.72	1.30±0.81	19.78±1.90	5.41±1.07	2.16±0.39	6.81±1.29	3.40±0.46	0.80±0.19
E035	Litchi (<i>Litchi chinensis</i>)	4	10.56±1.75	2.24±0.75	11.65±0.62	16.07±1.40	5.56±0.45	5.72±1.59	5.16±0.51	2.92±0.73
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	8.21±0.31	4.26±1.36	11.58±0.78	15.60±1.03	5.88±0.57	4.07±1.13	4.14±0.35	2.21±0.49
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	9.02	4.64	11.82	14.59	5.25	3.97	4.53	2.41
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	10.14±0.58	4.41±0.94	12.41±1.44	14.99±0.30	5.99±0.47	4.11±0.74	4.44±0.37	2.82±0.77
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	8.62±0.43	4.48±0.83	12.75±1.15	14.51±1.20	6.13±0.73	4.24±0.40	4.52±0.25	2.70±0.35
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	9.93	4.29	12.33	15.06	6.03	3.48	6.55	2.54
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	9.03	3.90	12.19	14.82	5.49	3.95	4.06	2.45
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	8.84	4.53	13.49	13.95	5.86	3.47	4.26	2.27

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	2.51	4.54	9.10	2.83	1.29	0.81	6.21	6.87	1.21	5.36
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	2.78	3.64	5.60	2.21	1.26	0.59	4.35	4.81	1.14	4.92
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	0.93±0.14	1.75±0.37	4.09±1.02	1.84±0.25	0.89±0.10	0.79±0.07	1.82±0.48	3.60±0.83	0.56±0.17	3.33±0.42
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	0.88±0.02	2.72±0.21	3.67±0.95	2.27±0.10	0.89±0.04	0.80±0.31	1.62±0.38	2.81±0.14	0.52±0.16	3.06±0.43
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	0.70±0.16	1.39±0.34	2.11±0.12	2.98±0.38	0.53±0.10	0.48±0.06	1.77±0.20	1.52±0.13	0.54±0.05	2.12±0.39
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	3.14	4.16	3.74	2.35	0.85	1.10	2.76	4.32	0.44	4.31
E049	Papaya, ripe (<i>Carica papaya</i>)	6	0.87±0.36	2.27±0.24	4.43±0.26	4.91±0.40	0.68±0.06	0.73±0.07	1.93±0.11	3.27±0.64	1.66±0.09	3.93±0.79
E050	Peach (<i>Prunus communis</i>)	1	1.53	2.54	5.49	2.75	0.98	1.21	2.95	4.92	0.43	5.43
E051	Pear (<i>Pyrus</i> sp.)	6	1.39±0.30	3.65±0.28	4.95±0.89	2.27±0.35	1.05±0.22	0.87±0.33	3.04±1.21	3.64±0.51	0.58±0.13	5.10±0.31
E052	Phalsa (<i>Grewia asiatica</i>)	2	1.91	4.44	7.19	2.82	2.05	1.10	4.84	4.18	0.66	5.76
E053	Pineapple (<i>Ananas comosus</i>)	6	1.37±0.58	2.61±0.69	3.97±0.44	4.03±0.10	1.06±0.28	2.23±0.06	2.59±0.70	3.01±0.87	1.09±0.14	4.07±0.92
E054	Plum (<i>Prunus domestica</i>)	3	1.33±0.18	2.20±0.22	3.82±0.10	2.97±0.13	1.08±0.12	1.89±0.15	2.75±0.14	2.33±0.18	1.21±0.10	3.63±0.18
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	1.94±0.16	1.67±0.57	4.87±0.64	1.15±0.44	0.61±0.25	0.89±0.29	3.18±0.55	2.59±0.42	0.46±0.08	2.40±0.42
E056	Pummelo (<i>Citrus maxima</i>)	3	1.76±0.15	2.81±0.19	4.69±0.20	3.78±0.21	0.87±0.05	0.81±0.14	2.45±0.35	3.19±0.22	0.48±0.03	4.23±0.14
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	2.17±0.32	1.97±0.25	4.80±0.71	2.90±0.60	0.97±0.13	0.61±0.12	2.44±0.24	2.91±0.32	0.97±0.07	2.87±0.06
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	2.92±0.43	1.88±0.19	4.26±0.32	3.04±0.40	0.74±0.11	0.78±0.16	2.51±0.50	3.39±0.77	0.70±0.33	2.84±0.55
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	3.38	1.90	4.66	3.54	1.12	0.76	2.41	4.01	1.25	4.77
E060	Sapota (<i>Achras sapota</i>)	6	3.61±0.37	3.52±0.25	6.10±0.43	4.93±0.59	0.82±0.24	0.51±0.15	3.95±0.54	4.68±0.48	0.75±0.09	5.03±0.64
E061	Soursop (<i>Annona muricata</i>)	1	2.93	4.45	6.62	4.67	1.02	0.57	4.99	4.56	0.84	5.91
E062	Star fruit (<i>Averrhoa carambola</i>)	1	2.60	2.80	5.67	5.30	0.91	0.74	4.07	3.89	0.87	4.21
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	2.56±0.31	3.61±0.53	5.61±0.44	3.14±0.29	0.86±0.09	0.67±0.11	2.50±0.28	4.32±0.24	0.93±0.17	4.51±0.38
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	2.58±0.50	3.28±0.75	5.58±0.54	5.18±0.61	0.84±0.15	0.71±0.15	5.46±0.73	3.26±0.51	0.85±0.15	4.02±0.72

279

Table 8. Amino Acid Profile

Table 8. Amino Acid Profile

280

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	7.60	2.64	14.16	13.30	7.07	4.27	4.76	2.86
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	6.25	3.35	13.85	16.45	4.21	3.56	4.86	1.85
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	12.72±1.30	2.12±0.39	10.60±0.69	28.92±5.33	3.89±0.82	2.97±0.30	4.26±0.82	1.65±0.29
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	12.94±0.55	2.51±0.43	9.99±1.19	25.89±6.58	3.76±1.70	3.20±0.15	4.82±1.13	1.69±0.11
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	2.28±1.28	6.51±0.26	13.29±2.66	5.82±1.15	2.46±0.27	12.17±2.77	3.38±0.25	1.08±0.15
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	6.84	3.85	13.86	16.82	4.56	4.17	5.18	1.25
E049	Papaya, ripe (<i>Carica papaya</i>)	6	4.23±0.42	2.59±0.51	15.42±1.42	13.85±3.84	5.23±0.19	4.55±0.97	4.70±0.95	2.85±0.63
E050	Peach (<i>Prunus communis</i>)	1	5.77	4.14	21.02	19.19	3.23	4.07	4.79	1.78
E051	Pear (<i>Pyrus</i> sp.)	6	6.55±0.35	2.48±0.41	25.05±2.31	11.67±1.81	4.31±0.62	3.64±0.62	4.46±0.26	1.36±0.13
E052	Phalsa (<i>Grewia asiatica</i>)	2	5.27	5.86	12.12	18.54	4.96	5.31	5.01	2.18
E053	Pineapple (<i>Ananas comosus</i>)	6	6.94±0.99	2.64±0.71	27.04±8.48	14.92±3.44	5.32±1.65	3.76±0.81	5.31±1.27	3.10±0.21
E054	Plum (<i>Prunus domestica</i>)	3	4.25±0.23	2.67±0.25	32.17±0.94	4.85±0.07	2.06±0.19	5.83±0.09	4.23±0.12	1.61±0.14
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	4.80±0.80	8.35±2.12	8.50±0.32	27.33±2.29	3.55±0.14	3.46±0.43	4.83±0.49	1.83±0.39
E056	Pummelo (<i>Citrus maxima</i>)	3	7.62±0.38	5.19±0.54	27.70±1.20	12.35±0.25	2.74±0.17	9.41±0.30	4.78±0.11	1.83±0.08
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	6.28±0.60	13.13±2.04	7.35±1.24	10.49±0.33	3.29±0.87	8.53±0.43	4.32±0.37	2.20±0.71
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	6.64±0.98	14.04±0.69	6.30±0.39	11.02±0.23	3.75±0.26	9.38±0.47	5.15±0.93	1.56±0.35
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	5.87	6.75	12.73	28.08	6.62	4.66	2.69	2.70
E060	Sapota (<i>Achras sapota</i>)	6	5.92±0.62	6.70±0.44	10.90±0.95	10.63±1.16	5.20±0.61	3.80±0.22	5.60±0.48	3.35±0.47
E061	Soursop (<i>Annona muricata</i>)	1	4.30	3.63	15.84	19.99	5.07	5.69	5.17	3.31
E062	Star fruit (<i>Averrhoa carambola</i>)	1	6.10	5.37	17.40	18.55	4.45	3.35	4.67	3.89
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	4.98±0.30	4.51±0.30	19.70±1.69	15.88±0.98	5.63±0.39	3.41±0.18	4.10±0.28	2.88±0.29
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	4.34±0.41	3.15±0.42	12.28±0.72	15.19±0.82	4.01±0.43	5.04±0.48	3.51±0.39	3.43±0.49

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	2.34±0.16	3.34±0.18	2.87±0.19	3.36±0.23	0.78±0.08	0.77±0.05	2.58±0.28	4.60±0.38	1.15±0.24	3.54±0.21
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	2.80±0.09	3.49±0.24	3.10±0.16	2.91±0.11	0.94±0.25	0.84±0.08	2.69±0.17	4.31±0.17	1.13±0.14	3.64±0.08
E067	Wood Apple (<i>Limonia acidissima</i>)	3	1.20±0.21	3.93±0.09	3.17±0.10	2.58±0.05	0.85±0.13	0.41±0.11	2.98±2.82	2.01±0.30	0.85±0.05	3.72±0.29
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	1.84	4.09	3.59	1.50	1.06	1.54	3.47	2.35	0.88	4.67

F ROOTS AND TUBERS												
F001	Beet root (<i>Beta vulgaris</i>)	6	2.21±0.36	3.90±0.46	5.08±0.47	4.58±0.48	0.88±0.20	0.61±0.07	2.31±0.43	3.60±0.68	0.86±0.14	5.60±0.58
F002	Carrot, orange (<i>Daucus carota</i>)	6	1.38±0.21	3.56±0.57	4.84±0.52	3.36±0.23	0.78±0.11	0.90±0.14	2.84±0.64	3.98±0.62	1.01±0.08	4.58±1.24
F003	Carrot, red (<i>Daucus carota</i>)	4	1.34±0.05	3.04±0.36	4.14±0.38	2.53±0.21	0.90±0.03	0.77±0.05	2.21±0.47	3.00±0.43	1.13±0.17	4.47±0.38
F004	Colocasia (<i>Colocasia esculenta</i>)	6	2.03±0.19	3.06±0.28	6.36±0.48	3.93±0.17	0.77±0.17	1.39±0.23	5.22±0.35	3.40±0.41	1.16±0.38	5.37±0.69
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	1.71±0.13	3.38±0.49	5.47±0.74	3.43±0.49	0.82±0.02	1.03±0.10	4.32±1.18	3.95±0.37	1.02±0.05	4.57±0.29
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	1.56±0.49	3.34±0.82	6.44±0.63	5.51±0.41	1.00±0.24	0.83±0.20	5.61±1.70	3.50±0.52	1.03±0.13	4.29±1.33
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	1.37	3.77	7.36	5.78	1.17	0.74	4.11	4.08	1.19	4.23
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	1.25	3.19	5.64	5.46	0.96	0.79	4.59	4.06	1.20	3.26
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	1.70±0.03	3.49±0.68	5.47±0.36	3.35±0.29	0.76±0.10	0.99±0.12	3.41±0.12	4.20±0.42	0.56±0.07	5.15±0.02
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	1.78±0.15	3.33±0.50	6.14±1.31	3.02±0.19	0.77±0.15	0.85±0.14	3.26±0.12	4.03±0.49	0.52±0.08	5.57±0.81
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	1.89	3.55	6.19	2.71	0.64	0.83	3.84	4.05	0.58	5.27
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	1.45	3.16	5.50	2.80	0.77	0.94	3.12	3.66	0.60	5.18
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	1.99±0.36	4.56±0.17	7.66±0.69	4.27±1.80	1.63±0.11	1.31±0.24	6.37±0.92	5.41±0.61	1.90±0.12	5.57±0.59
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	1.86±0.30	4.42±0.54	7.23±0.51	4.00±0.81	1.67±0.25	1.12±0.12	5.35±0.50	5.21±0.57	1.46±0.06	5.72±0.40
F015	Tapioca (<i>Manihot esculenta</i>)	3	2.01±0.54	2.32±0.11	7.51±0.82	2.96±0.67	0.80±0.11	1.44±0.09	5.29±0.75	5.00±0.53	0.70±0.15	4.72±0.46

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			$\frac{\text{ALA}}{\text{ASP}}$ g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	3.86±0.15	7.87±0.29	16.26±1.09	13.85±0.41	1.74±0.26	3.70±0.15	2.51±0.19	1.89±0.20
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	4.04±0.29	8.19±0.27	16.50±0.83	14.70±0.54	2.40±0.27	4.21±0.14	3.47±0.25	1.87±0.14
E067	Wood Apple (<i>Limonia acidissima</i>)	3	5.51±0.81	7.54±1.48	31.42±4.82	15.65±3.76	2.92±0.77	4.20±1.18	4.26±0.53	2.51±0.21
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	4.62	5.51	31.84	17.33	3.14	2.52	3.86	3.46

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	8.76±0.71	3.51±0.25	7.52±0.76	28.73±0.85	3.37±0.44	3.35±0.32	4.28±0.36	2.76±0.56
F002	Carrot, orange (<i>Daucus carota</i>)	6	10.44±1.52	3.30±0.91	14.35±1.39	26.56±3.69	3.64±0.66	3.74±0.72	3.72±0.53	1.71±0.78
F003	Carrot, red (<i>Daucus carota</i>)	4	10.23±2.20	2.47±0.13	15.01±0.32	28.68±0.42	3.07±0.47	5.50±2.64	3.97±0.68	1.74±0.03
F004	Colocasia (<i>Colocasia esculenta</i>)	6	4.74±0.61	7.60±0.91	12.77±1.06	14.22±0.85	4.57±0.51	4.03±0.94	4.17±0.39	3.89±0.26
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	5.11±1.11	5.57±0.58	26.00±5.38	14.81±2.20	3.91±0.43	3.16±0.96	4.33±0.23	2.70±0.11
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	5.81±1.42	3.58±0.72	21.07±0.46	18.54±0.61	3.31±0.07	3.60±0.49	4.39±0.84	3.23±0.54
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	5.63	3.55	9.76	19.04	3.00	3.19	4.17	2.94
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	7.52	3.64	6.81	20.40	2.80	3.36	4.54	3.92
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	7.36±0.11	4.53±0.01	9.70±0.96	28.02±1.14	4.08±0.05	4.29±0.13	4.33±0.05	1.62±0.30
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	7.49±1.02	4.15±0.94	9.78±1.30	26.26±6.49	4.51±1.56	4.28±1.11	4.55±1.16	1.73±0.32
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	7.12	4.89	10.10	24.98	4.12	4.84	4.01	1.43
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	7.37	4.16	10.49	27.62	3.83	4.45	4.12	1.78
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	8.00±1.11	3.48±1.23	22.80±1.34	9.65±0.44	4.90±0.66	3.83±0.07	5.21±0.44	3.26±0.41
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	8.18±2.81	3.19±0.54	14.21±1.92	10.60±1.50	5.46±0.72	3.98±0.77	5.26±0.27	2.69±0.30
F015	Tapioca (<i>Manihot esculenta</i>)	3	8.75±1.23	3.77±0.98	13.86±2.02	14.54±1.41	5.65±0.65	3.83±0.65	5.76±0.55	1.92±0.74

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	1.86	3.27	5.85	3.76	0.98	1.23	4.64	3.75	1.06	3.80
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	2.89±0.11	3.36±0.24	6.00±0.56	2.99±0.38	1.55±0.16	1.66±0.10	6.46±0.71	3.81±0.33	1.13±0.04	5.84±0.49
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	2.86±0.65	3.82±0.72	6.71±0.18	4.27±0.28	1.42±0.21	1.65±0.16	4.54±1.15	3.54±0.28	0.96±0.14	4.62±0.90
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	2.37	3.27	6.09	3.13	1.18	1.76	6.23	4.00	1.25	5.98

G CONDIMENTS AND SPICES-FRESH

283

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5	1.77±0.38	3.64±0.46	5.13±1.07	3.43±0.59	1.17±0.12	1.52±0.31	4.33±0.68	3.87±0.72	0.82±0.14	4.43±1.19
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3	1.62±0.18	3.16±0.32	5.02±0.32	3.58±0.52	1.25±0.09	1.41±0.22	4.25±0.31	3.84±0.29	0.75±0.06	4.22±0.48
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5	1.76±0.25	2.99±0.34	4.94±0.23	3.95±0.24	1.04±0.14	1.61±0.23	4.54±1.01	3.67±0.52	0.80±0.14	4.07±0.44
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3	1.82±0.12	3.08±0.68	4.99±0.37	3.41±0.82	1.05±0.10	1.22±0.12	4.59±0.32	3.67±0.32	0.72±0.11	3.88±0.47
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2	1.54±0.15	2.86±0.50	5.01±0.28	3.79±0.29	0.86±0.15	1.01±0.05	5.47±0.43	3.52±0.17	0.68±0.09	3.82±0.76
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1	1.49	2.97	4.97	3.65	0.66	0.98	4.76	2.95	0.92	3.08
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1	2.00	2.89	5.40	4.09	1.18	1.68	6.25	3.14	0.80	3.24
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6	1.72±0.28	3.14±0.47	5.05±0.54	3.66±0.51	1.09±0.18	1.40±0.29	4.69±0.82	3.66±0.47	0.77±0.11	4.02±0.72
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	2.48±0.39	4.37±0.24	6.08±0.63	5.19±0.28	1.30±0.14	0.63±0.05	5.35±0.50	4.00±0.45	1.08±0.07	6.44±0.30
G010	Curry leaves (<i>Murraya koenigii</i>)	6	1.73±0.13	3.75±0.17	6.51±0.30	3.66±0.30	0.50±0.09	0.60±0.06	3.50±0.33	3.88±0.26	1.64±0.25	3.92±0.15
G011	Garlic, big clove (<i>Allium sativum</i>)	6	1.33±0.17	2.25±0.33	3.79±0.24	4.11±0.29	0.75±0.19	1.71±0.38	3.53±0.52	3.18±0.47	0.83±0.09	3.17±0.63
G012	Garlic, small clove (<i>Allium sativum</i>)	3	1.26±0.06	2.24±0.41	4.07±0.47	3.94±0.26	0.76±0.06	1.93±0.21	3.27±0.37	3.08±0.42	0.73±0.23	3.79±0.99
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	1.30	3.44	5.68	4.15	0.69	1.66	3.46	3.65	0.97	3.58
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	1.58±0.17	3.98±0.47	6.49±0.51	2.31±0.48	0.89±0.29	0.82±0.18	4.36±0.40	4.35±0.47	0.99±0.17	4.35±0.65
G015	Mango ginger (<i>Curcuma amada</i>)	3	2.05±0.17	4.30±0.65	9.80±0.11	1.88±0.56	1.11±0.05	0.80±0.19	4.52±0.28	5.70±0.67	1.29±0.23	4.79±0.31
G016	Mint leaves (<i>Mentha spicata</i>)	4	1.62±0.29	4.34±0.30	8.22±0.38	2.93±0.19	1.41±0.09	0.72±0.08	5.34±0.47	4.57±0.30	1.23±0.17	5.73±0.38

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	6.21	5.43	15.82	14.54	5.21	3.68	5.86	3.62
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	5.37±0.72	9.26±1.01	11.47±0.72	16.63±1.63	4.61±0.27	5.03±0.59	6.48±0.57	3.17±0.43
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	5.82±1.28	7.78±1.35	11.40±1.41	14.97±1.28	4.52±0.84	4.47±0.77	5.48±1.22	3.09±0.56
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	6.78	8.61	11.93	16.15	4.78	5.30	6.28	3.34

G CONDIMENTS AND SPICES-FRESH										
G001	Chillies, green-1 (<i>Capsicum annum</i>)	5	4.98±0.69	4.99±1.66	16.33±2.33	16.66±1.36	4.95±0.80	3.16±0.45	4.59±0.40	2.71±0.45
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3	4.79±0.79	4.83±0.67	16.93±1.43	18.31±0.86	4.03±0.52	2.81±0.30	4.17±0.47	2.49±0.39
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5	5.01±0.51	4.78±0.26	18.29±1.17	19.15±0.59	4.57±0.42	2.65±0.30	4.66±0.38	2.58±0.33
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3	4.60±0.59	4.78±0.33	17.72±0.78	17.31±0.54	4.98±0.48	2.76±0.31	4.21±0.35	2.93±0.25
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2	5.12±0.29	4.36±0.14	17.19±1.22	17.64±0.77	4.40±0.04	2.71±0.21	4.70±0.40	2.51±0.42
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1	3.91	4.30	18.43	19.59	3.64	2.08	4.01	2.11
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1	5.02	5.13	16.38	17.96	3.69	3.44	4.37	2.93
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6	4.86±0.62	4.79±0.79	17.24±1.50	17.94±1.20	4.46±0.65	2.85±0.41	4.42±0.42	2.64±0.38
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	5.56±0.51	5.04±0.18	14.75±1.81	12.31±1.23	5.07±0.69	4.09±0.27	3.94±0.63	3.42±0.36
G010	Curry leaves (<i>Murraya koenigii</i>)	6	7.75±0.50	4.64±0.53	15.17±0.79	11.12±0.54	6.48±0.49	6.19±0.33	5.94±0.38	2.81±0.17
G011	Garlic, big clove (<i>Allium sativum</i>)	6	4.44±0.23	16.46±1.08	11.11±1.68	16.97±1.37	3.03±0.40	3.47±0.50	3.65±0.40	3.31±0.53
G012	Garlic, small clove (<i>Allium sativum</i>)	3	3.73±0.23	14.66±0.47	10.45±0.81	17.60±1.05	2.94±0.28	3.92±1.30	3.20±0.22	3.27±0.19
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	4.25	16.42	12.15	16.92	3.85	3.85	4.60	3.07
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6	4.73±0.69	5.93±0.68	15.34±1.84	13.82±1.64	4.91±0.73	3.28±0.71	4.80±0.87	3.78±0.32
G015	Mango ginger (<i>Curcuma amada</i>)	3	4.59±0.67	4.35±0.75	17.86±1.67	14.13±0.21	5.51±0.22	4.03±1.17	5.05±0.69	3.29±0.29
G016	Mint leaves (<i>Mentha spicata</i>)	4	5.25±0.12	4.96±0.14	13.21±1.43	15.47±0.99	5.46±0.49	4.81±0.72	4.54±0.20	3.32±0.28

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
G017	Onion, big (<i>Allium cepa</i>)	6	1.76±0.20	2.08±0.40	3.25±0.23	3.52±0.62	0.92±0.13	0.88±0.12	2.77±0.20	2.10±0.36	1.23±0.08	2.75±0.61
G018	Onion, small (<i>Allium cepa</i>)	5	1.53±0.33	3.91±0.73	5.02±1.29	2.62±0.44	1.84±0.35	1.38±0.38	4.13±0.38	3.62±0.33	0.73±0.09	3.93±0.21
G CONDIMENTS AND SPICES-DRY												
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	2.19±0.84	2.49±0.15	5.61±0.50	2.21±0.45	0.70±0.16	0.89±0.39	4.35±0.62	2.74±0.27	1.23±0.11	1.84±0.27
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	1.91±0.29	2.15±0.45	7.24±0.57	3.24±0.44	1.20±0.18	1.06±0.21	4.32±1.07	3.03±0.50	0.96±0.05	2.85±0.22
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	1.82±0.04	1.80±0.15	6.02±0.22	2.58±0.05	0.86±0.03	0.79±0.04	3.39±0.07	2.95±0.07	0.86±0.18	2.64±0.16
G022	Chillies, red (<i>Capsicum annum</i>)	6	2.11±0.19	3.75±0.41	6.38±0.59	4.19±0.25	1.26±0.38	1.74±0.13	5.09±0.81	4.08±0.56	0.92±0.18	4.82±0.57
G023	Cloves (<i>Syzygium aromaticum</i>)	6	2.28±0.40	2.13±0.13	5.82±0.35	6.60±0.39	1.26±0.12	0.81±0.06	4.10±0.50	2.99±0.33	0.90±0.05	4.31±0.11
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	2.85±0.22	4.52±0.40	6.73±0.42	5.62±0.25	2.04±0.16	0.99±0.07	4.09±0.30	4.02±0.26	1.18±0.16	6.24±0.39
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	2.87±0.09	4.43±0.13	6.23±0.34	4.85±0.16	1.25±0.19	1.02±0.03	4.46±0.36	3.91±0.25	0.95±0.07	5.13±0.15
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	2.28±0.40	4.57±0.34	6.00±0.41	6.60±0.39	1.22±0.08	1.38±0.16	4.10±0.50	2.85±0.16	1.19±0.01	4.43±0.54
G027	Mace (<i>Myristica fragrans</i>)	6	1.89±0.19	2.35±0.26	5.78±0.52	2.61±0.50	1.18±0.01	1.31±0.10	4.29±0.94	5.26±0.67	1.26±0.07	3.09±0.89
G028	Nutmeg (<i>Myristica fragrans</i>)	6	1.43±0.36	2.23±0.59	5.20±0.79	3.42±0.52	1.08±0.07	0.83±0.14	4.86±0.40	3.02±0.59	0.88±0.06	3.12±0.22
G029	Omum (<i>Trachyspermum ammi</i>)	6	2.38±0.12	1.70±0.18	5.26±0.51	4.17±0.36	0.97±0.10	1.11±0.17	3.23±0.49	3.04±0.47	1.38±0.09	4.70±0.43
G030	Pippali (<i>Piper longum</i>)	6	1.46±0.06	2.44±0.48	8.49±0.38	1.95±0.29	0.93±0.13	0.77±0.10	4.25±0.98	3.01±0.14	1.31±0.14	3.82±0.45
G031	Pepper, black (<i>Piper nigrum</i>)	6	1.28±0.12	3.85±0.39	8.25±0.45	2.23±0.17	0.60±0.10	1.26±0.09	5.15±0.39	2.63±0.78	0.55±0.06	3.62±0.13
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	2.18±0.13	3.64±0.08	5.98±0.29	4.45±0.29	1.51±0.29	1.37±0.14	3.69±0.56	3.54±0.29	0.82±0.08	4.33±0.09
G033	Turmeric powder (<i>Curcuma domestica</i>)	6	1.88±0.15	4.54±0.32	8.28±0.36	3.76±0.17	1.13±0.23	0.77±0.16	5.56±0.45	4.45±0.19	2.06±0.23	5.81±0.60
H NUTS AND OIL SEEDS												
H001	Almond (<i>Prunus amygdalus</i>)	6	2.22±0.43	2.38±0.38	4.02±0.57	2.28±0.19	1.24±0.27	0.84±0.12	5.61±0.22	2.82±0.40	0.89±0.04	4.45±0.40
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	2.09±0.35	1.74±0.16	4.43±0.43	4.59±0.40	0.98±0.05	0.65±0.18	3.56±0.96	2.81±0.63	0.79±0.17	3.25±0.44

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
G017	Onion, big (<i>Allium cepa</i>)	6	3.61±0.64	13.21±0.46	8.96±0.84	25.10±0.60	3.86±0.64	2.01±0.33	2.68±0.54	1.92±0.23
G018	Onion, small (<i>Allium cepa</i>)	5	5.48±0.78	12.28±0.81	9.51±1.25	25.34±1.94	6.50±0.36	3.55±0.81	3.03±0.55	2.24±0.48
G CONDIMENTS AND SPICES-DRY										
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	3.99±0.34	3.33±0.61	13.74±1.92	27.68±4.23	4.34±0.46	7.15±0.64	6.03±0.50	2.40±0.33
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	6.24±0.75	9.33±0.93	11.96±1.40	19.21±1.33	5.29±0.77	3.60±0.30	5.82±0.64	2.39±0.42
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	6.19±0.88	7.36±0.31	15.14±0.95	17.81±0.83	5.64±0.85	4.25±0.20	5.37±0.01	1.97±0.36
G022	Chillies, red (<i>Capsicum annum</i>)	6	4.77±0.35	4.96±0.22	14.05±2.24	17.32±0.88	5.13±0.50	5.67±0.62	4.32±0.37	3.09±0.44
G023	Cloves (<i>Syzygium aromaticum</i>)	6	4.31±0.58	6.38±0.25	11.01±0.99	18.47±0.91	4.58±1.27	3.90±0.45	5.32±0.46	2.57±0.30
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	4.97±0.51	6.01±0.58	10.72±0.70	15.62±1.50	6.29±0.44	4.91±0.49	4.70±0.52	3.05±0.33
286	G025 Cumin seeds (<i>Cuminum cyminum</i>)	6	5.22±0.28	6.82±0.34	8.96±0.29	20.91±0.54	7.22±0.44	4.33±0.41	5.07±0.18	3.27±0.32
	G026 Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	4.31±0.58	8.38±0.41	11.01±0.99	18.47±0.91	4.92±0.54	3.90±0.45	5.32±0.46	2.57±0.30
	G027 Mace (<i>Myristica fragrans</i>)	6	7.39±0.52	4.80±0.60	12.36±1.37	10.93±0.68	6.24±0.41	5.21±0.55	5.92±0.67	3.78±0.33
	G028 Nutmeg (<i>Myristica fragrans</i>)	6	5.98±0.79	6.88±0.80	10.96±0.83	16.10±0.76	5.72±0.66	4.54±0.70	6.20±0.68	2.43±0.43
	G029 Omum (<i>Trachyspermum ammi</i>)	6	5.47±0.51	5.91±0.48	10.87±1.78	18.46±0.72	7.84±0.68	4.72±0.40	5.33±0.44	2.74±0.15
	G030 Pippali (<i>Piper longum</i>)	6	6.12±0.90	7.69±0.19	15.24±1.47	15.04±0.83	4.70±0.73	6.61±1.02	5.25±0.85	4.97±0.53
	G031 Pepper, black (<i>Piper nigrum</i>)	6	5.45±0.06	2.31±0.40	12.11±0.70	15.96±0.78	4.72±0.22	6.58±0.99	4.16±0.24	4.50±0.13
	G032 Poppy seeds (<i>Papaver somniferum</i>)	6	4.89±0.43	8.87±0.25	10.98±0.87	24.34±0.92	5.12±0.58	14.39±0.10	5.29±0.55	3.41±0.22
	G033 Turmeric powder (<i>Curcuma domestica</i>)	6	3.75±0.32	5.35±0.48	14.66±0.43	13.44±0.50	4.53±0.23	2.61±0.26	4.46±0.27	3.12±0.32
H NUTS AND OIL SEEDS										
H001	Almond (<i>Prunus amygdalus</i>)	6	4.20±0.75	11.01±0.22	11.77±0.43	27.98±0.71	6.04±0.15	4.03±0.13	4.27±0.44	3.38±0.73
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6	3.80±0.37	11.15±1.15	8.03±0.92	19.36±1.56	4.70±0.58	3.71±0.30	4.68±0.28	3.18±0.76

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	2.75±0.96	1.56±0.27	4.26±0.07	4.84±0.36	0.97±0.18	0.55±0.03	3.83±0.72	2.86±0.89	0.76±0.13	3.33±0.18
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	1.81	1.62	4.51	4.59	1.27	0.64	3.65	2.89	0.70	4.89
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	2.27±0.36	3.86±0.30	7.02±0.23	4.80±0.26	1.38±0.11	1.33±0.09	4.87±0.70	3.12±0.17	1.05±0.11	3.23±0.19
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	2.15±0.17	3.02±0.69	6.74±0.45	4.31±0.38	1.55±0.20	1.75±0.10	5.19±0.49	3.07±0.18	0.62±0.12	4.81±1.10
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	2.40±0.23	4.37±0.41	6.93±0.38	4.08±0.19	2.19±0.14	1.47±0.13	4.51±0.20	3.25±0.26	1.20±0.15	5.83±0.36
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	2.62±0.10	3.75±0.15	6.58±0.10	3.85±0.19	1.85±0.16	1.23±0.10	3.89±0.18	3.15±0.16	1.24±0.18	4.69±0.18
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	2.39±0.25	5.69±0.17	5.91±0.78	2.63±0.31	3.36±0.13	1.22±0.16	4.74±0.38	3.19±0.22	1.10±0.11	4.78±0.37
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	2.30±0.24	5.01±0.29	6.18±0.37	2.57±0.22	2.69±0.16	1.13±0.13	3.83±0.85	3.05±0.37	1.17±0.10	4.79±0.14
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	2.41±0.11	6.02±0.02	5.40±0.41	2.59±0.08	2.25±0.04	1.31±0.08	4.38±0.60	3.00±0.28	1.16±0.09	4.64±0.23
H012	Ground nut (<i>Arachis hypogaea</i>)	6	2.24±0.20	4.67±0.38	6.40±0.57	3.39±0.28	1.21±0.14	1.33±0.11	5.40±1.08	2.54±0.17	0.90±0.14	3.92±0.93
H013	Mustard seeds (<i>Brassica nigra</i>)	6	2.76±0.16	3.80±0.46	6.96±0.32	5.31±0.34	1.66±0.43	1.63±0.10	4.47±0.71	4.02±0.31	1.23±0.09	5.00±0.72
H014	Linseeds (<i>Linum usitatissimum</i>)	6	2.62±0.10	4.47±0.22	6.81±0.26	4.63±0.22	1.75±0.05	1.61±0.10	5.58±0.26	3.88±0.10	1.57±0.12	5.31±0.13
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	1.88±0.47	4.57±0.23	4.71±0.27	3.61±0.28	1.31±0.21	1.76±0.53	3.14±0.91	2.70±0.88	1.25±0.14	3.69±0.67
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	1.87±0.20	4.69±0.27	5.22±0.77	3.72±0.19	1.32±0.07	1.71±0.14	3.72±0.67	3.12±0.35	1.11±0.10	4.50±0.31
H017	Pine seed (<i>Pinus sp.</i>)	5	2.38±0.19	4.00±0.22	6.23±0.19	3.79±0.18	1.43±0.13	1.56±0.27	3.68±0.26	3.63±0.32	0.83±0.09	4.73±0.17
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	2.28±0.13	5.22±0.15	7.55±0.30	3.32±0.18	1.45±0.12	1.46±0.13	5.52±0.51	4.60±0.17	1.42±0.19	5.27±0.22
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	2.44±0.21	3.69±0.33	6.32±0.14	3.55±0.09	0.74±0.06	1.60±0.12	4.27±0.19	3.30±0.13	1.43±0.14	4.35±0.24
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	2.30±0.10	4.21±0.08	6.38±0.34	3.26±0.26	0.84±0.19	1.43±0.15	4.97±0.31	3.31±0.16	1.14±0.06	4.99±0.19
H021	Walnut (<i>Juglans regia</i>)	6	2.34±0.24	4.74±0.12	6.87±0.50	2.18±0.54	0.73±0.13	1.36±0.13	4.41±0.68	3.08±0.28	1.04±0.13	5.78±0.36

I SUGARS

I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	1.64±0.41	2.27±0.57	2.97±0.14	2.73±0.15	0.44±0.11	0.49±0.10	4.82±0.46	2.18±0.25	0.59±0.18	3.45±0.30
------	--	---	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Table 8. Amino Acid Profile

288

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3	6.70±0.44	12.68±1.19	8.22±1.00	19.61±1.29	5.21±0.30	4.62±0.69	5.89±1.02	2.84±0.28
H004	Arecanut, fresh (<i>Areca catechu</i>)	2	3.80	10.99	8.20	22.03	4.54	4.25	5.01	2.84
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	5.35±0.37	9.75±0.07	9.85±0.19	22.76±0.64	5.25±0.39	3.97±0.20	6.39±0.35	2.81±0.11
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	5.51±0.58	13.08±1.96	9.59±1.16	22.14±1.17	4.54±0.33	3.50±0.27	5.11±0.62	2.69±0.07
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	5.27±0.18	13.87±0.44	9.62±0.23	19.12±0.56	4.63±0.19	4.61±0.21	5.33±0.20	3.20±0.31
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	5.33±0.35	10.67±0.38	10.29±0.83	21.34±0.82	5.22±0.19	4.37±0.17	4.99±0.18	3.47±0.12
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	5.92±0.70	11.02±0.73	8.63±1.39	20.14±1.72	5.66±0.76	3.76±0.41	5.48±0.54	3.22±0.72
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	5.67±0.82	11.30±0.77	8.65±0.48	20.73±0.99	5.58±0.55	3.48±0.14	5.43±0.38	3.36±0.26
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	5.62±1.14	11.18±0.75	9.06±1.38	20.03±1.33	6.32±1.48	3.76±0.41	5.63±0.51	3.30±0.33
H012	Ground nut (<i>Arachis hypogaea</i>)	6	4.23±0.30	10.85±0.78	11.68±1.66	19.41±1.16	5.56±0.38	3.74±0.97	5.05±0.37	3.86±0.37
H013	Mustard seeds (<i>Brassica nigra</i>)	6	4.62±0.53	6.71±0.74	7.14±0.68	19.70±2.13	5.08±0.77	6.11±0.80	4.20±0.72	3.03±0.30
H014	Linseeds (<i>Linum usitatissimum</i>)	6	4.89±0.25	11.15±0.62	10.87±0.25	17.70±1.07	5.71±0.20	4.39±0.17	5.25±0.12	3.48±0.12
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	6.92±0.68	7.54±0.65	9.85±0.55	22.85±2.79	6.13±0.79	4.46±0.61	4.16±0.84	3.02±0.19
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	4.90±0.74	8.33±0.52	10.53±1.76	21.33±1.60	6.24±0.13	4.20±0.56	6.18±0.91	2.87±0.95
H017	Pine seed (<i>Pinus sp.</i>)	5	4.33±0.27	16.73±0.51	8.97±0.61	18.23±0.79	4.34±0.20	4.59±0.23	4.18±0.22	2.74±0.11
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	5.17±0.15	8.52±0.36	9.94±0.38	16.37±0.62	5.99±0.17	3.69±0.12	4.19±0.30	3.18±0.29
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	5.71±0.19	9.34±0.23	10.22±0.38	20.14±0.86	5.96±0.16	4.05±0.21	5.56±0.12	3.24±0.21
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	5.69±0.33	8.55±0.37	9.80±0.29	22.29±0.81	6.29±0.18	4.76±0.28	5.51±0.08	2.47±0.11
H021	Walnut (<i>Juglans regia</i>)	6	5.44±0.60	13.47±0.49	10.18±0.90	20.50±0.77	5.55±0.32	3.42±0.35	6.54±0.50	2.73±0.34
I SUGARS										
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	4.53±0.25	3.01±0.42	31.24±0.90	12.89±2.93	2.72±0.71	1.71±0.74	3.34±0.28	1.00±0.18

Food code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	1.79±0.17	3.81±0.15	3.55±0.08	2.53±0.29	0.40±0.06	0.52±0.14	5.11±0.29	3.02±0.10	0.75±0.16	4.19±0.27
J MUSHROOMS												
J001	Button mushroom, fresh (<i>Agaricus sp.</i>)	1	2.68	4.36	6.88	6.82	1.66	0.98	4.63	4.40	1.26	5.48
J002	Chicken mushroom, fresh (<i>Lactiporus sp.</i>)	1	2.16	4.42	7.03	7.20	1.70	1.02	4.50	4.38	1.30	5.36
J003	Shiitake mushroom, fresh (<i>Lentinula sp.</i>)	1	2.20	4.50	7.14	7.36	1.56	1.06	4.20	4.92	1.32	6.08
J004	Oyster mushroom, dried (<i>Pleurotus sp.</i>)	1	2.81	4.30	7.08	7.54	1.82	1.20	4.52	4.86	1.41	6.16
K MISCELLANEOUS FOODS												
K001	Toddy (<i>Borassus flabellifer</i>)	10										
K002	Coconut Water (<i>Cocos nucifera</i>)	6	1.75±0.46	1.58±0.28	2.35±0.56	3.84±2.33	0.59±0.12	0.99±0.13	1.95±0.89	2.69±0.66	0.78±0.18	3.02±0.59
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6	2.08±0.11	5.30±0.38	9.83±0.05	7.87±0.30	2.46±0.08	1.25±0.08	4.26±0.14	4.42±0.21	1.30±0.18	5.86±0.29
L002	Milk, whole, Cow	6	2.14±0.13	6.20±0.55	10.66±0.41	8.59±0.20	2.51±0.12	1.22±0.04	5.09±0.42	4.81±0.07	1.46±0.11	6.40±0.24
L003	Paneer	6	2.04±0.45	4.79±0.19	9.76±0.14	5.79±0.93	2.28±0.21	0.72±0.16	5.08±0.16	4.37±0.16	1.42±0.87	5.68±0.20
L004	Khoa	6	1.47±0.16	4.93±0.21	10.34±0.28	2.41±0.21	1.95±0.17	0.75±0.17	5.08±0.32	4.63±0.18	1.59±0.80	6.10±0.18

Table 8. Amino Acid Profile

Food code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			$\leftarrow \text{g} \rightarrow$							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	5.22±0.36	3.43±0.16	30.49±1.15	11.60±0.54	2.70±0.22	2.46±0.25	3.55±0.31	2.35±0.19
J MUSHROOMS										
J001	Button mushroom, fresh (<i>Agaricus sp.</i>)	1	5.60	6.60	10.24	14.35	5.38	3.80	4.32	3.20
J002	Chicken mushroom, fresh (<i>Lactiporus sp.</i>)	1	6.20	7.23	10.30	15.80	5.26	4.21	4.50	3.18
J003	Shiitake mushroom, fresh (<i>Lentinula sp.</i>)	1	6.38	6.80	10.51	14.67	5.80	3.66	4.45	3.10
J004	Oyster mushroom, dried (<i>Pleurotus sp.</i>)	1	6.46	6.94	10.72	15.60	5.69	4.40	4.80	3.08
K MISCELLANEOUS FOODS										
K001	Toddy (<i>Borassus flabellifer</i>)	10								
K002	Coconut Water (<i>Cocos nucifera</i>)	6	20.28±2.26	5.13±1.26	10.81±0.71	31.01±1.65	1.97±0.64	4.25±1.56	5.05±1.71	1.57±0.31
L MILK AND MILK PRODUCTS										
L001	Milk, whole, Buffalo	6	3.38±0.14	3.09±0.42	8.21±0.16	16.21±0.76	2.43±0.08	7.60±0.40	5.78±0.39	4.86±0.41
L002	Milk, whole, Cow	6	3.87±0.27	3.25±0.34	8.84±0.36	17.88±0.43	2.35±0.07	6.82±0.13	6.36±0.51	5.48±0.35
L003	Paneer	6	3.39±1.05	3.56±0.46	7.69±0.14	20.24±1.09	2.18±0.19	10.45±0.59	5.27±0.13	5.36±0.31
L004	Khoa	6	3.99±0.35	1.06±0.67	7.95±0.23	21.82±0.43	2.02±0.11	11.32±0.89	5.37±0.33	4.95±0.31

Table 8. Amino Acid Profile

262

Food Code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
M EGG AND EGG PRODUCTS										
M001	Egg, poultry, whole, raw	6	6.72±0.27	6.29±0.32	9.53±0.18	13.53±0.32	3.23±0.20	4.11±0.21	6.71±0.33	3.93±0.12
M002	Egg, poultry, white, raw	6	6.24±0.33	5.28±0.56	10.55±0.49	14.15±0.65	3.49±0.27	4.88±0.78	6.45±0.31	3.62±0.16
M003	Egg, poultry, yolk, raw	6	6.17±0.22	7.08±0.38	9.35±0.23	13.69±0.40	3.20±0.11	3.97±0.15	7.97±0.33	4.05±0.17
M004	Egg, poultry, whole, boiled	6	6.66±0.09	6.25±0.40	10.13±0.56	13.69±0.39	3.20±0.12	3.88±0.17	6.85±0.21	4.03±0.15
M005	Egg, poultry, white, boiled	6	6.16±0.39	5.37±0.16	10.20±0.40	13.03±0.64	3.42±0.25	4.53±0.71	7.36±0.35	3.48±0.22
M006	Egg, poultry, yolk, boiled	6	6.43±0.82	6.94±0.49	9.36±0.24	13.06±0.74	3.04±0.06	3.46±0.25	7.44±0.38	4.06±0.62
M007	Egg, poultry, omlet	3	6.81±1.01	6.09±0.27	9.76±0.28	13.73±0.07	3.32±0.07	4.91±1.51	6.68±0.15	3.93±0.04
M008	Egg, country hen, whole, raw	1	6.21	6.42	9.79	13.04	3.54	3.36	7.54	3.70
M009	Egg, country hen, whole, boiled	1	6.87	6.39	9.58	13.24	3.28	3.82	6.65	3.99
M010	Egg, country hen, omlet	1	5.82	5.91	10.03	13.87	3.26	3.83	6.90	3.71
M011	Egg, duck, whole, boiled	1	6.36	5.08	10.12	13.41	2.76	3.59	5.74	3.93
M012	Egg, duck, whole, raw	1	6.45	5.22	10.29	13.61	3.62	3.50	6.49	3.96
M013	Egg, duck, whole, omlet	1	6.74	5.08	9.74	13.88	2.88	3.91	5.61	3.53
M014	Egg, quail, whole, raw	1	6.18	6.03	10.79	13.77	4.14	3.36	6.43	3.73
M015	Egg, quail, whole, boiled	1	5.34	5.48	9.93	13.44	3.45	3.71	6.00	3.89
N POULTRY										
N001	Chicken, poultry, leg, skinless	4	6.04±0.32	7.07±0.21	9.35±0.51	16.40±0.68	4.98±0.12	4.30±0.17	3.91±0.25	3.71±0.17
N002	Chicken, poultry, thigh, skinless	6	6.04±0.32	7.01±0.15	9.05±0.56	16.87±0.37	4.85±0.46	3.93±0.47	4.01±0.36	3.51±0.23
N003	Chicken, poultry, breast, skinless	5	6.31±0.37	7.23±0.23	9.16±0.45	16.92±0.43	4.80±0.25	4.77±0.31	4.15±0.39	3.89±0.16
N004	Chicken, poultry, wing, skinless	5	6.26±0.33	6.84±0.20	9.42±0.37	16.01±0.45	5.01±0.27	4.37±0.43	3.85±0.20	3.15±0.05

Food Code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{g}}{\text{g}}$									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
N005	Poultry, chicken, liver	1	3.20	5.11	9.93	8.20	2.53	1.44	5.82	4.82	1.52	6.30
N006	Poultry, chicken, gizzard	1	2.61	4.53	7.67	8.82	2.55	1.67	4.48	4.30	1.83	4.59
N007	Country hen, leg, with skin	1	2.20	5.16	9.22	7.52	2.49	1.19	4.32	4.93	1.15	5.99
N008	Country hen, thigh, with skin	1	2.87	5.04	9.29	7.65	2.63	1.08	5.01	5.21	1.26	5.01
N009	Country hen, breast, with skin	1	4.04	4.98	7.92	7.96	2.47	1.08	5.77	4.38	1.80	5.08
N010	Country hen, wing, with skin	1	3.50	4.64	9.12	7.90	2.84	1.16	5.70	4.33	1.24	5.12
N011	Duck, meat, with skin	1	3.26	5.46	8.36	7.31	2.65	1.14	5.34	5.31	1.54	5.09
N012	Emu, meat, skinless	1	3.12	5.77	8.58	7.23	2.89	1.24	5.12	5.13	1.74	5.04
N013	Guinea fowl, meat, with skin	1	2.66	4.88	8.49	7.35	2.58	0.99	4.70	4.64	1.65	4.98
N014	Pigeon, meat, with skin	1	2.47	5.33	8.32	7.22	3.02	1.16	4.51	4.88	1.62	5.28
N015	Quail, meat, skinless	1	2.98	5.74	8.65	7.20	2.89	1.27	5.03	5.11	1.74	5.14
N016	Turkey, leg, with skin	1	2.40	5.80	8.62	6.58	3.08	1.43	4.64	5.06	1.66	5.06
N017	Turkey, thigh, with skin	1	2.62	5.82	8.94	6.78	2.69	1.44	4.62	5.32	1.62	5.36
N018	Turkey, breast, with skin	1	2.97	5.46	8.17	7.07	2.57	1.12	5.91	4.80	1.54	5.03
N019	Turkey, wing, with skin	1	3.32	5.10	9.14	7.22	2.35	1.43		4.85	1.71	5.51
O ANIMAL MEAT												
O001	Goat, shoulder	6	3.33±0.48	4.19±0.39	9.00±0.38	7.66±0.33	2.17±0.17	1.35±0.18	4.71±0.24	4.71±0.15	1.34±0.10	5.12±0.28
O002	Goat, chops	6	3.53±0.69	4.59±0.17	7.26±0.09	6.24±0.19	2.56±0.57	1.35±0.16	4.45±0.23	5.09±0.66	1.63±0.23	4.92±0.29
O003	Goat, legs	6	3.63±0.76	4.63±0.31	8.09±0.15	6.81±0.04	2.79±0.30	1.67±0.57	4.51±0.09	5.38±0.82	1.43±0.21	4.65±0.35
O004	Goat, brain	5	2.98±1.01	4.82±0.09	8.24±0.25	5.21±0.20	3.05±0.29	1.29±0.08	4.70±0.03	5.29±0.44	1.36±0.11	5.29±0.18
O005	Goat, tongue	4	3.18±0.37	4.15±0.28	7.05±0.18	5.59±0.09	2.38±0.52	1.45±0.11	4.50±0.42	4.70±0.47	1.45±0.23	4.67±0.32

Table 8. Amino Acid Profile

294

Food Code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
										
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
N005	Poultry, chicken, liver	1	6.12	6.59	9.33	12.74	4.65	4.51	4.44	3.81
N006	Poultry, chicken, gizzard	1	6.22	7.97	8.56	14.29	5.63	5.90	4.01	3.78
N007	Country hen, leg, with skin	1	6.03	7.42	9.92	15.12	3.03	3.69	5.57	3.97
N008	Country hen, thigh, with skin	1	6.19	7.32	8.86	15.54	4.76	4.87	4.96	3.99
N009	Country hen, breast, with skin	1	6.05	7.67	8.77	15.91	4.34	5.06	4.78	4.09
N010	Country hen, wing, with skin	1	6.58	6.50	9.03	15.93	5.37	4.60	3.77	3.86
N011	Duck, meat, with skin	1	6.44	7.45	9.31	14.99	4.80	4.47	4.43	4.59
N012	Emu, meat, skinless	1	6.62	7.14	8.73	14.36	4.83	4.53	4.26	4.39
N013	Guinea fowl, meat, with skin	1	6.58	6.79	9.08	14.57	4.98	4.20	4.04	3.45
N014	Pigeon, meat, with skin	1	6.31	6.59	8.95	14.38	4.77	4.14	4.19	3.62
N015	Quail, meat, skinless	1	6.79	7.01	8.90	14.35	5.03	3.50	4.46	4.13
N016	Turkey, leg, with skin	1	6.60	6.80	8.77	15.71	4.55	4.13	4.46	4.04
N017	Turkey, thigh, with skin	1	6.15	6.93	8.65	16.08	4.66	4.27	4.65	3.89
N018	Turkey, breast, with skin	1	6.44	7.52	8.86	15.39	4.62	4.26	4.09	4.36
N019	Turkey, wing, with skin	1	6.09	6.26	9.44	16.62	5.20	4.28	4.22	4.07

O ANIMAL MEAT

O001	Goat, shoulder	6	5.66±0.62	7.29±1.42	9.26±0.68	14.68±0.73	5.63±0.34	4.72±0.13	4.34±0.30	3.95±0.43
O002	Goat, chops	6	5.41±0.61	7.06±1.26	9.29±0.34	14.31±1.25	6.05±0.70	4.20±0.47	4.24±0.63	3.71±0.23
O003	Goat, legs	6	5.15±0.74	7.76±1.20	9.89±0.20	14.02±1.12	5.64±0.58	4.08±0.45	4.43±0.42	4.66±0.79
O004	Goat, brain	5	6.01±0.30	6.61±0.72	8.47±0.30	13.68±0.35	5.72±0.23	4.20±0.14	5.29±0.35	4.68±0.55
O005	Goat, tongue	4	5.70±0.61	7.02±0.81	8.26±0.43	13.47±0.63	6.34±0.36	4.78±0.53	4.64±0.75	3.97±0.62

Food Code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
O006	Goat, lungs	4	2.54±0.05	3.26±0.12	8.04±0.59	5.82±0.10	2.46±0.41	1.48±0.05	5.15±0.53	4.64±0.42	1.45±0.16	5.74±0.45
O007	Goat, heart	5	3.08±0.76	4.27±0.26	7.04±0.07	6.35±0.18	2.41±0.20	1.71±0.38	5.08±0.62	5.38±0.21	1.31±0.12	5.43±0.51
O008	Goat, liver	6	3.04±0.42	4.61±0.38	8.39±0.98	6.02±0.25	2.49±0.15	1.71±0.74	4.53±0.99	4.23±0.47	1.22±0.11	6.58±0.68
O009	Goat, tripe	5	3.59±0.31	3.24±0.10	7.22±0.19	5.99±0.17	2.88±0.20	1.62±0.42	5.24±0.45	4.40±0.25	1.34±0.06	4.16±0.21
O010	Goat, spleen	4	2.70±0.41	3.44±0.02	8.89±0.87	5.50±0.11	2.48±0.61	1.37±0.17	5.27±0.28	4.62±0.35	1.46±0.06	6.27±0.90
O011	Goat, kidneys	4	3.41±0.39	4.08±0.25	8.48±0.46	6.46±0.19	2.66±0.32	1.71±0.05	5.44±0.43	5.23±0.18	1.50±0.11	5.69±0.21
O012	Goat, tube (small intestine)	3	3.90±0.83	3.50±0.11	7.50±0.04	7.01±0.34	2.31±1.02	1.44±0.05	4.14±0.03	4.55±0.33	1.47±0.00	4.44±0.17
O013	Goat, testis	2	3.88	3.40	7.09	8.31	2.41	1.32	4.36	4.59	1.28	5.25
O014	Sheep, shoulder	5	3.73±0.65	4.19±0.19	8.05±0.15	7.68±0.28	2.48±0.20	1.31±0.37	4.82±0.07	5.23±0.78	1.42±0.12	5.22±0.36
O015	Sheep, chops	4	3.31±0.26	4.64±0.38	7.29±0.13	7.36±0.48	2.76±0.20	1.39±0.11	4.23±0.26	5.19±0.69	1.50±0.16	4.89±0.17
O016	Sheep, leg	5	3.88±0.84	4.19±0.04	8.26±0.16	7.07±0.25	2.42±0.28	1.54±0.16	4.58±0.07	5.54±0.86	1.47±0.17	4.89±0.12
O017	Sheep, brain	1	2.47	4.69	8.51	5.21	3.20	1.34	4.19	5.54	1.29	5.30
O018	Sheep, tongue	1	3.64	3.72	7.49	5.45	2.72	1.48	3.62	5.71	1.36	4.87
O019	Sheep, lungs	2	2.58	3.22	7.78	5.02	2.48	1.40	4.53	4.56	1.36	5.41
O020	Sheep, heart	1	3.18	4.15	7.86	6.77	2.09	1.61	4.86	5.93	1.40	5.45
O021	Sheep, liver	4	2.83±0.27	4.53±0.12	7.79±0.34	6.20±0.06	2.64±0.29	1.68±0.22	4.68±0.20	4.39±0.30	1.19±0.28	5.52±0.39
O022	Sheep, tripe	2	3.44	3.32	7.05	5.78	2.60	1.48	6.05	4.72	1.46	3.86
O023	Sheep, spleen	1	2.89	4.02	8.91	5.90	2.27	1.46	5.50	5.05	1.38	6.94
O024	Sheep, kidneys	2	3.78	3.78	7.69	6.34	2.57	1.69	5.11	5.08	1.59	4.89
O025	Beef, shoulder	6	3.85±0.44	4.25±0.11	8.29±0.09	7.57±0.11	2.60±0.28	1.38±0.15	4.91±0.34	5.09±0.52	0.94±0.22	5.35±0.38
O026	Beef, chops	4	3.82±0.38	4.73±0.66	8.26±0.62	5.67±0.09	2.87±0.40	1.25±0.09	5.32±0.55	5.51±0.47	1.17±0.18	5.32±0.52
O027	Beef, round (leg)	6	3.67±0.50	4.49±0.29	8.09±0.22	6.43±0.16	2.90±0.22	1.63±0.35	4.67±0.18	5.07±0.36	1.42±0.16	5.10±0.13

Table 8. Amino Acid Profile

296

Food Code	Food Name	No. of Regions	g											
			Alanine		Arginine		Aspartic Acid		Glutamic Acid		Glycine	Proline	Serine	Tyrosine
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR				
O006	Goat, lungs	4	6.07±0.64	7.16±0.67	7.77±0.31	11.41±0.94	6.06±0.26	5.59±0.45	4.58±0.29	4.51±0.48				
O007	Goat, heart	5	5.59±0.34	6.25±0.50	8.15±0.36	13.14±0.74	6.71±1.03	4.38±0.38	4.74±0.29	3.97±0.40				
O008	Goat, liver	6	6.27±0.18	5.64±1.19	8.74±0.76	12.09±1.18	5.29±0.35	4.76±0.34	4.93±0.21	3.50±0.07				
O009	Goat, tripe	5	5.55±0.26	7.76±0.93	8.33±0.59	11.46±0.53	8.20±0.97	5.02±0.45	4.48±0.35	4.11±0.91				
O010	Goat, spleen	4	6.49±0.32	6.58±0.40	8.80±0.40	12.26±0.30	7.86±1.08	4.54±0.50	4.26±0.15	3.74±0.35				
O011	Goat, kidneys	4	5.52±0.22	5.74±1.03	8.43±0.22	12.62±0.77	6.98±0.29	4.73±0.29	5.08±0.09	4.77±0.87				
O012	Goat, tube (small intestine)	3	5.75±0.38	7.42±0.74	8.28±0.00	12.78±0.81	9.29±0.34	5.30±0.13	4.61±0.09	3.13±0.03				
O013	Goat, testis	2	5.99	6.44	8.38	12.92	9.35	5.51	4.31	3.94				
O014	Sheep, shoulder	5	5.36±0.29	7.87±0.87	9.61±0.32	14.72±0.95	5.47±0.39	4.64±0.27	4.34±0.45	4.10±0.45				
O015	Sheep, chops	4	5.48±0.19	6.80±0.37	9.39±0.32	14.31±0.14	5.91±0.80	4.24±0.15	4.33±0.40	3.59±0.21				
O016	Sheep, leg	5	5.33±0.34	7.78±0.72	9.52±0.55	14.46±0.43	5.86±0.67	3.97±0.35	4.57±0.54	4.10±0.53				
O017	Sheep, brain	1	6.04	6.83	8.08	13.47	5.28	3.89	5.19	4.23				
O018	Sheep, tongue	1	5.22	6.79	8.30	14.42	6.28	4.30	4.79	3.78				
O019	Sheep, lungs	2	6.63	7.43	7.27	10.53	8.33	5.48	4.64	3.37				
O020	Sheep, heart	1	5.56	6.45	7.65	13.75	5.50	4.23	4.72	3.81				
O021	Sheep, liver	4	5.12±0.71	5.66±0.99	8.22±0.80	10.93±0.65	5.17±0.20	4.79±0.65	4.91±0.16	3.67±0.07				
O022	Sheep, tripe	2	5.33	7.17	8.65	10.80	8.76	5.11	4.36	4.42				
O023	Sheep, spleen	1	7.04	6.55	8.83	12.11	6.76	4.38	4.39	3.34				
O024	Sheep, kidneys	2	5.04	5.61	8.82	12.78	6.65	4.90	4.91	4.36				
O025	Beef, shoulder	6	5.36±0.36	7.48±0.88	9.06±0.29	13.85±0.62	5.96±0.50	4.46±0.31	4.45±0.32	3.97±0.44				
O026	Beef, chops	4	5.37±0.45	6.51±0.88	9.40±0.72	14.07±0.78	6.26±0.25	4.80±0.26	4.79±0.57	3.80±0.47				
O027	Beef, round (leg)	6	5.41±0.17	7.00±0.85	9.85±0.31	14.70±0.61	5.82±0.65	4.13±0.23	4.19±0.58	4.28±0.30				

Food Code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
O028	Beef, brain	4	2.74±0.02	4.17±0.55	8.42±0.46	5.48±0.21	2.75±0.17	1.35±0.08	4.70±0.07	5.35±0.53	1.39±0.02	5.43±0.62
O029	Beef, tongue	4	3.22±0.21	4.35±0.32	7.98±0.47	5.55±0.11	3.02±0.21	1.25±0.31	4.59±0.55	4.99±0.45	1.20±0.18	5.20±0.59
O030	Beef, lungs	3	3.46±0.28	3.56±0.13	8.13±0.26	5.37±0.14	2.61±0.30	1.64±0.20	5.20±0.59	4.51±0.47	1.47±0.14	5.92±0.18
O031	Beef, heart	5	2.54±0.50	4.53±0.44	7.77±0.48	6.41±0.05	2.84±0.16	1.61±0.23	6.01±0.20	5.84±0.46	1.44±0.13	4.99±0.57
O032	Beef, liver	6	2.92±0.13	4.24±0.18	8.53±0.57	6.53±0.18	2.82±0.21	1.30±0.26	5.02±0.59	4.83±0.23	1.17±0.12	5.90±0.55
O033	Beef, tripe	5	3.30±0.14	4.07±0.14	7.11±0.18	5.28±0.06	2.82±0.23	1.75±0.37	5.58±0.07	4.38±0.07	1.48±0.16	4.75±0.20
O034	Beef, spleen	6	3.19±0.35	3.78±0.49	8.38±0.39	5.50±0.19	2.54±0.44	1.65±0.40	5.05±0.56	4.82±0.34	1.49±0.14	5.83±0.51
O035	Beef, kidneys	3	3.33±0.27	3.78±0.34	8.08±0.21	6.85±0.18	2.56±0.26	1.56±0.21	5.22±0.60	5.27±0.38	1.32±0.04	5.14±0.63
O036	Calf, shoulder	2	3.60	3.95	7.73	5.58	2.36	1.04	3.87	4.82	1.14	4.71
O037	Calf, chops	2	3.76	4.90	8.23	5.61	2.82	1.08	4.47	5.22	1.30	5.28
O038	Calf, round (leg)	2	5.10	4.62	8.32	6.49	3.01	1.66	4.36	5.12	1.25	5.45
O039	Calf, brain	2	2.33	4.37	9.19	5.56	2.30	1.32	4.25	5.98	1.40	5.17
O040	Calf, tongue	2	2.70	3.92	7.77	5.54	2.21	1.20	4.37	4.89	1.54	4.76
O041	Calf, heart	1	2.69	4.13	8.11	6.43	2.29	1.49	5.38	5.25	1.41	5.00
O042	Calf, liver	1	2.36	4.28	8.76	6.13	2.65	1.52	4.98	4.33	1.43	6.13
O043	Calf, spleen	1	3.15	3.45	9.51	5.66	2.26	1.47	5.19	4.76	1.47	6.84
O044	Calf, kidneys	2	3.77	3.88	8.27	6.39	2.81	1.55	5.38	5.49	1.21	5.53
O045	Mithun, shoulder	1	4.08	4.45	7.48	7.78	2.52	1.28	4.47	4.72	1.28	5.01
O046	Mithun, chops	1	3.35	4.71	7.87	6.92	3.10	1.14	4.76	5.21	1.28	4.65
O047	Mithun, round (leg)	1	3.77	4.40	7.87	6.49	2.58	1.21	3.94	5.08	1.33	4.93
O048	Pork, shoulder	6	3.86±0.46	4.40±0.07	8.39±0.12	5.50±0.13	2.89±0.40	1.35±0.43	4.41±0.29	4.83±0.29	1.32±0.11	4.39±0.43
O049	Pork, chops	6	4.08±0.72	4.55±0.08	7.77±0.04	5.97±1.11	2.88±0.13	1.41±0.14	4.37±0.67	4.42±0.25	1.31±0.08	4.63±0.23

Table 8. Amino Acid Profile

298

Food Code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			$\xleftarrow{\text{ALA ARG ASP GLU GLY PRO SER TYR}}$							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
O028	Beef, brain	4	5.64±0.50	6.29±0.53	8.08±0.25	12.75±0.54	5.65±0.47	4.05±0.23	5.43±0.53	4.87±0.58
O029	Beef, tongue	4	5.49±0.14	6.77±0.88	8.23±0.50	13.80±0.47	5.72±0.48	4.77±0.21	4.67±0.18	3.71±0.43
O030	Beef, lungs	3	6.12±0.47	6.21±1.62	7.08±0.19	11.46±0.08	8.15±0.52	5.74±0.34	4.78±0.56	3.87±0.55
O031	Beef, heart	5	5.53±0.54	7.29±0.08	8.00±0.55	13.39±0.53	4.60±0.47	4.30±0.63	4.92±0.54	4.92±0.61
O032	Beef, liver	6	5.54±0.29	5.94±0.31	8.48±0.25	11.84±0.42	5.60±0.37	4.59±0.09	4.66±0.14	3.77±0.59
O033	Beef, tripe	5	6.07±0.38	7.06±0.20	8.39±0.68	11.70±0.13	7.40±0.23	5.40±0.64	4.54±0.27	4.16±0.26
O034	Beef, spleen	6	5.71±0.58	6.12±0.55	7.73±0.41	11.81±0.51	7.41±0.60	4.75±0.52	4.86±0.26	3.17±0.08
O035	Beef, kidneys	3	5.40±0.44	6.21±0.18	7.95±0.18	12.93±0.66	5.26±0.09	5.05±0.30	4.96±0.23	4.26±0.34
O036	Calf, shoulder	2	5.40	5.35	9.49	13.73	5.07	4.59	4.64	3.11
O037	Calf, chops	2	5.69	5.78	10.47	14.47	5.09	4.33	4.43	3.68
O038	Calf, round (leg)	2	5.99	6.66	9.45	14.32	5.38	4.37	4.52	4.09
O039	Calf, brain	2	5.67	5.22	8.18	13.19	5.12	4.08	5.59	4.40
O040	Calf, tongue	2	6.86	6.39	8.45	12.73	6.61	4.43	4.70	3.50
O041	Calf, heart	1	4.98	6.83	7.97	13.82	5.50	3.78	4.20	4.28
O042	Calf, liver	1	5.51	5.55	8.61	12.77	5.66	4.55	4.62	3.62
O043	Calf, spleen	1	6.96	5.32	8.25	13.25	7.83	4.54	4.51	3.25
O044	Calf, kidneys	2	5.92	6.15	8.20	12.50	6.08	5.23	5.10	4.19
O045	Mithun, shoulder	1	6.01	7.44	9.54	16.40	5.63	4.83	4.20	3.87
O046	Mithun, chops	1	5.37	7.73	9.71	15.61	5.60	4.29	4.50	3.87
O047	Mithun, round (leg)	1	5.50	7.34	9.57	14.79	5.38	4.16	4.37	4.58
O048	Pork, shoulder	6	5.32±0.44	6.51±0.58	9.17±0.24	13.31±0.59	5.37±0.10	5.74±0.50	4.33±0.12	3.23±0.52
O049	Pork, chops	6	6.74±0.05	7.30±1.49	9.73±0.21	14.27±0.94	5.50±0.13	5.27±0.04	4.69±0.64	3.46±0.07

Food Code	Food Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			g									
			HIS	ILE	LEU	LYS	MET	CYS	PHE	THR	TRP	VAL
O050	Pork, ham	6	4.47±0.22	4.81±0.45	8.27±0.26	6.49±0.14	2.78±0.26	1.77±0.39	5.09±0.25	4.91±0.38	1.47±0.11	4.56±0.34
O051	Pork, lungs	4	3.02±0.35	3.17±0.29	8.00±0.55	5.50±0.12	2.27±0.58	1.84±0.25	3.92±0.62	4.34±0.20	1.37±0.18	6.16±0.48
O052	Pork, heart	4	3.11±0.08	4.44±0.40	8.73±0.35	6.57±0.24	2.86±0.34	1.68±0.44	5.58±0.12	5.09±0.49	1.55±0.04	5.69±0.36
O053	Pork, liver	5	3.07±0.47	4.28±0.19	8.64±0.35	6.71±0.21	2.57±0.27	1.53±0.43	4.73±0.57	4.73±0.45	1.24±0.15	6.07±0.18
O054	Pork, stomach	1	3.13	4.49	6.44	6.66	2.89	1.22	5.47	5.27	1.46	5.04
O055	Pork, spleen	3	3.06±0.02	3.61±0.30	8.61±0.47	7.53±0.34	2.43±0.65	1.50±0.51	4.26±0.07	4.36±0.08	1.28±0.28	5.84±0.16
O056	Pork, kidneys	5	3.67±0.49	4.07±0.31	8.12±0.11	7.76±0.07	2.53±0.23	1.36±0.41	4.96±0.21	5.15±0.61	1.26±0.10	6.11±0.64
O057	Pork, tube (small intestine)	1	4.08	3.62	7.93	7.74	2.25	1.26	3.50	4.98	1.27	4.73
O058	Hare, shoulder	1	2.57	5.04	9.13	7.76	2.53	1.03	5.01	4.64	1.49	5.04
O059	Hare, chops	1	2.64	5.26	9.08	7.46	2.93	1.20	4.88	4.98	1.64	5.86
O060	Hare, leg	1	2.72	5.18	9.00	7.73	2.71	1.05	4.94	4.83	1.82	5.08
O061	Rabbit, shoulder	1	2.86	5.42	8.34	7.23	2.88	1.21	5.31	5.04	1.65	5.10
O062	Rabbit, chops	1	2.97	5.56	8.84	7.51	3.17	1.34	4.93	5.11	1.46	5.10
O063	Rabbit, leg	1	2.95	5.31	9.17	7.21	2.54	1.21	5.09	4.86	1.52	5.08

Table 8. Amino Acid Profile

303

Food Code	Food Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			g							
			ALA	ARG	ASP	GLU	GLY	PRO	SER	TYR
O050	Pork, ham	6	5.32±0.44	7.62±0.58	9.38±0.25	14.18±1.07	5.41±0.29	4.79±0.54	4.49±0.21	4.47±0.51
O051	Pork, lungs	4	6.76±0.31	6.50±0.88	8.22±0.62	11.71±0.39	8.27±0.11	6.23±0.22	4.75±0.34	2.93±0.22
O052	Pork, heart	4	5.76±0.35	6.20±1.89	8.65±0.46	13.97±0.63	6.09±0.15	4.49±0.28	4.41±0.33	4.51±0.41
O053	Pork, liver	5	5.26±0.51	6.12±0.70	8.60±0.20	12.99±0.81	5.89±0.44	4.34±0.38	4.87±0.56	3.61±0.43
O054	Pork, stomach	1	5.55	8.82	8.96	9.24	8.41	4.56	5.29	5.48
O055	Pork, spleen	3	6.30±0.42	6.77±0.44	8.61±0.68	12.65±0.40	7.08±0.41	4.59±0.28	4.78±0.42	2.71±0.21
O056	Pork, kidneys	5	5.55±0.56	5.86±0.32	8.87±0.51	11.65±0.48	7.22±0.43	4.73±0.27	5.08±0.35	3.98±0.66
O057	Pork, tube (small intestine)	1	6.70	7.99	8.07	13.19	9.15	5.32	4.97	2.92
O058	Hare, shoulder	1	7.07	6.81	8.41	15.99	6.27	4.75	4.08	3.99
O059	Hare, chops	1	6.82	6.48	8.80	14.89	5.53	4.24	4.32	3.80
O060	Hare, leg	1	6.47	6.45	8.93	15.68	5.22	4.43	4.12	4.03
O061	Rabbit, shoulder	1	6.63	6.59	8.65	15.43	5.01	3.83	4.29	4.35
O062	Rabbit, chops	1	6.74	6.52	8.61	15.31	4.80	4.46	4.31	4.21
O063	Rabbit, leg	1	6.94	6.71	8.48	14.40	6.02	4.62	4.26	4.41

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{HIS} + \text{ILE} + \text{LE} + \text{LYS} + \text{MET} + \text{CYS} + \text{PHE} + \text{THR} + \text{TRP}}{\text{VAL}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P MARINE FISH												
P001	Allathi (<i>Elops machnata</i>)	1	5.23	4.76	7.80	6.63	3.26	1.42	5.49	5.13	1.18	5.26
P002	Aluva (<i>Parastromateus niger</i>)	3	3.72±0.23	4.57±0.40	8.65±0.35	5.91±0.96	2.28±0.30	1.42±0.39	6.43±0.42	5.57±0.74	0.99±0.02	5.74±0.25
P003	Anchovy (<i>Stolephorus indicus</i>)	2	3.65	4.59	7.72	5.67	3.28	1.82	4.61	5.55	0.81	5.49
P004	Ari fish (<i>Aprian virescens</i>)	1	4.71	4.56	8.23	6.30	2.64	2.14	4.55	5.49	1.23	5.11
P005	Betki (<i>Lates calcarifer</i>)	1	4.54	4.62	6.98	7.60	3.15	1.95	5.79	5.19	0.81	5.33
P006	Black snapper (<i>Macolor niger</i>)	1	4.94	4.93	7.97	5.84	3.12	2.01	5.33	4.64	0.79	5.43
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	4.60	4.49	7.47	7.17	3.44	1.74	5.37	4.51	1.25	5.34
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	3.74±0.09	4.75±0.46	8.59±0.25	5.07±0.45	2.57±0.13	1.48±0.14	6.19±0.37	5.58±0.11	1.19±0.07	5.35±0.45
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	2.06	5.04	8.35	6.13	2.12	1.42	4.40	4.83	0.55	5.59
P010	Chakla (<i>Rachycentron canadum</i>)	5	3.61±0.32	4.62±0.17	7.59±0.29	6.26±0.44	2.52±0.21	1.83±0.32	5.63±0.28	5.15±0.46	1.02±0.12	5.28±0.16
P011	Chappal (<i>Aluterus monoceros</i>)	1	3.04	4.82	8.35	5.47	4.10	1.91	4.72	5.76	1.18	5.75
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	2.96	4.70	7.41	6.31	4.15	1.58	4.37	5.82	1.13	5.63
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	3.19	4.60	7.72	8.03	4.30	1.45	4.93	5.29	1.01	5.26
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	3.89	4.86	8.19	6.92	3.19	1.67	5.95	5.25	1.11	5.39
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	2.87	4.59	7.92	7.51	3.54	1.98	4.52	5.53	1.15	5.23
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	2.35	4.89	8.37	6.92	3.07	1.33	4.26	4.96	1.04	5.22
P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	4.32	3.79	8.14	7.45	3.68	1.43	5.17	5.48	1.88	5.35
P018	Jallal (<i>Arius sp.</i>)	1	3.50	4.78	7.85	6.03	3.97	2.27	5.02	5.80	1.08	5.41
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	3.58	4.63	8.25	6.72	3.79	1.75	4.40	4.75	1.00	5.70
P020	Kadal bral (<i>Synodus indicus</i>)	1	3.20	4.38	7.43	6.52	3.46	2.01	3.82	5.39	0.81	5.22
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	3.63	4.71	8.01	7.43	2.33	1.21	5.77	5.48	1.11	5.24

Table 8. Amino Acid Profile

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P MARINE FISH										
P001	Allathi (<i>Elops machnata</i>)	1	5.41	5.95	10.70	14.01	4.68	3.39	3.88	5.15
P002	Aluva (<i>Parastromateus niger</i>)	3	5.55±0.36	6.97±1.17	9.56±1.05	13.13±0.62	5.47±0.29	3.53±0.40	4.34±0.63	5.13±0.33
P003	Anchovy (<i>Stolephorus indicus</i>)	2	5.28	5.83	7.89	14.66	5.57	3.35	4.39	4.15
P004	Ari fish (<i>Apion virescens</i>)	1	5.39	7.56	10.65	12.16	5.83	3.28	4.38	4.26
P005	Betki (<i>Lates calcarifer</i>)	1	2.15	5.93	10.35	13.28	6.51	5.55	4.46	5.28
P006	Black snapper (<i>Macolor niger</i>)	1	5.67	5.74	11.43	15.70	5.36	3.58	4.07	3.85
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	5.95	5.25	9.93	11.16	6.17	6.14	4.50	4.23
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	4.52±0.53	6.73±0.33	10.19±0.81	13.89±0.53	4.76±0.34	3.29±0.42	4.54±0.07	5.46±0.47
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	5.84	5.77	12.00	15.36	5.19	3.62	4.18	3.91
P010	Chakla (<i>Rachycentron canadum</i>)	5	5.57±0.20	6.88±1.24	10.25±0.50	13.92±0.58	4.96±0.22	3.44±0.16	4.30±0.25	4.41±0.59
P011	Chappal (<i>Aluterus monoceros</i>)	1	5.73	8.17	9.16	14.10	6.10	3.75	4.97	3.35
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	5.15	6.98	9.86	14.88	5.07	3.34	5.11	4.47
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	5.72	5.98	11.41	12.69	5.60	3.21	4.28	5.44
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	5.72	5.97	10.33	15.02	5.89	3.56	4.40	3.48
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	5.43	6.38	9.19	14.35	5.02	3.37	4.49	4.26
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	6.14	6.69	9.13	14.68	5.78	5.29	4.29	4.85
P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	4.43	4.15	1.72	13.13	6.66	6.85	4.43	3.83
P018	Jallal (<i>Arius sp.</i>)	1	5.11	6.87	9.54	13.98	5.33	3.14	5.41	4.28
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	5.61	6.42	9.92	14.07	5.38	3.73	4.23	4.18
P020	Kadal bral (<i>Synodus indicus</i>)	1	5.00	6.44	10.46	13.80	5.37	3.20	4.34	3.51
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	6.23	5.35	8.51	16.44	5.13	3.74	3.87	5.27

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{g}}{\text{HIS} \quad \text{ILE} \quad \text{LE} \quad \text{LYS} \quad \text{MET} \quad \text{CYS} \quad \text{PHE} \quad \text{THR} \quad \text{TRP} \quad \text{VAL}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	2.76	4.52	8.63	6.04	3.05	1.76	6.29	5.50	1.10	5.06
P023	Kalava (<i>Epinephelus coioides</i>)	1	3.81	4.82	8.00	6.04	3.50	1.72	5.61	5.10	1.28	5.19
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	2.00	4.95	7.78	5.62	2.87	1.61	5.36	6.11	0.98	5.64
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	4.13±0.64	4.47±0.02	7.68±0.36	6.11±0.42	2.89±0.11	1.66±0.34	5.61±0.09	5.57±0.24	1.10±0.06	5.29±0.06
P026	Karimeen (<i>Etroplus suratensis</i>)	1	2.30	4.59	8.06	6.50	3.61	1.70	4.03	5.11	0.78	5.24
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	2.85	5.06	8.51	5.43	3.66	2.54	4.68	6.80	0.91	5.83
P028	Kayrai (<i>Thunnus albacores</i>)	2	2.27	4.60	8.27	6.76	2.46	1.52	5.13	5.19	1.10	5.72
P029	Kiriyana (<i>Atule mate</i>)	1	3.07	4.54	7.39	6.30	4.14	2.34	5.09	5.37	1.24	5.59
P030	Kite fish (<i>Mobula kuhlii</i>)	1	3.07	4.67	8.18	5.80	3.10	1.31	4.97	5.66	1.56	4.98
P031	Korka (<i>Terapon jarbua</i>)	1	3.43	4.47	7.40	5.49	3.34	2.38	3.60	5.56	1.09	5.18
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	1.74	4.91	8.39	5.95	2.49	1.56	5.17	6.36	1.15	6.03
P033	Maagaa (<i>Polynemus plebeius</i>)	1	3.07	4.75	8.15	7.24	3.25	1.43	5.18	5.17	1.14	5.29
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	3.63±0.31	4.64±0.16	7.91±0.35	6.39±0.19	2.56±0.23	1.68±0.36	5.25±0.29	5.71±0.39	1.00±0.06	5.47±0.19
P035	Manda clathi (<i>Naso reticulatus</i>)	1	2.98	4.70	8.74	6.05	3.32	1.94	6.09	4.80	0.81	5.16
P036	Matha (<i>Acanthurus mata</i>)	2	4.02	5.11	8.65	5.18	3.54	2.03	5.94	5.68	1.25	5.74
P037	Milk fish (<i>Chanos chanos</i>)	1	3.10	5.15	8.30	7.36	3.30	1.86	5.20	5.87	0.90	6.12
P038	Moon fish (<i>Mene maculata</i>)	1	4.94	4.89	8.27	5.84	3.12	2.01	4.73	4.64	1.22	5.54
P039	Mullet (<i>Mugil cephalus</i>)	3	3.35±0.30	4.66±0.04	7.91±0.13	6.41±0.60	2.96±0.20	1.39±0.10	5.44±0.13	5.92±0.39	0.93±0.06	5.32±0.10
P040	Mural (<i>Tylosurus crocodilus</i>)	1	4.77	4.86	8.44	5.50	3.95	1.57	5.56	5.21	0.80	5.46
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	2.95	4.78	7.94	7.21	2.03	1.94	4.48	5.34	0.90	5.94
P042	Nalla bontha (<i>Epinephelus sp.</i>)	1	3.51	4.00	7.31	6.27	3.08	2.05	4.01	6.62	1.12	4.91
P043	Narba (<i>Caranx sexfasciatus</i>)	2	5.32	4.44	7.58	6.54	3.88	1.92	5.47	4.81	1.23	5.43

Table 8. Amino Acid Profile

3034

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	5.48	7.75	8.39	13.66	5.38	3.55	4.44	5.55
P023	Kalava (<i>Epinephelus coioides</i>)	1	5.41	6.54	9.33	14.20	5.83	3.82	4.44	4.50
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	5.66	6.09	10.96	14.60	5.42	3.73	4.63	5.24
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	5.34±0.20	6.01±0.22	9.73±1.86	13.56±0.62	5.09±0.25	3.37±0.08	4.43±0.21	4.28±0.13
P026	Karimeen (<i>Etroplus suratensis</i>)	1	6.36	6.48	11.62	15.32	6.34	3.69	4.50	3.20
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	5.69	6.63	9.28	13.80	5.18	3.33	5.36	3.39
P028	Kayrai (<i>Thunnus albacores</i>)	2	5.56	6.33	9.56	13.19	4.56	3.69	4.04	4.71
P029	Kiriyana (<i>Atule mate</i>)	1	5.54	6.56	10.05	14.49	6.06	3.37	4.22	3.93
P030	Kite fish (<i>Mobula kuhlii</i>)	1	5.25	6.70	10.35	14.85	6.30	3.57	4.47	4.96
P031	Korka (<i>Terapon jarbua</i>)	1	5.36	8.53	8.38	13.01	5.75	3.14	4.22	3.03
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	5.64	7.64	10.08	12.26	6.13	3.68	5.02	4.09
P033	Maagaa (<i>Polynemus plebeius</i>)	1	5.67	6.34	8.91	15.62	4.96	3.54	4.45	5.61
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	5.41±0.54	5.81±0.54	9.96±0.72	13.38±0.59	5.28±0.26	3.27±0.24	4.46±0.11	4.59±0.15
P035	Manda clathi (<i>Naso reticulatus</i>)	1	5.29	6.64	10.88	13.48	5.35	3.22	4.13	4.61
P036	Matha (<i>Acanthurus mata</i>)	2	5.52	8.02	8.66	13.56	5.22	3.63	4.39	4.80
P037	Milk fish (<i>Chanos chanos</i>)	1	6.23	6.15	8.60	14.07	5.06	3.96	3.93	4.84
P038	Moon fish (<i>Mene maculata</i>)	1	5.67	5.74	11.43	14.70	5.36	3.58	4.07	4.26
P039	Mullet (<i>Mugil cephalus</i>)	3	5.57±0.29	7.18±0.38	8.33±0.67	14.52±0.52	5.76±0.37	3.54±0.37	4.60±0.36	5.27±0.31
P040	Mural (<i>Tylosurus crocodilus</i>)	1	5.56	6.08	8.24	14.67	5.80	3.83	4.29	4.98
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	5.44	7.37	8.56	13.97	5.65	3.53	4.50	4.08
P042	Nalla bontha (<i>Epinephelus sp.</i>)	1	6.61	7.43	9.59	13.21	4.71	2.73	5.41	4.90
P043	Narba (<i>Caranx sexfasciatus</i>)	2	5.42	6.11	9.75	13.59	5.44	3.36	4.12	4.74

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{g}}{\text{HIS} \quad \text{ILE} \quad \text{LE} \quad \text{LYS} \quad \text{MET} \quad \text{CYS} \quad \text{PHE} \quad \text{THR} \quad \text{TRP} \quad \text{VAL}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P044	Paarai (<i>Caranx heberi</i>)	1	3.09	4.11	7.82	7.08	3.96	1.15	4.86	4.37	1.12	5.20
P045	Padayappa (<i>Canthidermis maculata</i>)	1	2.45	4.69	7.94	6.22	3.27	1.35	3.84	5.02	1.22	5.23
P046	Pali kora (<i>Panna microdon</i>)	1	2.90	4.64	7.74	6.85	3.94	1.33	3.78	5.90	0.86	5.15
P047	Pambada (<i>Lepturacanthus savala</i>)	2	2.73	4.58	7.77	6.44	3.38	1.27	5.51	6.13	0.94	5.20
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	4.00	4.89	8.37	5.28	2.63	1.10	5.71	5.29	0.90	5.94
P049	Parava (<i>Lactarius lactarius</i>)	1	2.60	4.77	8.11	5.25	3.73	1.76	4.18	4.82	0.89	5.09
P050	Parcus (<i>Psettosodes erumei</i>)	1	3.07	4.81	8.44	6.08	3.81	2.07	5.33	5.20	0.88	5.61
P051	Parrot fish (<i>Scarus ghobban</i>)	1	2.61	4.86	8.06	7.06	3.62	1.96	5.34	5.18	0.78	5.66
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	3.16	4.93	8.49	7.18	3.20	1.35	5.08	5.18	0.87	5.53
305	P053 Phopat (<i>Coryphaena hippurus</i>)	4	3.40±0.13	4.66±0.24	7.72±0.29	7.30±0.44	3.02±0.17	1.57±0.28	3.99±0.47	5.18±0.22	1.00±0.11	5.39±0.33
	P054 Piranha (<i>Pygopristis</i> sp.)	1	3.26	4.51	8.05	7.24	2.87	1.14	3.74	5.10	1.05	5.15
	P055 Pomfret, black (<i>Parastromateus niger</i>)	2	4.36	4.77	8.11	5.52	2.42	1.52	6.43	5.12	1.12	5.95
	P056 Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	3.19	5.52	7.94	6.04	3.13	1.71	4.25	4.89	0.89	5.45
	P057 Pomfret, white (<i>Pampus argenteus</i>)	2	3.80	4.64	8.21	7.03	2.99	1.75	6.38	5.28	1.11	5.42
	P058 Pranel (<i>Gerres</i> sp.)	1	3.00	4.55	7.75	5.94	3.24	1.82	5.85	4.79	1.05	5.97
	P059 Pulli paarai (<i>Gnathanodon speciosus</i>)	1	2.94	4.88	8.31	5.75	2.75	1.63	5.11	4.42	1.21	5.70
	P060 Queen fish (<i>Scomberoides commersonianus</i>)	3	0.86±0.50	4.56±0.11	7.58±0.21	5.93±0.26	3.63±0.50	1.39±0.38	4.25±0.42	5.98±2.20	0.80±0.17	5.32±0.31
	P061 Raai fish (<i>Lobotes surinamensis</i>)	2	2.80	4.52	8.05	6.48	3.10	1.76	5.54	5.91	1.07	5.17
	P062 Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	3.26	4.47	7.89	6.71	2.98	2.14	5.02	6.50	1.62	5.06
	P063 Rani (<i>Pink perch</i>)	1	4.35	4.65	8.03	7.27	2.56	1.95	5.04	5.07	1.66	5.07
	P064 Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1	3.06	4.77	7.94	6.52	2.65	1.41	5.87	5.04	0.98	4.64
	P065 Red snapper (<i>Lutjanus argentimaculatus</i>)	1	3.14	4.57	7.89	6.32	3.80	1.68	6.28	6.16	1.12	5.26

Table 8. Amino Acid Profile

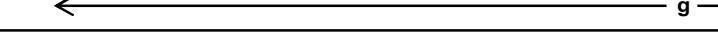
Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P044	Paarai (<i>Caranx heberi</i>)	1	6.36	6.08	11.10	14.51	6.78	4.66	3.94	3.36
P045	Padayappa (<i>Canthidermis maculata</i>)	1	6.30	6.06	13.85	15.76	6.40	4.06	4.30	3.55
P046	Pali kora (<i>Panna microdon</i>)	1	5.49	5.72	10.57	15.68	4.78	3.12	4.57	3.19
P047	Pambada (<i>Lepturacanthus savala</i>)	2	5.71	6.09	8.95	14.10	6.45	3.77	4.43	5.59
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	5.31	7.08	9.66	14.10	5.19	3.75	4.45	5.44
P049	Parava (<i>Lactarius lactarius</i>)	1	6.01	6.15	8.08	13.19	6.42	3.45	4.00	3.15
P050	Parcus (<i>Psettosodes erumei</i>)	1	5.29	6.43	9.08	14.97	4.69	3.35	4.43	5.58
P051	Parrot fish (<i>Scarus ghobban</i>)	1	5.78	5.12	10.40	14.96	5.59	3.64	4.36	4.85
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	5.59	7.30	9.94	14.94	4.50	3.47	4.49	4.56
P053	Phopat (<i>Coryphaena hippurus</i>)	4	5.63±0.10	6.02±0.51	10.00±0.24	14.08±0.16	5.54±0.38	3.55±0.09	4.41±0.04	4.89±0.11
P054	Piranha (<i>Pygopristis</i> sp.)	1	6.18	5.66	11.24	15.79	6.56	3.96	4.33	4.13
P055	Pomfret, black (<i>Parastromateus niger</i>)	2	5.75	6.86	9.77	12.54	6.07	4.70	4.91	4.98
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	5.70	6.07	10.89	14.65	5.01	3.51	4.08	3.74
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	5.09	6.11	9.11	14.69	5.66	3.15	4.34	5.98
P058	Pranel (<i>Gerres</i> sp.)	1	6.41	5.22	8.96	16.31	6.51	3.76	3.85	5.47
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	6.42	5.06	11.60	14.05	5.50	3.99	3.93	5.86
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	5.21±0.25	6.26±1.88	9.83±1.11	14.51±0.54	4.84±0.93	3.29±0.10	4.62±1.51	3.93±0.35
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	5.67	7.02	8.14	14.18	5.58	3.76	4.61	5.04
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	5.47	7.80	10.14	13.69	4.68	3.32	4.26	4.40
P063	Rani (<i>Pink perch</i>)	1	5.40	8.24	9.10	12.08	5.90	4.11	4.34	5.73
P064	Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1	5.76	6.03	8.38	16.86	6.76	3.94	4.05	3.25
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	5.21	6.48	8.80	13.92	5.17	3.31	4.76	5.48

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{HIS} + \text{ILE} + \text{LE} + \text{LYS} + \text{MET} + \text{CYS} + \text{PHE} + \text{THR} + \text{TRP}}{\text{VAL}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	3.49	4.39	8.59	5.04	2.59	1.64	6.78	5.74	0.89	5.14
P067	Sadaya (<i>Platax orbicularis</i>)	1	3.29	4.47	8.82	5.16	2.91	1.18	6.44	5.73	1.26	5.42
P068	Salmon (<i>Salmo salar</i>)	1	3.60	4.78	7.83	5.44	3.15	1.52	5.40	5.87	0.92	5.63
P069	Sangada (<i>Nemipterus japonicus</i>)	1	2.39	4.60	8.71	6.72	2.21	1.09	6.34	6.32	0.96	5.19
P070	Sankata parai (<i>Caranx ignobilis</i>)	1	2.04	4.86	8.36	6.56	3.36	1.65	6.11	5.31	1.39	5.69
P071	Sardine (<i>Sardinella longiceps</i>)	1	4.31	4.73	8.17	6.43	3.00	1.84	5.24	5.30	1.57	5.18
P072	Shark (<i>Carcharhinus sorrah</i>)	2	3.58	5.05	7.41	5.73	4.31	2.46	3.81	5.65	0.85	5.52
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	4.13	3.75	8.20	7.99	4.51	1.27	5.19	3.88	0.65	4.97
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	3.69	5.22	8.44	4.47	3.38	0.92	4.04	5.38	0.96	5.49
P075	Shelavu (<i>Sphyraena jello</i>)	4	2.76±0.31	4.66±0.27	8.18±0.46	6.33±0.41	3.37±0.53	1.35±0.29	5.56±0.74	5.06±0.18	1.08±0.28	5.46±0.16
P076	Silan (<i>Silonia silondia</i>)	1	1.55	4.71	7.92	6.17	3.61	1.58	4.04	5.38	0.96	5.49
P077	Silk fish (<i>Beryx</i> sp.)	1	3.39	4.36	7.84	6.34	3.22	1.47	3.98	4.93	1.22	5.02
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	4.51	4.75	7.24	6.11	4.24	1.41	5.32	4.69	1.17	4.77
P079	Sole fish (<i>Cynoglossus arel</i>)	1	2.53	4.56	8.08	5.35	4.48	2.43	6.71	5.42	0.97	5.18
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	4.54	3.56	6.37	5.66	2.86	1.88	5.12	4.71	0.92	5.58
P081	Tarlava (<i>Drepane punctata</i>)	2	4.06	4.72	8.11	6.14	2.13	1.58	5.08	4.90	0.82	5.38
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2	3.17	4.66	8.42	6.37	2.79	1.78	4.79	5.11	0.95	5.51
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	4.21	5.71	7.87	7.71	3.19	1.52	6.02	5.41	0.79	5.66
P084	Tuna (<i>Euthynnus affinis</i>)	5	3.37±0.79	4.85±0.32	8.23±0.56	5.70±0.29	3.01±0.37	1.41±0.05	5.40±0.36	6.20±0.40	0.90±0.05	5.75±0.35
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	2.70	4.96	8.16	7.11	3.93	1.79	4.29	5.40	1.63	6.03
P086	Valava (<i>Chirocentrus nudus</i>)	1	3.14	4.94	8.32	7.62	3.65	1.52	4.65	5.26	1.09	5.71
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	3.82	4.93	8.29	5.21	3.51	1.76	4.19	5.05	1.05	5.76

Table 8. Amino Acid Profile

308

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	5.21	6.75	9.36	13.86	5.88	3.11	4.65	5.26
P067	Sadaya (<i>Platax orbicularis</i>)	1	5.28	7.92	9.15	14.00	5.28	3.54	4.52	3.95
P068	Salmon (<i>Salmo salar</i>)	1	5.31	7.25	9.77	14.05	5.50	3.53	4.82	4.97
P069	Sangada (<i>Nemipterus japonicus</i>)	1	4.90	7.36	8.21	13.48	5.29	3.12	4.81	5.92
P070	Sankata parai (<i>Caranx ignobilis</i>)	1	5.56	4.90	10.62	14.54	4.94	3.59	4.87	4.55
P071	Sardine (<i>Sardinella longiceps</i>)	1	5.36	6.45	10.65	13.86	5.66	4.41	4.62	4.11
P072	Shark (<i>Carcharhinus sorrah</i>)	2	5.54	6.71	8.89	14.20	6.72	3.65	4.57	3.65
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	5.75	4.23	9.04	13.68	6.24	6.30	4.13	3.54
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	6.02	6.69	8.71	16.23	6.87	4.56	4.88	3.25
P075	Shelavu (<i>Sphyraena jello</i>)	4	5.58±0.23	7.31±1.40	9.05±2.88	14.24±0.50	5.41±0.55	3.39±0.14	4.24±0.18	3.87±0.89
P076	Silan (<i>Silonia silondia</i>)	1	5.18	7.44	7.79	15.05	5.76	4.02	6.41	4.26
P077	Silk fish (<i>Beryx</i> sp.)	1	5.43	7.53	10.21	14.57	5.25	3.45	4.39	3.53
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	3.31	3.97	9.43	13.75	9.82	7.72	4.54	3.40
P079	Sole fish (<i>Cynoglossus arel</i>)	1	5.71	6.24	8.01	14.66	4.98	3.36	4.65	5.79
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	5.21	5.94	8.21	13.94	5.65	4.18	5.65	4.33
P081	Tarlava (<i>Drepane punctata</i>)	2	5.94	5.94	9.79	14.51	4.96	4.11	4.21	4.64
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2	5.86	5.68	9.51	15.03	5.80	3.70	4.36	3.67
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	3.05	6.47	9.02	13.03	4.89	5.62	5.17	5.67
P084	Tuna (<i>Euthynnus affinis</i>)	5	5.28±0.64	6.46±1.00	8.60±0.30	13.49±0.51	5.60±0.36	3.49±0.36	4.53±0.31	5.19±1.01
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	5.97	7.02	8.04	14.20	5.24	3.46	4.50	5.72
P086	Valava (<i>Chirocentrus nudus</i>)	1	5.60	5.02	10.14	16.04	4.41	3.30	4.90	4.21
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	5.71	6.81	10.31	14.51	5.90	3.74	4.35	3.74

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
												
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P088	Vela meen (<i>Aprion virescens</i>)	1	3.61	4.82	8.12	5.45	2.34	2.21	6.17	5.51	0.93	5.65
P089	Vora (<i>Siganus javus</i>)	2	3.76	4.99	8.49	6.58	2.95	1.47	5.13	5.27	0.77	5.79
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	4.02	4.90	8.19	5.46	3.40	1.72	7.00	5.26	1.15	5.30
P091	Xiphinis (<i>Xiphias gladius</i>)	1	5.94	4.68	7.90	5.92	3.51	2.05	4.82	5.07	0.77	5.27
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	4.55	5.21	8.04	7.36	2.80	1.63	6.30	5.21	1.06	5.15

309

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	2.33	4.54	6.35	7.11	3.43	1.69	4.72	2.43	1.41	4.79
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	2.20	4.48	7.30	7.82	3.62	1.60	4.11	4.81	0.64	4.91
Q003	Lobster, brown (<i>Thenus orientalis</i>)	1	2.74	4.98	8.62	7.73	3.99	1.52	3.70	5.09	0.75	5.87
Q004	Lobster, king size (<i>Thenus orientalis</i>)	1	3.22	4.37	6.45	7.53	4.24	1.91	4.83	4.33	0.88	5.38
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	1.73	4.12	6.90	6.78	2.39	1.42	4.07	4.28	1.15	4.67
Q006	Oyster (<i>Crassostrea</i> sp.)	1	2.34	4.56	7.08	6.06	2.21	1.16	3.87	4.76	0.92	5.31
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	2.03	4.55	7.72	7.49	3.43	1.77	4.60	4.90	0.87	5.06
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	2.11	4.67	7.39	7.93	3.81	2.04	3.68	4.90	0.71	5.13

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	2.42	4.44	6.43	4.12	3.62	1.30	3.71	5.61	0.92	4.92
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	2.23	4.06	6.31	4.62	3.08	0.79	3.18	5.09	0.79	4.69
R003	Octopus (<i>Octopus vulgaris</i>)	1	4.48	5.82	8.48	7.55	2.46	1.87	6.37	5.82	0.88	5.30
R004	Squid, black (<i>Loligo</i> sp.)	1	4.14	4.05	8.49	6.58	2.25	1.69	5.21	5.53	0.93	4.62
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	3.89	4.24	7.57	5.09	3.89	1.75	3.21	4.45	0.71	4.19

Table 8. Amino Acid Profile

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P088	Vela meen (<i>Apriion virescens</i>)	1	5.42	6.57	8.71	14.28	6.04	3.53	4.46	4.69
P089	Vora (<i>Siganus javus</i>)	2	5.85	4.46	9.41	15.08	5.14	3.70	4.16	4.56
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	5.49	5.88	9.02	13.93	6.13	3.85	4.37	5.16
P091	Xiphinis (<i>Xiphias gladius</i>)	1	5.12	5.67	8.73	13.64	5.41	3.51	4.36	4.38
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	3.38	6.53	9.31	12.24	5.28	5.38	4.72	5.57

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	2.80	3.37	8.31	13.53	7.58	3.34	4.17	3.56
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	6.19	6.91	8.11	15.34	7.97	3.97	3.62	3.81
Q003	Lobster, brown (<i>Thenus orientalis</i>)	1	6.08	6.81	10.35	15.93	6.69	3.86	4.68	3.43
Q004	Lobster, king size (<i>Thenus orientalis</i>)	1	3.43	5.13	8.32	13.76	6.38	7.55	4.77	4.53
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	5.47	7.47	8.68	14.34	7.48	4.85	3.70	3.88
Q006	Oyster (<i>Crassostrea sp.</i>)	1	5.57	6.07	10.93	14.64	7.88	5.24	4.61	3.61
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	5.25	7.69	8.84	14.31	5.94	3.52	4.16	3.79
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	5.37	5.65	8.60	14.50	5.95	3.41	4.07	3.40

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	4.44	6.21	10.19	13.15	8.87	3.64	5.20	3.67
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	6.80	7.54	10.20	13.55	8.43	3.35	4.71	3.17
R003	Octopus (<i>Octopus vulgaris</i>)	1	5.34	6.59	8.90	10.43	5.84	4.43	4.75	6.32
R004	Squid, black (<i>Loligo sp.</i>)	1	5.27	6.99	10.65	13.08	5.95	4.56	4.16	4.30
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	4.43	7.03	9.96	13.99	4.64	4.44	4.50	2.91

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			<—————g—————>									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	3.54	5.34	7.84	5.58	3.77	1.52	6.47	7.18	1.24	5.10
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	4.54	4.14	5.99	7.94	3.31	1.74	4.38	4.88	0.97	4.80
S FRESHWATER FISH AND SHELLFISH												
S001	Cat fish (<i>Tandanus tandanus</i>)	2	4.80±0.29	4.46±0.33	7.29±0.82	8.11±0.23	6.07±0.15	14.31±1.10	5.30±0.20	3.46±0.77	1.18±0.45	5.15±0.12
S002	Catla (<i>Catla catla</i>)	6	5.23±0.11	4.06±0.86	7.53±0.39	8.09±0.05	5.61±0.66	15.25±0.91	5.49±0.22	3.54±0.37	0.74±0.17	5.18±0.09
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	3.67	3.43	3.41	5.94	4.62	10.94	4.07	3.46	1.22	4.56
S004	Gold fish (<i>Carassius auratus</i>)	1	4.90	4.47	6.31	7.94	5.76	14.49	5.14	2.50	1.03	5.23
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	2	8.30	6.59	3.83	4.57	4.01	4.74	4.49	4.19	1.26	6.07
S006	Rohu (<i>Labeo rohita</i>)	6	4.77±0.39	4.09±0.54	6.27±0.69	8.03±0.55	5.57±0.44	15.13±0.75	5.26±0.37	2.90±0.58	1.04±0.28	5.39±0.72
S007	Crab (<i>Pachygrapsus sp.</i>)	1	3.86	3.73	5.19	6.82	4.97	13.27	3.94	3.43	0.93	3.96
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	3	4.66	2.99	6.72	7.79	5.16	14.75	4.57	3.33	1.11	4.72
S009	Prawns, small (<i>Macrobrachium sp.</i>)	6	4.45±0.28	4.11±0.57	6.76±0.77	7.89±0.58	5.73±0.43	14.71±0.87	5.37±0.41	2.92±0.63	1.02±0.17	5.17±0.68
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	4.19	2.96	4.85	7.54	5.15	15.67	4.64	3.53	0.94	4.75

Table 8. Amino Acid Profile

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	5.71	6.75	8.86	12.38	5.48	3.27	5.79	5.63
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	4.74	4.67	9.75	8.18	5.33	4.34	4.60	4.46
S FRESHWATER FISH AND SHELLFISH										
S001	Cat fish (<i>Tandanus tandanus</i>)	2	2.38±0.43	4.03±0.54	1.56±0.17	6.74±0.65	8.78±0.99	7.13±1.37	4.72±0.54	3.82±0.32
S002	Catla (<i>Catla catla</i>)	6	2.64±0.33	3.53±0.05	1.08±0.55	6.64±1.21	9.32±2.68	6.75±1.68	4.43±0.03	2.88±0.75
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	2.06	4.06	1.12	7.74	6.53	5.97	3.52	3.78
S004	Gold fish (<i>Carassius auratus</i>)	1	3.12	3.19	1.61	7.39	8.61	7.77	4.38	3.14
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	2	13.64	95.04	3.34	6.08	2.84	8.44	6.51	5.31
S006	Rohu (<i>Labeo rohita</i>)	6	2.45±0.64	3.68±1.15	1.45±0.12	7.19±0.24	9.60±0.89	6.41±0.57	4.63±0.50	3.40±0.92
S007	Crab (<i>Pachygrapsus sp.</i>)	1	2.92	5.27	2.03	9.15	8.42	7.73	3.80	5.17
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	3	2.79	3.28	1.82	9.11	9.10	5.49	4.13	2.66
S009	Prawns, small (<i>Macrobrachium sp.</i>)	6	2.56±0.43	4.42±0.77	1.51±0.43	6.52±1.01	8.32±2.18	6.30±1.04	4.36±0.57	3.86±0.53
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	2.35	4.06	1.41	10.29	8.84	4.24	4.30	3.59

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{HIS} + \text{ILE} + \text{LE} + \text{LYS} + \text{MET} + \text{CYS} + \text{PHE} + \text{THR} + \text{TRP}}{\text{VAL}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P MARINE FISH												
P001	Allathi (<i>Elops machnata</i>)	1	5.23	4.76	7.80	6.63	3.26	1.42	5.49	5.13	1.18	5.26
P002	Aluva (<i>Parastromateus niger</i>)	3	3.72±0.23	4.57±0.40	8.65±0.35	5.91±0.96	2.28±0.30	1.42±0.39	6.43±0.42	5.57±0.74	0.99±0.02	5.74±0.25
P003	Anchovy (<i>Stolephorus indicus</i>)	2	3.65	4.59	7.72	5.67	3.28	1.82	4.61	5.55	0.81	5.49
P004	Ari fish (<i>Aprian virescens</i>)	1	4.71	4.56	8.23	6.30	2.64	2.14	4.55	5.49	1.23	5.11
P005	Betki (<i>Lates calcarifer</i>)	1	4.54	4.62	6.98	7.60	3.15	1.95	5.79	5.19	0.81	5.33
P006	Black snapper (<i>Macolor niger</i>)	1	4.94	4.93	7.97	5.84	3.12	2.01	5.33	4.64	0.79	5.43
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	4.60	4.49	7.47	7.17	3.44	1.74	5.37	4.51	1.25	5.34
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	3.74±0.09	4.75±0.46	8.59±0.25	5.07±0.45	2.57±0.13	1.48±0.14	6.19±0.37	5.58±0.11	1.19±0.07	5.35±0.45
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	2.06	5.04	8.35	6.13	2.12	1.42	4.40	4.83	0.55	5.59
P010	Chakla (<i>Rachycentron canadum</i>)	5	3.61±0.32	4.62±0.17	7.59±0.29	6.26±0.44	2.52±0.21	1.83±0.32	5.63±0.28	5.15±0.46	1.02±0.12	5.28±0.16
P011	Chappal (<i>Aluterus monoceros</i>)	1	3.04	4.82	8.35	5.47	4.10	1.91	4.72	5.76	1.18	5.75
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	2.96	4.70	7.41	6.31	4.15	1.58	4.37	5.82	1.13	5.63
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	3.19	4.60	7.72	8.03	4.30	1.45	4.93	5.29	1.01	5.26
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	3.89	4.86	8.19	6.92	3.19	1.67	5.95	5.25	1.11	5.39
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	2.87	4.59	7.92	7.51	3.54	1.98	4.52	5.53	1.15	5.23
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	2.35	4.89	8.37	6.92	3.07	1.33	4.26	4.96	1.04	5.22
P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	4.32	3.79	8.14	7.45	3.68	1.43	5.17	5.48	1.88	5.35
P018	Jallal (<i>Arius sp.</i>)	1	3.50	4.78	7.85	6.03	3.97	2.27	5.02	5.80	1.08	5.41
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	3.58	4.63	8.25	6.72	3.79	1.75	4.40	4.75	1.00	5.70
P020	Kadal bral (<i>Synodus indicus</i>)	1	3.20	4.38	7.43	6.52	3.46	2.01	3.82	5.39	0.81	5.22
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	3.63	4.71	8.01	7.43	2.33	1.21	5.77	5.48	1.11	5.24

Table 8. Amino Acid Profile

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P MARINE FISH										
P001	Allathi (<i>Elops machnata</i>)	1	5.41	5.95	10.70	14.01	4.68	3.39	3.88	5.15
P002	Aluva (<i>Parastromateus niger</i>)	3	5.55±0.36	6.97±1.17	9.56±1.05	13.13±0.62	5.47±0.29	3.53±0.40	4.34±0.63	5.13±0.33
P003	Anchovy (<i>Stolephorus indicus</i>)	2	5.28	5.83	7.89	14.66	5.57	3.35	4.39	4.15
P004	Ari fish (<i>Apion virescens</i>)	1	5.39	7.56	10.65	12.16	5.83	3.28	4.38	4.26
P005	Betki (<i>Lates calcarifer</i>)	1	2.15	5.93	10.35	13.28	6.51	5.55	4.46	5.28
P006	Black snapper (<i>Macolor niger</i>)	1	5.67	5.74	11.43	15.70	5.36	3.58	4.07	3.85
P007	Bombay duck (<i>Harpodon nehereus</i>)	2	5.95	5.25	9.93	11.16	6.17	6.14	4.50	4.23
P008	Bommuralu (<i>Muraenesox cinerius</i>)	3	4.52±0.53	6.73±0.33	10.19±0.81	13.89±0.53	4.76±0.34	3.29±0.42	4.54±0.07	5.46±0.47
P009	Cat fish (<i>Tachysurus thalassinus</i>)	1	5.84	5.77	12.00	15.36	5.19	3.62	4.18	3.91
P010	Chakla (<i>Rachycentron canadum</i>)	5	5.57±0.20	6.88±1.24	10.25±0.50	13.92±0.58	4.96±0.22	3.44±0.16	4.30±0.25	4.41±0.59
P011	Chappal (<i>Aluterus monoceros</i>)	1	5.73	8.17	9.16	14.10	6.10	3.75	4.97	3.35
P012	Chelu (<i>Elagatis bipinnulata</i>)	2	5.15	6.98	9.86	14.88	5.07	3.34	5.11	4.47
P013	Chembali (<i>Lutjanus quinquefasciatus</i>)	1	5.72	5.98	11.41	12.69	5.60	3.21	4.28	5.44
P014	Eri meen (<i>Pristipomoides filamentosus</i>)	1	5.72	5.97	10.33	15.02	5.89	3.56	4.40	3.48
P015	Gobro (<i>Epinephelus diacanthus</i>)	2	5.43	6.38	9.19	14.35	5.02	3.37	4.49	4.26
P016	Guitar fish (<i>Rhinobatos prahli</i>)	1	6.14	6.69	9.13	14.68	5.78	5.29	4.29	4.85
P017	Hilsa (<i>Tenualoosa ilisha</i>)	2	4.43	4.15	1.72	13.13	6.66	6.85	4.43	3.83
P018	Jallal (<i>Arius sp.</i>)	1	5.11	6.87	9.54	13.98	5.33	3.14	5.41	4.28
P019	Jathi vela meen (<i>Lethrinus lentjan</i>)	2	5.61	6.42	9.92	14.07	5.38	3.73	4.23	4.18
P020	Kadal bral (<i>Synodus indicus</i>)	1	5.00	6.44	10.46	13.80	5.37	3.20	4.34	3.51
P021	Kadali (<i>Nemipterus mesoprion</i>)	1	6.23	5.35	8.51	16.44	5.13	3.74	3.87	5.27

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{HIS} + \text{ILE} + \text{LE} + \text{LYS} + \text{MET} + \text{CYS} + \text{PHE} + \text{THR} + \text{TRP}}{\text{VAL}}$ g									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	2.76	4.52	8.63	6.04	3.05	1.76	6.29	5.50	1.10	5.06
P023	Kalava (<i>Epinephelus coioides</i>)	1	3.81	4.82	8.00	6.04	3.50	1.72	5.61	5.10	1.28	5.19
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	2.00	4.95	7.78	5.62	2.87	1.61	5.36	6.11	0.98	5.64
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	4.13±0.64	4.47±0.02	7.68±0.36	6.11±0.42	2.89±0.11	1.66±0.34	5.61±0.09	5.57±0.24	1.10±0.06	5.29±0.06
P026	Karimeen (<i>Etroplus suratensis</i>)	1	2.30	4.59	8.06	6.50	3.61	1.70	4.03	5.11	0.78	5.24
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	2.85	5.06	8.51	5.43	3.66	2.54	4.68	6.80	0.91	5.83
P028	Kayrai (<i>Thunnus albacores</i>)	2	2.27	4.60	8.27	6.76	2.46	1.52	5.13	5.19	1.10	5.72
P029	Kiriyana (<i>Atule mate</i>)	1	3.07	4.54	7.39	6.30	4.14	2.34	5.09	5.37	1.24	5.59
P030	Kite fish (<i>Mobula kuhlii</i>)	1	3.07	4.67	8.18	5.80	3.10	1.31	4.97	5.66	1.56	4.98
P031	Korka (<i>Terapon jarbua</i>)	1	3.43	4.47	7.40	5.49	3.34	2.38	3.60	5.56	1.09	5.18
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	1.74	4.91	8.39	5.95	2.49	1.56	5.17	6.36	1.15	6.03
P033	Maagaa (<i>Polynemus plebeius</i>)	1	3.07	4.75	8.15	7.24	3.25	1.43	5.18	5.17	1.14	5.29
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	3.63±0.31	4.64±0.16	7.91±0.35	6.39±0.19	2.56±0.23	1.68±0.36	5.25±0.29	5.71±0.39	1.00±0.06	5.47±0.19
P035	Manda clathi (<i>Naso reticulatus</i>)	1	2.98	4.70	8.74	6.05	3.32	1.94	6.09	4.80	0.81	5.16
P036	Matha (<i>Acanthurus mata</i>)	2	4.02	5.11	8.65	5.18	3.54	2.03	5.94	5.68	1.25	5.74
P037	Milk fish (<i>Chanos chanos</i>)	1	3.10	5.15	8.30	7.36	3.30	1.86	5.20	5.87	0.90	6.12
P038	Moon fish (<i>Mene maculata</i>)	1	4.94	4.89	8.27	5.84	3.12	2.01	4.73	4.64	1.22	5.54
P039	Mullet (<i>Mugil cephalus</i>)	3	3.35±0.30	4.66±0.04	7.91±0.13	6.41±0.60	2.96±0.20	1.39±0.10	5.44±0.13	5.92±0.39	0.93±0.06	5.32±0.10
P040	Mural (<i>Tylosurus crocodilus</i>)	1	4.77	4.86	8.44	5.50	3.95	1.57	5.56	5.21	0.80	5.46
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	2.95	4.78	7.94	7.21	2.03	1.94	4.48	5.34	0.90	5.94
P042	Nalla bontha (<i>Epinephelus sp.</i>)	1	3.51	4.00	7.31	6.27	3.08	2.05	4.01	6.62	1.12	4.91
P043	Narba (<i>Caranx sexfasciatus</i>)	2	5.32	4.44	7.58	6.54	3.88	1.92	5.47	4.81	1.23	5.43

Table 8. Amino Acid Profile

3034

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P022	Kalamaara (<i>Leptomelanosoma indicum</i>)	2	5.48	7.75	8.39	13.66	5.38	3.55	4.44	5.55
P023	Kalava (<i>Epinephelus coioides</i>)	1	5.41	6.54	9.33	14.20	5.83	3.82	4.44	4.50
P024	Kanamayya (<i>Lutjanus rivulatus</i>)	2	5.66	6.09	10.96	14.60	5.42	3.73	4.63	5.24
P025	Kannadi paarai (<i>Alectis indicus</i>)	3	5.34±0.20	6.01±0.22	9.73±1.86	13.56±0.62	5.09±0.25	3.37±0.08	4.43±0.21	4.28±0.13
P026	Karimeen (<i>Etroplus suratensis</i>)	1	6.36	6.48	11.62	15.32	6.34	3.69	4.50	3.20
P027	Karnagawala (<i>Anchoa hepsetus</i>)	1	5.69	6.63	9.28	13.80	5.18	3.33	5.36	3.39
P028	Kayrai (<i>Thunnus albacores</i>)	2	5.56	6.33	9.56	13.19	4.56	3.69	4.04	4.71
P029	Kiriyana (<i>Atule mate</i>)	1	5.54	6.56	10.05	14.49	6.06	3.37	4.22	3.93
P030	Kite fish (<i>Mobula kuhlii</i>)	1	5.25	6.70	10.35	14.85	6.30	3.57	4.47	4.96
P031	Korka (<i>Terapon jarbua</i>)	1	5.36	8.53	8.38	13.01	5.75	3.14	4.22	3.03
P032	Kulam paarai (<i>Carangoides fulvoguttatus</i>)	1	5.64	7.64	10.08	12.26	6.13	3.68	5.02	4.09
P033	Maagaa (<i>Polynemus plebeius</i>)	1	5.67	6.34	8.91	15.62	4.96	3.54	4.45	5.61
P034	Mackerel (<i>Rastrelliger kanagurta</i>)	3	5.41±0.54	5.81±0.54	9.96±0.72	13.38±0.59	5.28±0.26	3.27±0.24	4.46±0.11	4.59±0.15
P035	Manda clathi (<i>Naso reticulatus</i>)	1	5.29	6.64	10.88	13.48	5.35	3.22	4.13	4.61
P036	Matha (<i>Acanthurus mata</i>)	2	5.52	8.02	8.66	13.56	5.22	3.63	4.39	4.80
P037	Milk fish (<i>Chanos chanos</i>)	1	6.23	6.15	8.60	14.07	5.06	3.96	3.93	4.84
P038	Moon fish (<i>Mene maculata</i>)	1	5.67	5.74	11.43	14.70	5.36	3.58	4.07	4.26
P039	Mullet (<i>Mugil cephalus</i>)	3	5.57±0.29	7.18±0.38	8.33±0.67	14.52±0.52	5.76±0.37	3.54±0.37	4.60±0.36	5.27±0.31
P040	Mural (<i>Tylosurus crocodilus</i>)	1	5.56	6.08	8.24	14.67	5.80	3.83	4.29	4.98
P041	Myil meen (<i>Istiophorus platypterus</i>)	2	5.44	7.37	8.56	13.97	5.65	3.53	4.50	4.08
P042	Nalla bontha (<i>Epinephelus sp.</i>)	1	6.61	7.43	9.59	13.21	4.71	2.73	5.41	4.90
P043	Narba (<i>Caranx sexfasciatus</i>)	2	5.42	6.11	9.75	13.59	5.44	3.36	4.12	4.74

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{HIS}}{\text{ILE}} \times \frac{\text{LE}}{\text{LYS}} \times \frac{\text{MET}}{\text{CYS}} \times \frac{\text{PHE}}{\text{THR}} \times \frac{\text{TRP}}{\text{VAL}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P044	Paarai (<i>Caranx heberi</i>)	1	3.09	4.11	7.82	7.08	3.96	1.15	4.86	4.37	1.12	5.20
P045	Padayappa (<i>Canthidermis maculata</i>)	1	2.45	4.69	7.94	6.22	3.27	1.35	3.84	5.02	1.22	5.23
P046	Pali kora (<i>Panna microdon</i>)	1	2.90	4.64	7.74	6.85	3.94	1.33	3.78	5.90	0.86	5.15
P047	Pambada (<i>Lepturacanthus savala</i>)	2	2.73	4.58	7.77	6.44	3.38	1.27	5.51	6.13	0.94	5.20
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	4.00	4.89	8.37	5.28	2.63	1.10	5.71	5.29	0.90	5.94
P049	Parava (<i>Lactarius lactarius</i>)	1	2.60	4.77	8.11	5.25	3.73	1.76	4.18	4.82	0.89	5.09
P050	Parcus (<i>Psettosodes erumei</i>)	1	3.07	4.81	8.44	6.08	3.81	2.07	5.33	5.20	0.88	5.61
P051	Parrot fish (<i>Scarus ghobban</i>)	1	2.61	4.86	8.06	7.06	3.62	1.96	5.34	5.18	0.78	5.66
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	3.16	4.93	8.49	7.18	3.20	1.35	5.08	5.18	0.87	5.53
305	P053 Phopat (<i>Coryphaena hippurus</i>)	4	3.40±0.13	4.66±0.24	7.72±0.29	7.30±0.44	3.02±0.17	1.57±0.28	3.99±0.47	5.18±0.22	1.00±0.11	5.39±0.33
	P054 Piranha (<i>Pygopristis</i> sp.)	1	3.26	4.51	8.05	7.24	2.87	1.14	3.74	5.10	1.05	5.15
	P055 Pomfret, black (<i>Parastromateus niger</i>)	2	4.36	4.77	8.11	5.52	2.42	1.52	6.43	5.12	1.12	5.95
	P056 Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	3.19	5.52	7.94	6.04	3.13	1.71	4.25	4.89	0.89	5.45
	P057 Pomfret, white (<i>Pampus argenteus</i>)	2	3.80	4.64	8.21	7.03	2.99	1.75	6.38	5.28	1.11	5.42
	P058 Pranel (<i>Gerres</i> sp.)	1	3.00	4.55	7.75	5.94	3.24	1.82	5.85	4.79	1.05	5.97
	P059 Pulli paarai (<i>Gnathanodon speciosus</i>)	1	2.94	4.88	8.31	5.75	2.75	1.63	5.11	4.42	1.21	5.70
	P060 Queen fish (<i>Scomberoides commersonianus</i>)	3	0.86±0.50	4.56±0.11	7.58±0.21	5.93±0.26	3.63±0.50	1.39±0.38	4.25±0.42	5.98±2.20	0.80±0.17	5.32±0.31
	P061 Raai fish (<i>Lobotes surinamensis</i>)	2	2.80	4.52	8.05	6.48	3.10	1.76	5.54	5.91	1.07	5.17
	P062 Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	3.26	4.47	7.89	6.71	2.98	2.14	5.02	6.50	1.62	5.06
	P063 Rani (<i>Pink perch</i>)	1	4.35	4.65	8.03	7.27	2.56	1.95	5.04	5.07	1.66	5.07
	P064 Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1	3.06	4.77	7.94	6.52	2.65	1.41	5.87	5.04	0.98	4.64
	P065 Red snapper (<i>Lutjanus argentimaculatus</i>)	1	3.14	4.57	7.89	6.32	3.80	1.68	6.28	6.16	1.12	5.26

Table 8. Amino Acid Profile

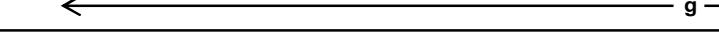
Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P044	Paarai (<i>Caranx heberi</i>)	1	6.36	6.08	11.10	14.51	6.78	4.66	3.94	3.36
P045	Padayappa (<i>Canthidermis maculata</i>)	1	6.30	6.06	13.85	15.76	6.40	4.06	4.30	3.55
P046	Pali kora (<i>Panna microdon</i>)	1	5.49	5.72	10.57	15.68	4.78	3.12	4.57	3.19
P047	Pambada (<i>Lepturacanthus savala</i>)	2	5.71	6.09	8.95	14.10	6.45	3.77	4.43	5.59
P048	Pandukopa (<i>Pseudosciaena manchurica</i>)	1	5.31	7.08	9.66	14.10	5.19	3.75	4.45	5.44
P049	Parava (<i>Lactarius lactarius</i>)	1	6.01	6.15	8.08	13.19	6.42	3.45	4.00	3.15
P050	Parcus (<i>Psettosodes erumei</i>)	1	5.29	6.43	9.08	14.97	4.69	3.35	4.43	5.58
P051	Parrot fish (<i>Scarus ghobban</i>)	1	5.78	5.12	10.40	14.96	5.59	3.64	4.36	4.85
P052	Perinkilichai (<i>Pinjalo pinjalo</i>)	1	5.59	7.30	9.94	14.94	4.50	3.47	4.49	4.56
P053	Phopat (<i>Coryphaena hippurus</i>)	4	5.63±0.10	6.02±0.51	10.00±0.24	14.08±0.16	5.54±0.38	3.55±0.09	4.41±0.04	4.89±0.11
P054	Piranha (<i>Pygopristis</i> sp.)	1	6.18	5.66	11.24	15.79	6.56	3.96	4.33	4.13
P055	Pomfret, black (<i>Parastromateus niger</i>)	2	5.75	6.86	9.77	12.54	6.07	4.70	4.91	4.98
P056	Pomfret, snub nose (<i>Trachinotus blochii</i>)	2	5.70	6.07	10.89	14.65	5.01	3.51	4.08	3.74
P057	Pomfret, white (<i>Pampus argenteus</i>)	2	5.09	6.11	9.11	14.69	5.66	3.15	4.34	5.98
P058	Pranel (<i>Gerres</i> sp.)	1	6.41	5.22	8.96	16.31	6.51	3.76	3.85	5.47
P059	Pulli paarai (<i>Gnathanodon speciosus</i>)	1	6.42	5.06	11.60	14.05	5.50	3.99	3.93	5.86
P060	Queen fish (<i>Scomberoides commersonianus</i>)	3	5.21±0.25	6.26±1.88	9.83±1.11	14.51±0.54	4.84±0.93	3.29±0.10	4.62±1.51	3.93±0.35
P061	Raai fish (<i>Lobotes surinamensis</i>)	2	5.67	7.02	8.14	14.18	5.58	3.76	4.61	5.04
P062	Raai vanthu (<i>Epinephelus chlorostigma</i>)	1	5.47	7.80	10.14	13.69	4.68	3.32	4.26	4.40
P063	Rani (<i>Pink perch</i>)	1	5.40	8.24	9.10	12.08	5.90	4.11	4.34	5.73
P064	Ray fish, bow head, spotted (<i>Rhina ancylostoma</i>)	1	5.76	6.03	8.38	16.86	6.76	3.94	4.05	3.25
P065	Red snapper (<i>Lutjanus argentimaculatus</i>)	1	5.21	6.48	8.80	13.92	5.17	3.31	4.76	5.48

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			$\frac{\text{HIS} \quad \text{ILE} \quad \text{LE} \quad \text{LYS} \quad \text{MET} \quad \text{CYS} \quad \text{PHE} \quad \text{THR} \quad \text{TRP} \quad \text{VAL}}{\text{G}}$									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	3.49	4.39	8.59	5.04	2.59	1.64	6.78	5.74	0.89	5.14
P067	Sadaya (<i>Platax orbicularis</i>)	1	3.29	4.47	8.82	5.16	2.91	1.18	6.44	5.73	1.26	5.42
P068	Salmon (<i>Salmo salar</i>)	1	3.60	4.78	7.83	5.44	3.15	1.52	5.40	5.87	0.92	5.63
P069	Sangada (<i>Nemipterus japonicus</i>)	1	2.39	4.60	8.71	6.72	2.21	1.09	6.34	6.32	0.96	5.19
P070	Sankata parai (<i>Caranx ignobilis</i>)	1	2.04	4.86	8.36	6.56	3.36	1.65	6.11	5.31	1.39	5.69
P071	Sardine (<i>Sardinella longiceps</i>)	1	4.31	4.73	8.17	6.43	3.00	1.84	5.24	5.30	1.57	5.18
P072	Shark (<i>Carcharhinus sorrah</i>)	2	3.58	5.05	7.41	5.73	4.31	2.46	3.81	5.65	0.85	5.52
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	4.13	3.75	8.20	7.99	4.51	1.27	5.19	3.88	0.65	4.97
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	3.69	5.22	8.44	4.47	3.38	0.92	4.04	5.38	0.96	5.49
307	P075 Shelavu (<i>Sphyraena jello</i>)	4	2.76±0.31	4.66±0.27	8.18±0.46	6.33±0.41	3.37±0.53	1.35±0.29	5.56±0.74	5.06±0.18	1.08±0.28	5.46±0.16
	P076 Silan (<i>Silonia silondia</i>)	1	1.55	4.71	7.92	6.17	3.61	1.58	4.04	5.38	0.96	5.49
	P077 Silk fish (<i>Beryx</i> sp.)	1	3.39	4.36	7.84	6.34	3.22	1.47	3.98	4.93	1.22	5.02
	P078 Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	4.51	4.75	7.24	6.11	4.24	1.41	5.32	4.69	1.17	4.77
	P079 Sole fish (<i>Cynoglossus arel</i>)	1	2.53	4.56	8.08	5.35	4.48	2.43	6.71	5.42	0.97	5.18
	P080 Stingray (<i>Dasyatis pastinaca</i>)	1	4.54	3.56	6.37	5.66	2.86	1.88	5.12	4.71	0.92	5.58
	P081 Tarlava (<i>Drepane punctata</i>)	2	4.06	4.72	8.11	6.14	2.13	1.58	5.08	4.90	0.82	5.38
	P082 Tholam (<i>Plectorhinchus schotaf</i>)	2	3.17	4.66	8.42	6.37	2.79	1.78	4.79	5.11	0.95	5.51
	P083 Tilapia (<i>Oreochromis niloticus</i>)	1	4.21	5.71	7.87	7.71	3.19	1.52	6.02	5.41	0.79	5.66
	P084 Tuna (<i>Euthynnus affinis</i>)	5	3.37±0.79	4.85±0.32	8.23±0.56	5.70±0.29	3.01±0.37	1.41±0.05	5.40±0.36	6.20±0.40	0.90±0.05	5.75±0.35
	P085 Tuna, striped (<i>Katsuwonus pelamis</i>)	1	2.70	4.96	8.16	7.11	3.93	1.79	4.29	5.40	1.63	6.03
	P086 Valava (<i>Chirocentrus nudus</i>)	1	3.14	4.94	8.32	7.62	3.65	1.52	4.65	5.26	1.09	5.71
	P087 Vanjaram (<i>Scomberomorus commerson</i>)	2	3.82	4.93	8.29	5.21	3.51	1.76	4.19	5.05	1.05	5.76

Table 8. Amino Acid Profile

308

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P066	Red snapper, small (<i>Priacanthus hamrur</i>)	1	5.21	6.75	9.36	13.86	5.88	3.11	4.65	5.26
P067	Sadaya (<i>Platax orbicularis</i>)	1	5.28	7.92	9.15	14.00	5.28	3.54	4.52	3.95
P068	Salmon (<i>Salmo salar</i>)	1	5.31	7.25	9.77	14.05	5.50	3.53	4.82	4.97
P069	Sangada (<i>Nemipterus japonicus</i>)	1	4.90	7.36	8.21	13.48	5.29	3.12	4.81	5.92
P070	Sankata parai (<i>Caranx ignobilis</i>)	1	5.56	4.90	10.62	14.54	4.94	3.59	4.87	4.55
P071	Sardine (<i>Sardinella longiceps</i>)	1	5.36	6.45	10.65	13.86	5.66	4.41	4.62	4.11
P072	Shark (<i>Carcharhinus sorrah</i>)	2	5.54	6.71	8.89	14.20	6.72	3.65	4.57	3.65
P073	Shark, hammer head (<i>Sphyrna mokarran</i>)	1	5.75	4.23	9.04	13.68	6.24	6.30	4.13	3.54
P074	Shark, spotted (<i>Stegostoma fasciatum</i>)	1	6.02	6.69	8.71	16.23	6.87	4.56	4.88	3.25
P075	Shelavu (<i>Sphyraena jello</i>)	4	5.58±0.23	7.31±1.40	9.05±2.88	14.24±0.50	5.41±0.55	3.39±0.14	4.24±0.18	3.87±0.89
P076	Silan (<i>Silonia silondia</i>)	1	5.18	7.44	7.79	15.05	5.76	4.02	6.41	4.26
P077	Silk fish (<i>Beryx</i> sp.)	1	5.43	7.53	10.21	14.57	5.25	3.45	4.39	3.53
P078	Silver carp (<i>Hypophthalmichthys molitrix</i>)	1	3.31	3.97	9.43	13.75	9.82	7.72	4.54	3.40
P079	Sole fish (<i>Cynoglossus arel</i>)	1	5.71	6.24	8.01	14.66	4.98	3.36	4.65	5.79
P080	Stingray (<i>Dasyatis pastinaca</i>)	1	5.21	5.94	8.21	13.94	5.65	4.18	5.65	4.33
P081	Tarlava (<i>Drepane punctata</i>)	2	5.94	5.94	9.79	14.51	4.96	4.11	4.21	4.64
P082	Tholam (<i>Plectorhinchus schotaf</i>)	2	5.86	5.68	9.51	15.03	5.80	3.70	4.36	3.67
P083	Tilapia (<i>Oreochromis niloticus</i>)	1	3.05	6.47	9.02	13.03	4.89	5.62	5.17	5.67
P084	Tuna (<i>Euthynnus affinis</i>)	5	5.28±0.64	6.46±1.00	8.60±0.30	13.49±0.51	5.60±0.36	3.49±0.36	4.53±0.31	5.19±1.01
P085	Tuna, striped (<i>Katsuwonus pelamis</i>)	1	5.97	7.02	8.04	14.20	5.24	3.46	4.50	5.72
P086	Valava (<i>Chirocentrus nudus</i>)	1	5.60	5.02	10.14	16.04	4.41	3.30	4.90	4.21
P087	Vanjaram (<i>Scomberomorus commerson</i>)	2	5.71	6.81	10.31	14.51	5.90	3.74	4.35	3.74

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
												
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
P088	Vela meen (<i>Aprion virescens</i>)	1	3.61	4.82	8.12	5.45	2.34	2.21	6.17	5.51	0.93	5.65
P089	Vora (<i>Siganus javus</i>)	2	3.76	4.99	8.49	6.58	2.95	1.47	5.13	5.27	0.77	5.79
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	4.02	4.90	8.19	5.46	3.40	1.72	7.00	5.26	1.15	5.30
P091	Xiphinis (<i>Xiphias gladius</i>)	1	5.94	4.68	7.90	5.92	3.51	2.05	4.82	5.07	0.77	5.27
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	4.55	5.21	8.04	7.36	2.80	1.63	6.30	5.21	1.06	5.15

309

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	2.33	4.54	6.35	7.11	3.43	1.69	4.72	2.43	1.41	4.79
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	2.20	4.48	7.30	7.82	3.62	1.60	4.11	4.81	0.64	4.91
Q003	Lobster, brown (<i>Thenus orientalis</i>)	1	2.74	4.98	8.62	7.73	3.99	1.52	3.70	5.09	0.75	5.87
Q004	Lobster, king size (<i>Thenus orientalis</i>)	1	3.22	4.37	6.45	7.53	4.24	1.91	4.83	4.33	0.88	5.38
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	1.73	4.12	6.90	6.78	2.39	1.42	4.07	4.28	1.15	4.67
Q006	Oyster (<i>Crassostrea</i> sp.)	1	2.34	4.56	7.08	6.06	2.21	1.16	3.87	4.76	0.92	5.31
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	2.03	4.55	7.72	7.49	3.43	1.77	4.60	4.90	0.87	5.06
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	2.11	4.67	7.39	7.93	3.81	2.04	3.68	4.90	0.71	5.13

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	2.42	4.44	6.43	4.12	3.62	1.30	3.71	5.61	0.92	4.92
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	2.23	4.06	6.31	4.62	3.08	0.79	3.18	5.09	0.79	4.69
R003	Octopus (<i>Octopus vulgaris</i>)	1	4.48	5.82	8.48	7.55	2.46	1.87	6.37	5.82	0.88	5.30
R004	Squid, black (<i>Loligo</i> sp.)	1	4.14	4.05	8.49	6.58	2.25	1.69	5.21	5.53	0.93	4.62
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	3.89	4.24	7.57	5.09	3.89	1.75	3.21	4.45	0.71	4.19

Table 8. Amino Acid Profile

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
P088	Vela meen (<i>Aprion virescens</i>)	1	5.42	6.57	8.71	14.28	6.04	3.53	4.46	4.69
P089	Vora (<i>Siganus javus</i>)	2	5.85	4.46	9.41	15.08	5.14	3.70	4.16	4.56
P090	Whale shark (<i>Galeocerdo cuvier</i>)	1	5.49	5.88	9.02	13.93	6.13	3.85	4.37	5.16
P091	Xiphinis (<i>Xiphias gladius</i>)	1	5.12	5.67	8.73	13.64	5.41	3.51	4.36	4.38
P092	Eggs, Cat fish (<i>Ompok bimaculatus</i>)	1	3.38	6.53	9.31	12.24	5.28	5.38	4.72	5.57

Q MARINE SHELLFISH

Q001	Crab (<i>Menippe mercenaria</i>)	1	2.80	3.37	8.31	13.53	7.58	3.34	4.17	3.56
Q002	Crab, sea (<i>Portunus sanguinolentus</i>)	1	6.19	6.91	8.11	15.34	7.97	3.97	3.62	3.81
Q003	Lobster, brown (<i>Thenus orientalis</i>)	1	6.08	6.81	10.35	15.93	6.69	3.86	4.68	3.43
Q004	Lobster, king size (<i>Thenus orientalis</i>)	1	3.43	5.13	8.32	13.76	6.38	7.55	4.77	4.53
Q005	Mud crab (<i>Scylla tranquebarica</i>)	1	5.47	7.47	8.68	14.34	7.48	4.85	3.70	3.88
Q006	Oyster (<i>Crassostrea</i> sp.)	1	5.57	6.07	10.93	14.64	7.88	5.24	4.61	3.61
Q007	Tiger prawns, brown (<i>Solenocera crassicornis</i>)	1	5.25	7.69	8.84	14.31	5.94	3.52	4.16	3.79
Q008	Tiger Prawns, orange (<i>Penaeus monodon</i>)	1	5.37	5.65	8.60	14.50	5.95	3.41	4.07	3.40

R MARINE MOLLUSKS

R001	Clam, green shell (<i>Perna viridis</i>)	1	4.44	6.21	10.19	13.15	8.87	3.64	5.20	3.67
R002	Clam, white shell, ribbed (<i>Meretrix meretrix</i>)	1	6.80	7.54	10.20	13.55	8.43	3.35	4.71	3.17
R003	Octopus (<i>Octopus vulgaris</i>)	1	5.34	6.59	8.90	10.43	5.84	4.43	4.75	6.32
R004	Squid, black (<i>Loligo</i> sp.)	1	5.27	6.99	10.65	13.08	5.95	4.56	4.16	4.30
R005	Squid, hard shell (<i>Sepia pharaonis</i>)	1	4.43	7.03	9.96	13.99	4.64	4.44	4.50	2.91

Food Code	Fish Name	No. of Regions	Histidine	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Threonine	Tryptophan	Valine
			<—————g—————>									
			HIS	ILE	LE	LYS	MET	CYS	PHE	THR	TRP	VAL
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	3.54	5.34	7.84	5.58	3.77	1.52	6.47	7.18	1.24	5.10
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	4.54	4.14	5.99	7.94	3.31	1.74	4.38	4.88	0.97	4.80
S FRESHWATER FISH AND SHELLFISH												
S001	Cat fish (<i>Tandanus tandanus</i>)	2	4.80±0.29	4.46±0.33	7.29±0.82	8.11±0.23	6.07±0.15	14.31±1.10	5.30±0.20	3.46±0.77	1.18±0.45	5.15±0.12
S002	Catla (<i>Catla catla</i>)	6	5.23±0.11	4.06±0.86	7.53±0.39	8.09±0.05	5.61±0.66	15.25±0.91	5.49±0.22	3.54±0.37	0.74±0.17	5.18±0.09
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	3.67	3.43	3.41	5.94	4.62	10.94	4.07	3.46	1.22	4.56
S004	Gold fish (<i>Carassius auratus</i>)	1	4.90	4.47	6.31	7.94	5.76	14.49	5.14	2.50	1.03	5.23
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	2	8.30	6.59	3.83	4.57	4.01	4.74	4.49	4.19	1.26	6.07
S006	Rohu (<i>Labeo rohita</i>)	6	4.77±0.39	4.09±0.54	6.27±0.69	8.03±0.55	5.57±0.44	15.13±0.75	5.26±0.37	2.90±0.58	1.04±0.28	5.39±0.72
S007	Crab (<i>Pachygrapsus sp.</i>)	1	3.86	3.73	5.19	6.82	4.97	13.27	3.94	3.43	0.93	3.96
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	3	4.66	2.99	6.72	7.79	5.16	14.75	4.57	3.33	1.11	4.72
S009	Prawns, small (<i>Macrobrachium sp.</i>)	6	4.45±0.28	4.11±0.57	6.76±0.77	7.89±0.58	5.73±0.43	14.71±0.87	5.37±0.41	2.92±0.63	1.02±0.17	5.17±0.68
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	4.19	2.96	4.85	7.54	5.15	15.67	4.64	3.53	0.94	4.75

Table 8. Amino Acid Profile

Food Code	Fish Name	No. of Regions	Alanine	Arginine	Aspartic Acid	Glutamic Acid	Glycine	Proline	Serine	Tyrosine
			<—————g—————>							
			ALA	ARG	ASN	GLU	GLY	PRO	SER	TYR
R006	Squid, red (<i>Loligo duvaucelii</i>)	2	5.71	6.75	8.86	12.38	5.48	3.27	5.79	5.63
R007	Squid, white, small (<i>Uroteuthis duvauceli</i>)	1	4.74	4.67	9.75	8.18	5.33	4.34	4.60	4.46
S FRESHWATER FISH AND SHELLFISH										
S001	Cat fish (<i>Tandanus tandanus</i>)	2	2.38±0.43	4.03±0.54	1.56±0.17	6.74±0.65	8.78±0.99	7.13±1.37	4.72±0.54	3.82±0.32
S002	Catla (<i>Catla catla</i>)	6	2.64±0.33	3.53±0.05	1.08±0.55	6.64±1.21	9.32±2.68	6.75±1.68	4.43±0.03	2.88±0.75
S003	Freshwater Eel (<i>Anguilla anguilla</i>)	1	2.06	4.06	1.12	7.74	6.53	5.97	3.52	3.78
S004	Gold fish (<i>Carassius auratus</i>)	1	3.12	3.19	1.61	7.39	8.61	7.77	4.38	3.14
S005	Pangas (<i>Pangasianodon hypophthalmus</i>)	2	13.64	95.04	3.34	6.08	2.84	8.44	6.51	5.31
S006	Rohu (<i>Labeo rohita</i>)	6	2.45±0.64	3.68±1.15	1.45±0.12	7.19±0.24	9.60±0.89	6.41±0.57	4.63±0.50	3.40±0.92
S007	Crab (<i>Pachygrapsus sp.</i>)	1	2.92	5.27	2.03	9.15	8.42	7.73	3.80	5.17
S008	Prawns, big (<i>Macrobrachium rosenbergii</i>)	3	2.79	3.28	1.82	9.11	9.10	5.49	4.13	2.66
S009	Prawns, small (<i>Macrobrachium sp.</i>)	6	2.56±0.43	4.42±0.77	1.51±0.43	6.52±1.01	8.32±2.18	6.30±1.04	4.36±0.57	3.86±0.53
S010	Tiger prawns (<i>Macrobrachium sp.</i>)	2	2.35	4.06	1.41	10.29	8.84	4.24	4.30	3.59

Table 9

ORGANIC ACIDS



Table 9. ORGANIC ACIDS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid						
			Total	Soluble	Insoluble													
			$\leftarrow \text{mg} \rightarrow$															
A CEREALS AND MILLETS																		
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	226	37.43	188		8.64	0.15	45.78	75.53	1.47							
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	209±49.7	32.30±1.46	177±49.8	0.14±0.02	7.93±0.45	0.14±0.02	47.16±1.64	75.06±0.57	1.89±0.13							
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	53.13±5.34	43.49±3.90	9.88±8.36	0.08±0.03		1.99±0.59	0.86±0.21		0.02±0.01							
A004	Barley (<i>Hordeum vulgare</i>)	6	10.98±1.31	8.73±0.54	2.04±0.61	1.43±0.27			0.90±0.48	0.52±0.09	0.17±0.06	3.24±1.27						
A005	Jowar (<i>Sorghum vulgare</i>)	6	28.38±2.65	24.62±4.49	1.72±0.46			1.84±0.79	0.51±0.24		3.88±1.22							
A006	Maize, dry (<i>Zea mays</i>)	6	15.26±1.78	14.19±1.30	2.73±1.34			0.66±0.20	0.93±0.50	0.84±0.07	1.50±0.23	0.94±0.05						
A007	Maize, tender, local (<i>Zea mays</i>)	6	5.20±1.09	3.98±0.66	0.92±0.15	0.29±0.07		0.46±0.19	0.73±0.48	1.83±0.58	1.22±0.10	4.35±0.72						
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	1.67±0.15	1.45±0.08	0.34±0.12	0.26±0.01		0.78±0.07	0.64±0.15	4.56±0.78	1.90±0.53	2.24±0.43						
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	82.94	42.22	40.72			25.07	0.23		2.07							
A010	Ragi (<i>Eleusine coracana</i>)	5	39.58±6.47	31.16±3.05	8.58±1.55			0.20±0.06	0.75±0.35		1.89±0.56	1.60±0.26						
A011	Rice flakes (<i>Oryza sativa</i>)	6	10.97±0.60	8.52±0.48	2.45±0.40			1.28±0.10	0.48±0.23		1.35±0.28							
A012	Rice puffed (<i>Oryza sativa</i>)	6	6.27±0.24	5.59±0.21	0.68±0.25			0.49±0.21	0.45±0.12		1.30±0.28							
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	12.06±1.05	9.30±0.83	1.96±0.44			1.72±0.60	0.50±0.29		1.85±0.60							
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	5.02±0.81	3.70±0.97	1.10±0.68			0.05±0.02	0.49±0.26		1.61±0.36							
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	1.92±0.37	1.58±0.37	0.35±0.08			0.07±0.06	0.48±0.34		1.54±0.41							
A016	Samai (<i>Panicum miliare</i>)	6	6.74±0.98	5.40±0.49	1.61±0.11			0.37±0.04	0.51±0.23		2.35±0.69	6.07±2.18						
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	3.48±0.17	2.57±0.40	0.65±0.06	0.21±0.03		0.26±0.09	0.45±0.24		1.87±0.82							
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	20.22±0.77	11.02±0.64	9.20±0.57			1.07±0.07	0.02±0.01	5.57±1.78	1.05±0.06	1.07±0.04						

Table 9. Organic Acids

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid	
			Total	Soluble	Insoluble						mg		
									CITAC	FUMAC	MALAC	SUCAC	TARAC
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	52.38±10.71	26.20±1.99	24.18±1.35				1.50±0.13	0.02±0.01	6.49±1.98	1.15±0.12	1.41±0.18
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	52.46±3.32	25.55±7.62	26.96±7.58				1.61±0.39	0.03±0.03	6.16±2.71	1.48±0.58	1.72±0.59
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	40.23±1.94	25.27±2.11	14.96±0.69				1.57±0.27	0.02±0.01	6.42±2.91	1.54±0.42	1.43±0.13
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	28.43±3.76	22.74±2.63	5.90±0.59				1.04±0.02	0.02±0.01	5.81±1.71	1.09±0.09	1.21±0.26
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	23.84±2.34	18.86±1.94	5.57±0.78	4.20±0.70			1.20±0.20	0.02±0.01	4.86±2.13	0.97±0.77	0.62±0.11
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	21.91±1.31	17.55±1.95	5.66±0.77	2.89±0.58			1.05±0.03	0.02±0.01	4.13±1.90	0.83±0.38	0.64±0.27

B GRAIN LEGUMES

136

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	6.49±1.18	5.29±0.51	1.20±0.66				55.58±1.22	0.52±0.14		0.74±0.09	
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	7.14±1.36	5.57±0.58	1.70±0.08				81.17±6.44	0.71±0.19		1.56±0.35	
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	43.78±1.49	24.50±1.68	19.68±1.55				1.65±0.48	0.54±0.24		0.79±0.22	
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	56.25±2.42	34.17±1.70	22.09±2.32				18.01±1.27	0.60±0.16		2.16±0.30	
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	14.34±1.86	10.83±1.05	2.55±0.78	0.02±0.01			1.54±0.37	0.68±0.23		5.38±3.28	
B006	Cowpea, white (<i>Vigna catjang</i>)	1	17.23	1.29	15.94	0.02			1.21	0.82		1.35	
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	1.28	1.10	0.18				3.83	0.44		6.84	
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	1.26	1.10	0.16				2.24	0.52		4.52	
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	1.23±0.05	0.97±0.07	0.31±0.08				3.12±0.73	0.89±0.44		1.67±0.88	
B010	Green gram, dal (<i>Vigna radiata</i>)	6	2.46±0.74	1.94±0.66	0.52±0.39				2.16±0.71	1.50±0.30		1.33±0.26	
B011	Green gram, whole (<i>Vigna radiata</i>)	6	12.29±0.30	10.57±0.27	1.72±0.12				5.98±0.84	1.84±0.13		1.34±0.29	
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	181±9.1	144±7.7	38.36±3.08				37.04±2.71	0.37±0.12		0.68±0.44	
B013	Lentil dal (<i>Lens culinaris</i>)	6	10.46±1.00	8.42±1.07	2.04±0.42				2.77±0.94	0.18±0.07	21.37±4.24	0.70±0.20	0.12±0.11

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble							
			$\leftarrow \text{mg} \rightarrow$									
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	10.74±0.61	8.71±0.71	3.04±1.44	1.56±0.28	0.04±0.01	0.50±0.14	25.17±1.15	1.57±0.44	10.13±0.01	
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	13.88	10.76	3.38	1.35	0.10	0.68	23.29	1.31	12.95	
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	36.11±6.26	28.72±1.91	10.15±0.37		2.25±0.33	0.71±0.28		4.25±1.68		
B017	Peas, dry (<i>Pisum sativum</i>)	6	8.89±1.04	6.75±0.73	2.35±0.64	2.98±0.68	1.32±0.44	0.82±0.52	83.15±7.96	3.48±1.84		
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	48.66	45.46	3.20		2.72	1.20		3.71		
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	43.41±8.69	33.48±4.15	8.16±0.95		2.40±0.85	0.73±0.34		3.48±2.08		
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	41.44±8.25	38.84±7.80	2.60±0.44		2.19±0.62	0.67±0.47		3.76±1.34		
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	1.41±0.11	1.20±0.13	0.22±0.08		0.48±0.18	0.56±0.23	3.28±1.69	0.55±0.22	2.02±0.57	
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	1.65±0.11	1.33±0.15	0.32±0.16		4.13±0.51	1.53±0.42	4.03±1.62	1.55±0.27	2.20±0.52	
B023	Ricebean (<i>Vigna umbellata</i>)	1	391	70.36	321		20.05	3.86		0.40		
B024	Soybean, brown (<i>Glycine max</i>)	6	122±5.3	8.19±0.22	114±5.1		31.91±4.04	1.34±0.17		0.82±0.25		
B025	Soybean, white (<i>Glycine max</i>)	1	119	8.18	111	0.08	33.52	1.32		0.89		

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	179	8.06	171	2.46	7.26	7.59		3.27		
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	779±232	198±29.7	582±203.6	2.70±0.16	3.64±1.13	5.03±1.57		3.78±1.44		
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	823	185	438	2.79	2.99	4.52		2.98		
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	676±157	188±6.5	489±159	2.76±0.26	2.87±0.88	5.97±1.14		2.39±1.48		
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	1073±158	81.78±11.52	991±147	6.11±0.59	2.58±0.28	11.15±1.10	3.84±0.95			
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	1045	90.20	955	6.19	2.52	15.45	4.67		3.39	

317

Table 9. Organic Acids

Table 9. Organic Acids

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble						mg	
						CITAC	FUMAC	MALAC	SUCAC	TARAC		
C007	Basella leaves (<i>Basella alba</i>)	2	170	35.47	133		8.18	0.33	1.40		4.72	
C008	Bathua leaves (<i>Chenopodium album</i>)	2	1077	228	850	3.08	8.64	0.46	5.53		1.32	
C009	Beet greens (<i>Beta vulgaris</i>)	6	127±21.6	34.98±5.06	92.38±19.84		2.27±1.28	0.32±0.16	3.17±1.54		62.38±17.90	
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	493±113	151±7.5	342±116		2.27±0.61	0.58±0.31	6.25±0.62	0.27±0.03	10.74±2.70	145±13.5
C011	Betel leaves, small (<i>Piper betle</i>)	4	577±139	183±8.1	393±138		1.65±0.31	0.27±0.14	5.39±0.40	0.32±0.04	12.62±2.15	51.07±9.78
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1	12.40	4.67	7.73		2.63	2.24	4.07		11.56	
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1	16.55	1.85	14.77		67.54	0.41	5.65	88.30	85.00	
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	9.42	0.80	8.62	0.03	45.82	0.81	0.55	58.30	89.66	2.98
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6	2.88±0.67	0.53±0.40	2.35±0.42	0.04±0.03	64.87±12.68	0.82±0.44	0.22±0.09	90.09±3.28	90.00±6.27	2.04±0.94
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2	2.70	0.26	2.45	0.02	61.73	0.78	0.62	37.25	88.78	2.43
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	172±25.8	10.10±1.36	162±25.5		62.21±0.97	0.35±0.23	1.82±0.10	3.45±0.16	48.86±1.42	4.20±0.07
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6	701±112	208±13.2	492±105		19.37±1.49	3.95±1.20	56.27±5.95		212±3.0	
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	120±14.9	13.69±1.54	107±16.0		19.22±2.39		88.40±4.34	105±3.9	101±21.2	
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	34.29±9.84	9.08±4.26	25.21±5.80		32.26±11.71	8.41±1.41	130±1.8	189±1.8	16.47±2.19	
C021	Garden cress (<i>Lepidium sativum</i>)	2	115	30.47	84.15		7.13	5.64	85.23		152	
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4	177±13.2	33.01±3.67	144±14.4	7.51±0.90	3.99±1.24	11.56±1.04	40.77±5.23	102±0.8	25.25±1.54	
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1	187	31.86	155	6.86	3.42	11.82	34.63	105	22.40	
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2	2.92	1.88	1.04		5.47	3.87	38.98		26.96	
C025	Lettuce (<i>Lactuca sativa</i>)	3	364±82.7	72.08±35.77	292±47.2		9.24±0.60	1.99±0.15	63.28±2.19	12.74±1.73	60±3.3	
C026	Mustard leaves (<i>Brassica juncea</i>)	3	1.69±0.04	1.49±0.09	0.20±0.05		4.62±0.95	4.07±0.86	0.68±0.32		22.73±0.64	

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble						mg	
			← CITAC FUMAC MALAC →						SUCAC	TARAC		
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1	14.35	2.15	12.20		35.85	1.01	1.82	4.75	79.88	3.14
C028	Parsley (<i>Petroselinum crispum</i>)	3	128±8.1	11.50±1.06	116±7.5	113±0.6	1.36±0.29	0.83±0.12	113±0.6		104±13.5	
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	465	165	299		5.82	0.83			246	
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	13.61±1.91	5.06±1.41	8.55±0.96	30.67±1.03	7.74±2.63	14.35±1.44	30.67±1.03	20.22±1.26	54.07±0.72	
C031	Radish leaves (<i>Raphanus sativus</i>)	6	53.83±15.04	23.46±3.89	30.37±13.72	6.04±0.69	3.15±1.60	1.66±0.37	6.04±0.69	22.96±0.89	139±3.2	
C032	Rumex leaves (<i>Rumex patientia</i>)	2	93.76	45.96	47.81	1.64	9.68	3.91	1.64		2.58	4.06
C033	Spinach (<i>Spinacia oleracea</i>)	6	592±36.7	241±18.8	351±30.8	15.79±2.95	67.34±14.43	5.44±0.79	15.79±2.95	254±7.9	1.64±0.25	
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3	150±13.9	72.63±14.02	77.44±22.84			6.46±4.33			195±7.0	44.76±19.99

319

D OTHER VEGETABLES									
D001	Ash gourd (<i>Benincasa hispida</i>)	6	4.89±0.85	3.28±1.29	1.61±0.90		36.91±1.03	0.57±0.04	
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	85.70	75.01	10.69	2.60	12.53	0.10	2.60
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	20.97±3.63	5.72±1.98	16.88±3.26	35.70±1.14	21.45±0.79	1.79±0.14	35.91±0.95
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6	45.40±11.17	17.53±2.08	27.87±11.44		59.33±1.55	1.41±0.22	
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4	48.83±10.78	16.28±2.12	32.55±10.52		66.42±2.46	1.51±0.47	
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1	43.37	15.33	28.04		65.68	1.42	
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	3.75±1.45	2.67±1.39	1.08±0.39		31.16±1.71	0.16±0.02	
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	2.53±1.02	1.38±0.32	1.15±0.88		31.12±2.36	0.14±0.02	
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	1.70	1.32	0.38		33.41	0.12	
									64.80

Table 9. Organic Acids

Table 9. Organic Acids

320

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble							
						CITAC	FUMAC	MALAC	SUCAC	TARAC		
D010	Brinjal-1 (<i>Solanum melongena</i>)	1	34.00	31.26	2.75	1.63	8.21	81.83	22.88			14.71
D011	Brinjal-2 (<i>Solanum melongena</i>)	1	35.87	33.45	2.42	0.23	7.31	47.27	26.76			17.75
D012	Brinjal-3 (<i>Solanum melongena</i>)	2	32.40	30.44	1.96	1.53	10.49	48.35	36.97			17.94
D013	Brinjal-4 (<i>Solanum melongena</i>)	4	29.37±6.87	25.15±5.01	4.22±1.93	1.50±1.00	9.54±1.17	39.27±13.07	66.55±27.18			14.92±6.79
D014	Brinjal-5 (<i>Solanum melongena</i>)	3	33.50±6.86	29.75±5.82	3.75±1.25	2.03±2.08	7.75±2.21	18.75±2.32	45.24±40.15			15.48±4.63
D015	Brinjal-6 (<i>Solanum melongena</i>)	2	36.80	30.16	6.64	2.64	10.49	16.82	87.21			12.95
D016	Brinjal-7 (<i>Solanum melongena</i>)	1	33.68	28.92	4.76	1.82	8.88	92.63	25.26			10.18
D017	Brinjal-8 (<i>Solanum melongena</i>)	3	37.86±8.54	27.54±6.36	10.31±9.80	2.20±1.16	9.44±1.17	21.92±12.56	66.28±32.10			16.85±3.56
D018	Brinjal-9 (<i>Solanum melongena</i>)	2	43.33	29.17	14.16	1.22	10.41	43.53	71.11			18.90
D019	Brinjal-10 (<i>Solanum melongena</i>)	2	34.80	31.32	3.48	0.84	8.45	75.35	44.41			8.59
D020	Brinjal-11 (<i>Solanum melongena</i>)	6	32.83±4.23	28.92±4.34	3.91±0.92	1.47±0.76	11.27±4.36	82.70±7.81	43.85±22.27			17.63±6.70
D021	Brinjal-12 (<i>Solanum melongena</i>)	2	31.81	26.14	5.67	1.17	10.49	61.07	64.57			12.76
D022	Brinjal-13 (<i>Solanum melongena</i>)	1	29.12	25.33	3.79	0.30	9.12	68.87	44.26			10.81
D023	Brinjal-14 (<i>Solanum melongena</i>)	3	32.95±6.18	27.09±7.24	5.86±1.35	1.81±0.41	8.63±1.55	66.96±10.76	48.93±13.54			15.19±2.69
D024	Brinjal-15 (<i>Solanum melongena</i>)	4	29.74±8.02	21.77±2.50	7.97±7.06	0.85±0.41	10.85±1.64	47.43±9.97	48.77±9.12			16.71±4.93
D025	Brinjal-16 (<i>Solanum melongena</i>)	1	32.81	28.76	4.05	1.36	8.65	91.48	35.19			16.57
D026	Brinjal-17 (<i>Solanum melongena</i>)	1	37.14	32.46	4.68	1.72	10.12	23.51	98.93			12.86
D027	Brinjal-18 (<i>Solanum melongena</i>)	3	37.58±5.39	31.76±6.44	5.82±1.35	1.68±0.89	8.79±4.17	51.60±15.25	52.70±14.73			17.75±6.55
D028	Brinjal-19 (<i>Solanum melongena</i>)	3	37.84±5.68	27.09±7.24	10.75±8.72		9.02±3.11	47.69±15.14	23.76±11.67			15.11±4.10
D029	Brinjal-20 (<i>Solanum melongena</i>)	5	35.39±5.77	28.44±5.50	6.94±3.13	2.99±1.50	9.29±1.60	63.90±41.84	22.64±6.12	9.26±1.10		13.08±3.76
D030	Brinjal-21 (<i>Solanum melongena</i>)	2	34.60	25.48	9.13	2.08	9.01	48.90	50.74			15.10

Food code	Food Name	No. of Regions	Oxalate											
			Total	Soluble	Insoluble	Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid		
											CITAC	FUMAC	MALAC	SUCAC
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6	34.31±5.90	28.17±5.01	6.14±4.44	1.66±1.03	9.76±2.73	56.02±26.03	47.84±24.54	9.26±1.10	15.52±5.06			
D032	Broad beans (<i>Vicia faba</i>)	3	20.25±1.21	5.81±2.00	13.00±1.34		124±1.2	1.12±0.18	4.99±0.37					
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	19.12±1.47	6.83±1.34	2.29±1.07		103±1.4	0.26±0.02	185±2.9	250±6.3				
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	16.28±4.34	10.73±0.98	5.54±3.61		33.39±9.88	0.41±0.11	116±8.2	5.10±2.99	151±40.3			
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	18.07±2.72	11.03±1.22	7.04±3.82		56.43±17.52	1.03±0.32	115±10.1	127±19.5				
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	9.82±1.49	1.88±0.83	7.95±1.59	0.25±0.05	104±1.8	4.60±0.68	11.04±0.87	4.94±0.81	282±5.6	4.25±2.38		
D037	Celery stalk (<i>Apium graveolens</i>)	3	54.23±7.31	23.18±3.10	31.04±10.38		158±3.4		5.96±0.75	51.46±2.07	9.36±0.58			
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	1.55±0.45	1.14±0.41	0.41±0.20	0.13±0.02	60.10±4.56			37.30±4.21	32.49±3.30	0.51±0.26		
321	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	16.49±1.45	8.55±0.23	8.58±1.10	0.03±0.01	92.19±1.95	1.36±0.56	6.02±1.12	45.46±1.06	227±1.8			
	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	250	177	73.74		20.30	4.65	296		62.60			
	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	229±48.1	172±14.4	64.37±37.16		24.01±1.37	0.15±0.02	156±2.8	96.99±1.38				
	Corn, baby (<i>Zea mays</i>)	6	9.22±3.75	4.94±3.44	4.27±0.69	0.29±0.00	21.14±15.00	4.15±2.34		5.57±2.27	60.48±19.84	4.38±1.77		
	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6	12.13±1.56	2.28±0.05	9.84±1.58		81.51±17.01	4.13±0.44	68.75±8.77	4.97±2.73	40.70±5.40			
	Cucumber, green, short (<i>Cucumis sativus</i>)	6	10.49±1.31	2.27±0.05	8.22±1.31		60.82±11.41	3.50±0.55	67.07±5.09	3.38±1.81	47.40±6.19			
	Cucumber, orange, round (<i>Cucumis sativus</i>)	2	11.55	2.31	9.24		37.31	4.40	64.48	5.70	50.82			
	Drumstick (<i>Moringa oleifera</i>)	6	123±8.5	66.98±5.99	55.82±3.91	16.31±2.04	72.33±14.95	44.83±1.95	406±2.7	29.95±5.10	60.96±12.76	130±6.5		
	Field beans, tender, broad (<i>Vicia faba</i>)	2	34.83	8.82	26.02	16.20	52.58	5.26	59.82					
	Field beans, tender, lean (<i>Vicia faba</i>)	6	35.12±6.94	8.81±0.16	26.31±6.94	12.43±2.69	58.47±7.11	4.45±0.91	54.81±2.50					
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	36.01±7.98	4.02±0.04	31.99±7.99	14.40±0.61	92.41±12.43	13.53±1.34	67.01±0.85					
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	36.97	4.88	32.09	12.60	81.10	14.40	68.60					

Table 9. Organic Acids

Table 9. Organic Acids

322

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid	
			Total	Soluble	Insoluble						mg		
									CITAC	FUMAC	MALAC	SUCAC	TARAC
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	9.60±1.48	7.24±1.39	2.37±0.33	4.81±0.55	35.40±1.54	7.80±1.06	82.78±0.99	450±30.9			
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	38.51±7.16	31.03±2.98	7.48±4.68	1.72±0.57	19.76±1.49	7.51±0.64	82.47±1.71	427±37.5			
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	2.92±0.96	1.88±0.55	1.04±0.41		14.19±1.86	5.90±1.29	5.57±2.23	248±40.5	6.42±0.67		
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	7.72±1.93	4.76±0.26	2.96±1.79	5.38±0.53	22.68±2.00	0.56±0.18	46.41±4.22	90.46±2.46	254±1.3		
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	8.15	5.01	3.14	5.63	25.89	0.41	51.63	92.82	239.14		
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	83.87±6.55	5.99±0.15	77.88±6.46	3.65±0.65	21.66±6.84	64.57±1.17	16.24±0.99	151±4.5	120±3.5		
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	7.51±1.45	3.92±0.04	3.60±1.47	0.47±0.29	32.73±1.32	1.38±0.37	84.39±1.25				85.92±3.20
D058	Onion, stalk (<i>Allium cepa</i>)	6	29.72±6.15	22.72±7.76	7.00±2.16		839±6.3	1.41±0.27	76.23±2.35	82.32±3.15			
D059	Papaya, raw (<i>Carica papaya</i>)	6	9.38±1.31	4.77±0.56	4.69±0.77	2.51±0.52	28.85±0.71	2.05±0.10	57.46±3.88	31.63±1.71	22.61±0.12		
D060	Parwar (<i>Trichosanthes dioica</i>)	6	3.24±0.72	1.56±0.19	1.58±0.25		28.36±10.14	3.26±0.70	1.61±0.31	3.29±0.96	31.10±1.95	3.13±0.64	
D061	Peas, fresh (<i>Pisum sativum</i>)	6	18.42±1.34	14.18±1.03	4.65±0.69	0.15±0.02		17.69±2.27	0.84±0.83	160±3.9	2.39±0.99		
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6	169±23.5	129±7.4	39.91±21.86	0.05±0.01	57.65±5.95	2.04±0.54	13.04±1.14				
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6	85.25±9.52	49.83±2.70	35.42±11.56	0.13±0.03	35.87±3.43	1.27±0.54	33.35±1.74	12.62±1.49			
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6	213±27.5	159±4.9	53.28±29.45	0.13±0.02	14.29±1.65	0.11±0.02	34.47±4.30				
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	57.33	49.61	7.72	1.13	159	1.13	13.51	37.98			
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	41.22±10.34	35.84±11.23	5.38±1.93	1.59±0.33	33.32±14.78	1.35±0.31	3.34±1.11		4.56±1.56		
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	19.83	19.29	0.54			28.36	0.77	5.19	0.76	5.60	
D068	Ridge gourd (<i>Luffa acutangula</i>)	6	29.55±4.23	1.22±0.10	28.33±4.20	0.07±0.01	152±4.8	11.35±1.54	12.36±1.46	32.05±1.81			
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	35.85±6.19	1.15±0.02	34.70±6.20	0.07±0.01	112±9.2	10.13±0.80	45.56±9.92				
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	24.22±5.03	3.88±0.66	20.34±4.78	2.53±0.74	110±8.3	1.67±0.47	54.35±1.86				
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	13.44	3.53	9.90	1.29	123	1.91	68.18	36.82			

Food code	Food Name	No. of Regions	Oxalate		Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble							
			\leftarrow mg \rightarrow								
CITAC	FUMAC	MALAC	SUCAC	TARAC							
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	14.25	3.40	10.85	1.82	126	1.89	63.86	33.48	
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	3.36±1.01	1.91±0.86	1.26±0.64		119±2.8	15.51±3.24	62.38±1.38	33.36±3.52	
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	8.47±2.24	6.95±1.85	1.52±0.50		135±1.1	0.31±0.02	6.77±0.37		
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	2.89±0.68	2.12±0.73	0.77±0.44		288±8.7	0.06±0.03	11.58±2.59	58.82±11.29	2.86±0.78
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	5.58±1.44	4.32±0.84	1.27±0.80		278±4.0	0.07±0.01	7.15±0.10	6.77±0.30	2.65±1.34
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	17.83	2.80	15.03		47.81	49.65	2.32		55.30
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	16.06	2.80	13.26		47.81	45.17	2.32		55.30

323

E FRUITS											
E001	Apple, big (<i>Malus domestica</i>)	6	13.19±3.75	6.84±1.75	6.35±2.24		49.87±13.31	3.73±1.04	436±113	74.13±17.25	4.04±1.69
E002	Apple, green (<i>Malus domestica</i>)	6	17.63±5.77	7.28±3.23	10.34±3.19		30.98±13.16	2.60±1.22	124±37.3	29.22±6.30	5.49±1.71
E003	Apple, small (<i>Malus domestica</i>)	6	15.51±5.62	6.17±1.72	9.34±5.79		34.22±1.90	4.17±1.37	291±5.2	67.88±1.24	5.71±2.25
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	14.35	7.55	6.80		41.58	4.98	298	71.52	5.60
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	113±25.0	20.04±0.65	90.54±2.27		119±5.6	8.67±0.53	422±3.3	156±4.4	5.42±0.68
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3	44.87±8.78	15.22±0.66	29.65±8.62		295±6.2	2.36±0.41	170±6.8	212±1.7	2.61±0.14
E007	Avocado fruit (<i>Persea</i> sp.)	1	2.78	2.02	0.76		0.12	111	1.02		111
E008	Bael fruit (<i>Aegle marmelos</i>)	1	3.87	3.11	0.76		0.21	1.32	0.33		
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	2.80	1.33	1.47		290	0.67	2.32		5.12
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	2.38	2.05	0.34	0.77	285	0.90	2.87		4.05
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	4.15	3.97	0.18	1.69	296	1.92	4.15		4.15
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	3.24±1.62	2.13±1.24	1.11±0.56	0.91±0.77	293±6.9	1.83±0.68	3.54±1.34		3.20±0.88

Table 9. Organic Acids

Table 9. Organic Acids

324

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid	
			Total	Soluble	Insoluble						mg		
									CITAC	FUMAC	MALAC	SUCAC	TARAC
E013	Black berry (<i>Rubus</i> sp.)	5	5.33±1.58	0.98±0.03	4.35±1.58	0.05±0.02	396±2.9	1.44±0.29	262±4.4	2.59±0.26			
E014	Cherries, red (<i>Prunus cerasus</i>)	4	6.15±1.36	4.44±0.67	1.71±1.36	0.28±0.06	18.84±1.08	0.33±0.06	289±5.0	5.53±0.42	30.22±5.50	3.25±1.45	
E015	Currants, black (<i>Ribes nigrum</i>)	1	10.80	1.95	8.84		421	2.76	389			382	
E016	Custard apple (<i>Annona squamosa</i>)	1	35.10	22.28	13.35		11.23	12.81	1.11		6.53		
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	2.11±0.86	1.63±0.22	0.29±0.17		58.61±1.75	3.55±0.51	34.17±2.47	16.04±0.46	1.75±0.49		
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	1.98	0.99	0.98		3.01	3.21	33.23	3.02	2.17		
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2	1.96	1.56	0.40		4.98	7.62	29.08	5.84	3.99		
E020	Fig (<i>Ficus carica</i>)	6	46.71±10.69	5.26±0.71	41.69±11.14		216±2.7	1.51±0.27	23.51±2.59	134±2.3	132±3.5		
E021	Gooseberry (<i>Embllica officinalis</i>)	5	7.96±0.91	5.40±0.74	2.81±1.28		751±8.5	1.65±0.28	7.58±1.17		44.33±6.23	14.06±1.11	
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	26.12±10.48	12.96±4.29	10.53±7.96	0.03±0.01	3.12±0.98	1.14±0.45	288±3.6			280±5.3	
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	25.74±6.18	18.79±2.51	7.09±4.59	0.03±0.02	3.36±0.17	1.47±0.54	286±4.1			276±20.9	
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	23.92±5.49	12.77±5.37	11.15±1.27	0.06±0.01	1.82±1.39	1.57±0.22	291±33.7			272±75.9	
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	19.07±5.22	9.21±2.68	9.86±5.42	0.03±0.00	3.06±1.31	1.77±0.04	282±2.0			268±39.3	
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	20.06±6.25	13.79±3.59	6.27±4.37	0.04±0.01	3.47±1.39	1.56±0.77	290±2.8			288±21.0	
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	22.11±3.87	16.09±4.81	6.02±2.63	0.27±0.03	3.98±2.07	1.42±0.08	282±0.0			274±66.9	
E028	Guava, white flesh (<i>Psidium guajava</i>)	5	13.05±3.69	0.32±0.28	10.61±6.06	0.62±0.16	384±176	1.83±0.80	77.02±1.63		2.83±0.48	1.39±0.26	
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5	9.57±2.04	0.64±0.12	7.44±4.10		87.07±1.32	0.46±0.04	25.94±4.84	24.71±4.04	15.47±1.36	1.43±0.13	
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	8.45±3.18	5.49±2.17	2.96±2.40	2.57±0.85	35.40±1.14	11.19±2.03	219±5.1	347±1.4			
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	9.60	7.24	2.37	0.16	72.26	0.42	23.69				
E032	Karonda fruit (<i>Carissa carandas</i>)	1	5.88	3.18	2.40		2.13	0.66		0.55	1.07		

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble							
			$\leftarrow \text{mg} \rightarrow$									
E033	Lemon, juice (<i>Citrus limon</i>)	6				0.80±0.24	3490±7.1	0.04±0.03	243±5.0		338±73.8	2.36±0.21
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6	0.57±0.30	0.24±0.15	0.34±0.16		3416±46.1	0.48±0.34	125±5.8		418±5.8	
E035	Litchi (<i>Litchi chinensis</i>)	4	15.28±4.29	11.12±3.07	4.16±1.71		24.21±4.56	6.06±0.72	97.11±1.87	46.55±2.64	13.53±1.04	
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	7.94±2.05	4.72±1.64	3.23±1.71	0.29±0.05	446±9.1	0.43±0.22	76.71±1.12		2.95±0.74	
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	7.70	4.34	3.36	0.59	432	0.70	75.46		2.34	
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	8.09±2.53	6.94±2.12	1.71±1.40	0.30±0.06	448±0.6	0.58±0.22	73.58±2.98		3.15±0.69	
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	8.31±1.88	5.92±2.44	2.39±1.27	0.32±0.10	445±7.4	0.48±0.25	75.34±2.83		3.70±0.83	
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	8.46	6.90	1.56	0.49	430	0.58	75.86		3.56	
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	9.71	7.79	1.92	0.44	445	0.45	74.50		3.51	
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	11.50	7.23	4.28	0.45	442	0.81	75.48		2.68	
E043	Mangosteen (<i>Garcinia mangostana</i>)	1	8.44	5.32	3.07		127		22.07		1.07	
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1	4.32	0.98	3.35		10.52	0.34	135		79.06	6.50
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	2.62±1.10	2.17±1.12	0.44±0.34	0.41±0.14	5.71±3.09	0.42±0.04	1.32±0.33		82.54±2.04	2.06±0.55
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	1.88±0.94	1.30±0.77	0.58±0.54	0.44±0.08	9.08±2.55	0.55±0.07	2.94±1.86		63.45±1.46	10.14±0.99
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	8.06±2.47	5.59±2.30	2.47±0.43		1281±6.4	0.28±0.04	122±37.1	25.51±2.15	45.04±1.69	
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	1.05	0.64	0.41		1.31	3.73			3.73	
E049	Papaya, ripe (<i>Carica papaya</i>)	6	5.96±1.97	2.27±0.89	3.70±1.17	0.03±0.01	146±1.7	0.52±0.08	43.40±0.69	3.73±0.70	39.37±2.24	
E050	Peach (<i>Prunus communis</i>)	1	6.35	4.05	2.30		127	1.65	267.01			
E051	Pear (<i>Pyrus sp.</i>)	6	2.41±0.86	1.35±0.19	1.27±0.64	5.05±0.99	81±23.8	0.04±0.02	63.72±0.77	68.62±4.55	5.05±0.99	
E052	Phalsa (<i>Grewia asiatica</i>)	2	352	24.41	326	279	319	1.70	270		279	

Table 9. Organic Acids

326

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble					mg		
								CITAC	FUMAC	MALAC	SUCAC	TARAC
E053	Pineapple (<i>Ananas comosus</i>)	6	3.39±0.60	2.55±0.10	0.84±0.61	4.89±0.95	605±11.3	0.04±0.01	92.39±1.61	3.71±0.69	4.89±0.95	
E054	Plum (<i>Prunus domestica</i>)	3	0.74±0.13	0.19±0.13	0.70±0.13	87.64±7.75	62.32±11.93	0.83±0.21	96.33±14.39		87.64±7.75	
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	253±53.6	178±52.9	75.75±13.77		1239±8.9	0.05±0.01	123±2.0	5.94±0.76		0.39±0.19
E056	Pummelo (<i>Citrus maxima</i>)	3	16.25±5.51	8.78±3.02	7.47±2.62		2013±0.0	0.84±0.00	74.78±0.00			
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	10.71±1.36	5.24±0.75	5.47±1.00	5.89±1.11	24.92±1.60	1.13±0.20	61.00±9.45	63.62±8.66	5.89±1.11	
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	10.90±4.02	5.32±0.72	5.86±3.60	5.43±1.52	17.47±4.66	0.23±0.06	33.86±3.60	338±8.7	5.43±1.52	
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	1.89	1.24	0.65		12.65	1.77				
E060	Sapota (<i>Achras sapota</i>)	6	8.97±2.09	6.68±2.67	2.28±0.75	440±3.7	355±4.2	3.26±1.10	17.94±1.68	44.00±0.88	440±3.7	
E061	Soursop (<i>Annona muricata</i>)	1	1.07	0.31	0.76		12.33					2.25
E062	Star fruit (<i>Averrhoa carambola</i>)	1	1.23	0.97	0.26	0.15	886	1.23				0.15
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	2.04±0.44	1.50±0.37	0.52±0.32		0.11±0.11	0.19±0.07	2.55±1.35		0.82±0.14	
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6	48.91±16.19	21.42±1.80	27.50±16.79		0.06±0.02	0.18±0.03	2.81±1.16		0.80±0.26	12.25±2.11
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	0.72±0.40	0.47±0.35	0.25±0.18	0.92±0.04	47.35±2.04	14.58±0.90	7.27±0.46			
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	0.55±0.31	0.31±0.19	0.24±0.13	0.86±0.07	52.65±3.06	15.18±1.06	7.55±1.04			
E067	Wood Apple (<i>Limonia acidissima</i>)	3	55.80±8.41	7.91±0.35	47.88±8.06	0.26±0.03	257±6.4	0.65±0.11	13.83±1.00	4.86±1.00	18.49±0.93	2.90±0.47
E068	Zizyphus (<i>Zizyphus jujube</i>)	1	2.89	1.33	1.56		19.93	1.37	1.21	141	89.70	129

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	71.37±13.10	30.15±1.79	41.21±12.20	45.43±3.34	134±16.2	0.02±0.01	0.33±0.18		0.29±0.12	
F002	Carrot, orange (<i>Daucus carota</i>)	6	17.45±6.32	12.63±5.24	4.82±4.30	37.50±1.80	222±11.2	5.62±0.33	4.83±1.42		5.58±1.00	
F003	Carrot, red (<i>Daucus carota</i>)	4	16.41±7.00	15.43±7.09	0.98±0.09	39.15±2.74	105±0.8		5.01±1.22		5.13±0.01	

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble							
			$\leftarrow \text{mg} \rightarrow$									
F004	Colocasia (<i>Colocasia esculenta</i>)	6	48.73±0.41	26.60±9.45	22.13±9.27	0.44±0.12	12.17±1.04	7.03±0.87	3.69±1.05	42.18±1.61		
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	364±33.9	26.03±2.84	116±186	0.85±0.03	55.38±1.77	1.48±0.33	84.39±1.25		4.89±0.77	85.92±3.20
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	12.24±2.48	9.71±0.27	2.64±0.16	10.97±1.46	55.38±1.77	1.48±0.33	84.10±6.07		4.89±0.77	
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	13.63	10.71	2.92	15.63	56.81	1.82	94.52		7.11	
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	12.37	10.21	2.16	14.52	57.82	1.52	93.80		6.81	
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	12.73±2.11	5.37±1.13	7.36±1.01	4.20±1.14	2.94±0.52	1.34±0.27	4.53±1.12		2.59±0.39	
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	12.72±3.34	8.06±3.60	4.66±2.09	4.35±1.07	3.65±0.68	1.35±0.17	4.90±1.31		1.84±0.83	
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	12.27	9.12	3.15	3.27	6.12	1.36	6.41		2.82	
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	15.49	8.88	6.61	3.49	2.97	1.61	5.58		2.07	
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	14.39±4.70	6.56±1.55	6.27±4.47		15.66±0.41	1.92±0.64	127±3.2		652±8.2	6.42±0.76
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	14.14±3.58	9.04±2.43	5.10±1.16		25.69±1.12	0.23±0.01	147±4.8	0.08±0.01	334±8.0	17.95±0.61
F015	Tapioca (<i>Manihot esculenta</i>)	3	16.86±3.83	10.93±1.91	5.93±1.94	1.21±0.07	8.83±0.41	1.87±0.89	8.82±1.50	167±1.9	18.23±1.38	
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1	16.54	8.66	7.88		4.86	1.05	2.07	15.07	17.22	
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6	15.58±3.80	12.39±4.77	3.18±1.93	1.63±0.23	354±5.3	5.92±0.90	122±1.5	15.88±1.71	16.18±4.13	
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	13.99±4.21	11.21±4.28	2.78±0.26	4.55±1.51	556±2.7	1.62±0.50	50.48±5.36	13.37±4.92	18.56±0.71	
F019	Yam, wild (<i>Dioscorea villosa</i>)	2	13.45	3.63	9.82		286	1.11	138	10.48	20.65	

Table 9. Organic Acids

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	28.86±8.82	24.35±5.41	4.94±1.64	1.48±0.65	4.85±2.17	3.12±2.40	27.49±10.16		131±13.1	15.81±3.86
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	26.32±2.26	20.87±3.49	5.45±1.34	1.43±0.48	5.89±1.91	3.19±1.89	29.52±4.88		127±8.3	18.15±4.76

Table 9. Organic Acids

Food code	Food Name	No. of Regions	Oxalate		Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble							
			← mg →			CITAC	FUMAC	MALAC	SUCAC	TARAC	
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5	27.68±5.51	22.10±4.92	5.58±1.39	1.33±0.24	6.44±3.13	3.43±0.97	31.64±2.63	123±4.8	19.99±4.06
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3	23.85±7.46	20.50±7.84	3.35±3.07	1.92±0.78	4.43±1.98	3.52±0.78	33.22±2.15	118±5.2	16.24±2.74
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2	38.30±8.99	22.73±5.95	4.33±0.95	1.37±0.82	4.86±1.49	3.94±1.05	33.47±2.26	129±7.9	24.64±7.08
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1	30.12	24.31	5.82	0.73	1.13	3.28	30.79	121	20.91
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1	29.37	25.40	3.97	1.57	5.69	4.04	34.69	131	19.55
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6	28.54±8.17	22.66±6.46	4.92±1.68	1.43±0.57	5.13±2.46	3.42±1.46	30.91±5.46	126±9.0	18.88±4.33
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	20.42±9.35	15.75±9.45	4.68±1.97	11.59±1.59	546±3.9	23.95±3.20	65.96±1.91	16.17±1.24	
G010	Curry leaves (<i>Murraya koenigii</i>)	6	154±84.6	10.93±0.38	143±84.4	0.73±0.06	65.27±1.25	1.62±0.46	7.45±1.11	13.66±1.11	37.87±2.28
328	G011 Garlic, big clove (<i>Allium sativum</i>)	6	159±38.1	130±30.8	28.47±14.59		0.64±0.16	0.05±0.02		20.73±1.90	
	G012 Garlic, small clove (<i>Allium sativum</i>)	3	143±56.6	115±51.2	27.98±9.57		1.15±0.53	0.07±0.02		23.11±2.29	
	G013 Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	127	119	7.33		0.12			20.11	
	G014 Ginger, fresh (<i>Zingiber officinale</i>)	6	259±73.9	18.26±1.86	241±75.5		5.95±0.74	1.43±0.38		2.16±0.39	
	G015 Mango ginger (<i>Curcuma amada</i>)	3	307±127	228±7.8	79.22±5.81		53.42±1.94	0.40±0.04	33.20±1.80	3.13±1.06	3.80±1.77
	G016 Mint leaves (<i>Mentha spicata</i>)	4	97.07±12.11	8.30±5.87	88.76±11.05		25.86±1.24	3.83±0.21	14.80±0.79	26.33±0.55	27.22±0.52
	G017 Onion, big (<i>Allium cepa</i>)	6	4.03±1.85	3.42±0.35	0.61±2.10	43.05±3.98	33.89±1.32	0.63±0.20	392±4.5	105±16.3	12.21±1.79
	G018 Onion, small (<i>Allium cepa</i>)	5	11.11±2.04	9.69±1.69	1.27±0.27		76.07±6.07	0.04±0.01	117±5.5	165±1.5	135±9.8
	G CONDIMENTS AND SPICES-DRY										
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6	23.82±7.75	3.27±0.11	20.55±7.82	1.66±0.30	6.35±0.86	0.02±0.01	0.46±0.10	4.72±0.72	1.64±0.48
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	1961±174	1191±54.8	770±148		73.83±0.87	0.85±0.06	22.21±1.41	4.85±0.54	5.41±0.79
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	2472±683	1471±619	1001±170		156±2.1	0.81±0.10	36.77±1.54	4.28±0.04	6.11±0.58

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid	
			Total	Soluble	Insoluble						mg		
									CITAC	FUMAC	MALAC	SUCAC	TARAC
G022	Chillies, red (<i>Capsicum annuum</i>)	6	87.17±15.16	65.69±1.85	21.48±15.48		0.62±0.11	13.67±1.36	68.38±4.48		22.00±5.86		
G023	Cloves (<i>Syzygium aromaticum</i>)	6	1845±73.8	353±24.6	1492±55.5	1.54±0.38	427±5.5	0.46±0.05	177±3.3			20.28±1.30	
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	809±90.9	118±9.6	692±90.8	1.41±0.19	53.84±1.47	6.53±1.43	13.51±2.08				
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	817±117	40.43±2.45	777±117	2.43±0.97	47.00±1.25	2.38±0.98	40.76±6.76				
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	31.75±8.12	10.55±0.64	21.20±7.89	0.24±0.04	4.99±1.43			2.47±0.63		2.19±0.61	
G027	Mace (<i>Myristica fragrans</i>)	6	28.22±10.42	0.28±0.06	27.94±10.43		98.68±2.00	2.36±0.32	173±2.4	345±7.5			
G028	Nutmeg (<i>Myristica fragrans</i>)	6	194±87.7	48.20±1.59	146±87.5		59.31±2.23	55.90±6.21	15.70±1.69	231±8.9	16.52±1.22		
G029	Omum (<i>Trachyspermum ammi</i>)	6	1020±30.7	34.19±2.01	985±30.8		47.73±2.03		199±3.2	26.16±1.21	5.55±0.93		
329	G030 Pippali (<i>Piper longum</i>)	6	367±57.9	21.22±1.17	346±58.3	0.16±0.01	37.97±0.98	0.05±0.02	0.52±0.09		121±7.0	154±2.8	
	G031 Pepper, black (<i>Piper nigrum</i>)	6	431±63.7	33.74±8.11	398±65.2	4.39±0.83	136±1.5	1.65±0.14	13.93±1.08		119±11.7	1.92±0.44	
	G032 Poppy seeds (<i>Papaver somniferum</i>)	6	1631±54.9	32.08±1.42	1599±54.0	3.92±0.31	21.79±1.60		24.18±0.60	557±4.7	24.40±1.45		
	G033 Turmeric powder (<i>Curcuma domestica</i>)	6	1531±146	1221±77.5	310±84.1		2.63±0.36	0.17±0.05	40.62±5.02		33.24±2.25		

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6	344±55.7	110±4.9	235±54.2		11.88±0.66	0.29±0.07	97.52±0.93		1.31±0.15	1.18±0.29
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6					7.93±0.45	0.14±0.02	47.16±1.64	75.06±0.57	1.89±0.13	
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3					8.76±0.35	0.20±0.05	45.71±2.49	74.62±2.16	2.03±0.60	
H004	Arecanut, fresh (<i>Areca catechu</i>)	2					12.56	24.80			26.62	
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	189±11.8	149±11.4	39.52±17.31		7.73±0.46	34.66±1.06			27.73±2.55	
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	6.83±1.21	3.10±0.04	3.73±1.20		117±1.4	0.41±0.10	1.83±0.64	13.84±1.58	10.17±0.48	6.38±0.81

Table 9. Organic Acids

330

Food code	Food Name	No. of Regions	Oxalate			Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid
			Total	Soluble	Insoluble							
			$\leftarrow \text{mg} \rightarrow$									
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	3.44±1.52	1.68±0.33	1.76±1.33	1.71±0.75	1.82±0.20			15.15±0.49		119±1.4
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	60.04±5.04	33.30±5.55	26.74±2.45		2.08±1.11	1.73±0.25	94.12±1.04		25.42±2.35	0.84±0.09
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	2156±199	78.58±5.76	2078±200	0.22±0.03	4.56±2.11	1.77±0.32		10.45±0.15	104±2.5	3.84±0.89
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	2030±794	83.13±4.87	1947±792	0.64±0.09	54.18±16.15	3.27±0.46	34.68±1.45	11.90±3.25	10.72±1.12	139±12.7
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	2004±123	73.51±3.34	1931±122	0.77±0.06	56.42±2.93	0.42±0.04	0.12±0.01			93.82±1.11
H012	Ground nut (<i>Arachis hypogaea</i>)	6	60.98±11.01	39.67±3.31	21.31±10.21		61.34±11.36	1.05±0.38	6.21±0.77	12.48±0.64	9.70±1.98	154±7.8
H013	Mustard seeds (<i>Brassica nigra</i>)	6	6.92±1.59	5.28±0.21	1.64±1.65		67.49±13.38	0.39±0.04	16.04±0.64	14.12±0.72	5.95±0.53	149±2.2
H014	Linseeds (<i>Linum usitatissimum</i>)	6	5.85±1.00	1.91±0.34	3.95±1.09		9.73±0.53	7.06±1.03	11.46±2.65		1.87±0.19	
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	1913±123	93.94±12.22	1819±134	0.35±0.08	102±3.7		41.54±2.58		41.73±2.64	371±2.9
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	1544±224	90.22±3.55	1453±222	0.74±0.03	343±4.5		13.80±1.99			
H017	Pine seed (<i>Pinus sp.</i>)	5	159±19.3	94.00±4.91	64.99±15.30		15.26±0.52	23.06±0.60			34.32±1.13	
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	46.42±7.95	22.88±2.45	23.54±7.90		3.24±0.34	1.22±0.21	139±3.6	53.79±2.27	6.12±0.37	4.21±1.04
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	215±27.2	92.57±6.98	122±33.5		1.95±0.53	1.94±0.93	133±7.0	25.63±0.79	9.02±0.62	5.67±0.64
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	23.70±5.39	6.13±0.72	17.57±5.94		33.42±1.26	1.46±0.23	7.47±1.05		0.60±0.05	57.95±9.16
H021	Walnut (<i>Juglans regia</i>)	6	37.03±9.41	27.31±4.89	9.72±5.45	3.33±0.85	15.32±0.80		24.59±0.82		279±3.7	81.29±11.73
I SUGARS												
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6					5.24±1.14	3.31±0.70	36.91±1.90	60.69±2.73	46.62±2.59	3.21±0.98
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6					3.55±1.01		2.04±0.49	132±6.2	459±5.4	

Food code	Food Name	No. of Regions	Oxalate		Cis-Aconitic Acid	Citric Acid	Fumaric Acid	Malic Acid	Quinic Acid	Succinic Acid	Tartaric Acid						
			Total	Soluble													
					mg												
J MUSHROOMS																	
J001	Button mushroom, fresh (<i>Agaricus sp.</i>)	1	10.23	2.46	7.77	5.61	0.81	3.50									
J002	Chicken mushroom, fresh (<i>Lactiporus sp.</i>)	1	12.56	3.55	9.01	6.48	0.97	3.96									
J003	Shiitake mushroom, fresh (<i>Lentinula sp.</i>)	1	15.84	4.12	11.72	6.25	0.76	3.25									
J004	Oyster mushroom, dried (<i>Pleurotus sp.</i>)	1	20.65	6.34	14.31	6.97	0.86	3.04									
K MISCELLANEOUS FOODS																	
K001	Toddy (<i>Saccharum officinarum</i>)	10				0.03±0.01											
K002	Coconut Water (<i>Cocos nucifera</i>)	6			0.82±0.07		1.74±0.92		124±15.5	4.20±1.10							
L MILK AND MILK PRODUCTS																	
L001	Milk, whole, Buffalo	6															
L002	Milk, whole, Cow	6															
L003	Paneer	6			5.21±0.82				64.28±2.59	1.42±0.22							
L004	Khoa	6			25.26±1.48	1.12±0.23	1.43±0.19	651±10.2	6.99±0.76								

Table 10

POLYPHENOLS



Table 10. POLYPHENOLS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P- Coumaric acid	Caffeic acid
			←———— mg —————→								
			GALLAC								
A CEREALS AND MILLETS											
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	1.28		0.21	0.06			0.06	0.03	
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	1.23±0.05		0.26±0.03	0.04±0.02			0.04±0.03	0.03±0.02	
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	0.03±0.01	0.11±0.02					0.07±0.02	0.25±0.01	
A004	Barley (<i>Hordeum vulgare</i>)	6			0.43±0.14	0.06±0.01			1.70±0.11	0.05±0.01	
A005	Jowar (<i>Sorghum vulgare</i>)	6	0.02±0.01	0.02±0.01	0.07±0.01	1.76±0.11	0.06±0.02		1.84±0.46	1.69±0.39	
533	A006 Maize, dry (<i>Zea mays</i>)	6	0.07±0.02		2.93±0.42	2.96±0.44			2.84±0.36	2.91±0.32	
	A007 Maize, tender, local (<i>Zea mays</i>)	6	0.04±0.03		1.24±0.14	2.85±0.43			0.55±0.09	0.55±0.27	
	A008 Maize, tender, sweet (<i>Zea mays</i>)	4	0.03±0.01		1.09±0.19	1.43±0.16			0.50±0.05	0.51±0.27	
A009	Quinoa (<i>Chenopodium quinoa</i>)	1	6.70	0.44	9.70	4.90		0.11	0.02		0.13
A010	Ragi (<i>Eleusine coracana</i>)	5			2.38±0.35	0.34±0.06	1.38±0.36				
A011	Rice flakes (<i>Oryza sativa</i>)	6	0.05±0.02		0.03±0.01	0.03±0.02			0.05±0.01	0.06±0.01	
A012	Rice puffed (<i>Oryza sativa</i>)	6	0.04±0.01		0.02±0.01	0.05±0.02			0.04±0.01	0.05±0.02	
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	0.04±0.01		0.02±0.01	0.05±0.02			0.04±0.01	0.05±0.02	
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.07±0.02		0.06±0.01	0.05±0.02			0.06±0.02	0.06±0.02	
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	0.05±0.02		0.04±0.01	0.05±0.01			0.05±0.02	0.06±0.02	
A016	Samai (<i>Panicum miliare</i>)	6			0.16±0.04	0.05±0.03			0.37±0.04	0.67±0.03	
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5				0.02±0.01					
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	0.23±0.09		0.09±0.01	0.13±0.01	0.63±0.10		0.06±0.02	0.07±0.02	

Table 10. POLYPHENOLS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			mg									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
A CEREALS AND MILLETS												
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1	0.21	2.13								
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6	0.10±0.05	0.59±0.76								
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	0.08±0.01	1.39±0.24				1.11±0.38	0.14±0.02			
A004	Barley (<i>Hordeum vulgare</i>)	6	2.75±0.25	0.60±0.07								
A005	Jowar (<i>Sorghum vulgare</i>)	6	4.04±0.99	1.59±0.23	0.07±0.01							
A006	Maize, dry (<i>Zea mays</i>)	6	1.01±0.45	1.43±0.09								
A007	Maize, tender, local (<i>Zea mays</i>)	6	0.92±0.04	0.38±0.12								
A008	Maize, tender, sweet (<i>Zea mays</i>)	4	0.87±0.02	1.39±0.14								
A009	Quinoa (<i>Chenopodium quinoa</i>)	1					0.13	0.19	3.60	1.90	3.40	4.40
A010	Ragi (<i>Eleusine coracana</i>)	5			2.58±0.49		10.45±1.17					
A011	Rice flakes (<i>Oryza sativa</i>)	6	0.70±0.06	0.07±0.01								
A012	Rice puffed (<i>Oryza sativa</i>)	6	0.06±0.01	0.02±0.01								
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	0.06±0.01	0.02±0.01								
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.28±0.07	0.62±0.18								
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6	0.65±0.10	0.59±0.09								
A016	Samai (<i>Panicum miliare</i>)	6	2.79±0.75	0.39±0.03								
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5						0.07±0.01				
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	0.16±0.02	0.04±0.01		0.07±0.02						

Table 10. POLYPHENOLS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
A CEREALS AND MILLETS												
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1										
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6										
A003	Bajra (<i>Pennisetum typhoideum</i>)	6		0.30±0.04								
A004	Barley (<i>Hordeum vulgare</i>)	6										
A005	Jowar (<i>Sorghum vulgare</i>)	6										
337	A006 Maize, dry (<i>Zea mays</i>)	6										
	A007 Maize, tender, local (<i>Zea mays</i>)	6										
	A008 Maize, tender, sweet (<i>Zea mays</i>)	4										
	A009 Quinoa (<i>Chenopodium quinoa</i>)	1	4.30									
	A010 Ragi (<i>Eleusine coracana</i>)	5										
	A011 Rice flakes (<i>Oryza sativa</i>)	6										
	A012 Rice puffed (<i>Oryza sativa</i>)	6										
	A013 Rice, raw, brown (<i>Oryza sativa</i>)	6										
	A014 Rice, parboiled, milled (<i>Oryza sativa</i>)	6										
	A015 Rice, raw, milled (<i>Oryza sativa</i>)	6										
	A016 Samai (<i>Panicum miliare</i>)	6										
	A017 Varagu (<i>Paspalum scrobiculatum</i>)	5										
	A018 Wheat flour, refined (<i>Triticum aestivum</i>)	6										

Table 10. POLYPHENOLS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	(-)-Epigallo catechin	(-)-Epigallo catechin 3-gallate	(+)-Catechin	(-)Gallocatechin gallate	(-)Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			↔ mg ↔								
			EPICATEGC								
A CEREALS AND MILLETS											
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1									12.50
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6									11.75±2.48
A003	Bajra (<i>Pennisetum typhoideum</i>)	6									67.71±5.89
A004	Barley (<i>Hordeum vulgare</i>)	6			1.28±0.05						23.47±2.30
A005	Jowar (<i>Sorghum vulgare</i>)	6									23.25±2.00
A006	Maize, dry (<i>Zea mays</i>)	6									32.92±3.85
A007	Maize, tender, local (<i>Zea mays</i>)	6									19.00±2.52
A008	Maize, tender, sweet (<i>Zea mays</i>)	4									1.54±0.34
A009	Quinoa (<i>Chenopodium quinoa</i>)	1						65.72			74.00
A010	Ragi (<i>Eleusine coracana</i>)	5			15.52±0.90			0.28±0.02			135±2.2
A011	Rice flakes (<i>Oryza sativa</i>)	6					0.07±0.01	0.06±0.02			3.16±0.24
A012	Rice puffed (<i>Oryza sativa</i>)	6					0.03±0.02	0.07±0.02			2.76±0.63
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6					0.03±0.02	0.07±0.02			2.81±0.69
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6					0.56±0.15	0.11±0.02			6.93±1.07
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6					0.07±0.03	0.08±0.05			3.14±0.44
A016	Samai (<i>Panicum miliare</i>)	6									14.24±0.89
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5									0.53±0.26
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6					0.02±0.01	0.06±0.02			5.17±0.24

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			mg								
			GALLAC								
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	0.68±0.19		0.62±0.11	0.26±0.08	2.79±0.37		0.38±0.09	0.78±0.07	
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	0.71±0.14		0.74±0.35	0.40±0.31	2.44±0.25		0.67±0.15	0.68±0.12	
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	0.68±0.10		0.71±0.12	0.40±0.09	2.75±0.62		0.63±0.07	0.66±0.13	
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	0.25±0.05		0.12±0.01	0.18±0.05	0.23±0.07		0.05±0.02	0.14±0.02	
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	0.21±0.03		0.04±0.03	0.15±0.05	0.11±0.02		0.04±0.01	0.02±0.01	
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	0.20±0.04		0.02±0.01	0.07±0.03	0.06±0.01		0.02±0.01	0.03±0.01	
B GRAIN LEGUMES											
B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	0.02±0.01		0.02±0.01					0.69±0.03	
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	0.11±0.02		0.02±0.01					5.63±0.34	
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6				0.06±0.02			0.59±0.10		
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6				0.48±0.11			4.06±0.58		
B005	Cowpea, brown (<i>Vigna catjang</i>)	6							0.45±0.09	0.28±0.12	
B006	Cowpea, white (<i>Vigna catjang</i>)	1							0.52	0.41	
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	3.18						3.87	0.59	
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	2.67						2.68	0.64	
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	2.56±0.30						3.97±1.00	0.60±0.14	
B010	Green gram, dal (<i>Vigna radiata</i>)	6				0.75±0.15			1.54±0.22		
B011	Green gram, whole (<i>Vigna radiata</i>)	6				2.31±0.45			4.06±0.64		
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6			4.61±0.46					0.39±0.17	
B013	Lentil dal (<i>Lens culinaris</i>)	6	0.13±0.03		0.07±0.03		1.52±0.41	0.11±0.02	0.03±0.01	0.02±0.01	

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			mg									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	0.71±0.13	0.14±0.01		0.31±0.08						
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	0.76±0.11	0.15±0.02		0.30±0.06						
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	0.73±0.13	0.15±0.01		0.26±0.02						
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	0.28±0.07	0.05±0.02	0.03±0.01	0.04±0.01						
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6	0.24±0.03	0.03±0.01		0.03±0.01						
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6	0.03±0.02	0.03±0.02		0.03±0.01						

B GRAIN LEGUMES

340

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	1.59±0.46		4.25±1.21							
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6		4.17±0.95		10.48±1.14						
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	0.36±0.03	0.14±0.01	2.43±0.38	0.29±0.03	0.09±0.02	1.40±0.32	0.05±0.02		1.69±0.26	
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	2.71±0.55	0.91±0.06	5.64±0.22	2.56±0.36	1.83±0.16	4.79±0.53	3.12±0.67		12.37±0.93	
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	1.30±0.32								0.27±0.12	
B006	Cowpea, white (<i>Vigna catjang</i>)	1	1.64								0.52	
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	6.47									
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	5.14									
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	5.52±0.50									
B010	Green gram, dal (<i>Vigna radiata</i>)	6		0.04±0.01		0.40±0.23		0.08±0.01	0.04±0.02			
B011	Green gram, whole (<i>Vigna radiata</i>)	6		3.76±0.55		0.76±0.11		4.29±0.71	0.36±0.10			
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6					3.32±0.37					
B013	Lentil dal (<i>Lens culinaris</i>)	6	0.23±0.05	0.07±0.03	0.02±0.01	0.12±0.01	0.13±0.02	0.02±0.01	0.32±0.20	0.87±0.09		0.76±0.08

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside	mg								
				HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC				
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6										
A020	Wheat, whole (<i>Triticum aestivum</i>)	6										
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6										
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6										
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6										
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6										

B GRAIN LEGUMES

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	0.84±0.02	1.49±0.25			0.01±0.01	0.07±0.01	
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	6.53±0.22	8.85±2.56					
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6		1.53±0.01			0.03±0.01		
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6		3.12±0.67			1.34±0.19		
B005	Cowpea, brown (<i>Vigna catjang</i>)	6					0.04±0.01	0.06±0.01	
B006	Cowpea, white (<i>Vigna catjang</i>)	1					0.05	0.08	
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1							
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1							
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5							
B010	Green gram, dal (<i>Vigna radiata</i>)	6	0.14±0.02						
B011	Green gram, whole (<i>Vigna radiata</i>)	6	5.52±0.86						
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6							
B013	Lentil dal (<i>Lens culinaris</i>)	6	1.14±0.42			0.02±0.01	0.02±0.01	0.02±0.01	0.06±0.02

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-) Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← EPICATEGC →						mg		
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6						0.04±0.01	0.13±0.02		13.98±2.54
A020	Wheat, whole (<i>Triticum aestivum</i>)	6						0.07±0.01	0.12±0.02		14.33±1.76
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6						0.06±0.02	0.11±0.01		9.53±1.40
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6						0.03±0.01	0.04±0.01		6.50±1.30
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6						0.03±0.01	0.03±0.01		5.55±0.34
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6						0.02±0.00	0.02±0.01		7.37±0.57

B GRAIN LEGUMES

B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6						5.68±1.07			14.13±0.67
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6						6.00±0.57			64.28±3.08
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6							0.26±0.04		32.43±6.76
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6							1.55±0.23		168±5.4
B005	Cowpea, brown (<i>Vigna catjang</i>)	6									59.65±5.21
B006	Cowpea, white (<i>Vigna catjang</i>)	1									63.57
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1									180
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1									172
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5									170±6.2
B010	Green gram, dal (<i>Vigna radiata</i>)	6									6.44±0.53
B011	Green gram, whole (<i>Vigna radiata</i>)	6									90.74±5.49
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6									332±27.7
B013	Lentil dal (<i>Lens culinaris</i>)	6	0.06±0.02		0.11±0.02		0.03±0.01		7.17±0.74	4.10±1.57	14.94±2.10

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	0.35±0.02		0.28±0.05		2.72±0.72	0.28±0.09		0.25±0.09	0.08±0.02
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	0.43		0.25		2.65	0.23		0.07	
B016	Moth bean (<i>Vigna aconitifolia</i>)	6								0.09±0.01	0.55±0.13
B017	Peas, dry (<i>Pisum sativum</i>)	6	0.07±0.01				0.11±0.07			0.08±0.03	0.07±0.01
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2								4.70	2.69
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6								3.96±1.08	2.74±0.26
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3								3.80±1.44	2.42±0.33
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	0.08±0.01		0.13±0.02	0.04±0.01				0.36±0.03	
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	0.59±0.03		0.63±0.05	0.41±0.12				0.59±0.03	
B023	Ricebean (<i>Vigna umbellata</i>)	1	0.03		0.11	0.09		0.03		0.02	
B024	Soybean, brown (<i>Glycine max</i>)	6	1.45±0.14		1.75±0.06	0.41±0.10	1.28±0.02			1.07±0.02	5.88±0.48
B025	Soybean, white (<i>Glycine max</i>)	1	1.48		1.87	0.35	1.31			1.04	4.12

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	1.66			0.99		0.36	0.41	0.20
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	0.79±0.32			1.08±0.32			0.48±0.22	0.54±0.22
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	0.92			1.24			1.42	0.57
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	0.64±0.09			1.39±0.42			0.67±0.33	0.58±0.09
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4							0.61±0.13	4.06±0.44
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2							0.72	4.41
C007	Basella leaves (<i>Basella alba</i>)	2	0.03		0.07					0.05

Table 10. Polyphenols

344

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6		0.08±0.01	0.72±0.07	0.20±0.04	0.24±0.08	0.12±0.01	0.84±0.13	1.42±0.19		1.28±0.09
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	2.56	0.12	0.05	0.17	0.22	0.09	0.61	1.46		1.21
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	2.56±0.86									
B017	Peas, dry (<i>Pisum sativum</i>)	6	2.08±0.54					1.68±0.32				
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	5.66				28.35	5.90	2.30			
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	6.12±1.25					4.86±0.82	2.58±0.17			
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	5.93±0.22					4.76±0.96	2.76±0.33			
B021	Red gram, dal (<i>Cajanus cajan</i>)	6		0.05±0.01	0.40±0.13			0.05±0.01				2.87±0.16
B022	Red gram, whole (<i>Cajanus cajan</i>)	6		0.12±0.02	1.50±0.23			1.16±0.25				8.32±0.85
B023	Ricebean (<i>Vigna umbellata</i>)	1		0.32	0.01			0.01				
B024	Soybean, brown (<i>Glycine max</i>)	6	2.52±0.28	8.23±0.11	1.77±0.33				1.67±0.20	1.47±0.57	1.47±0.09	6.51±0.25
B025	Soybean, white (<i>Glycine max</i>)	1	2.45	7.42	2.47				1.47	1.41	1.58	5.93

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	10.90	0.35	0.84		0.25	0.42	0.51			
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	1.82±0.76	1.59±0.50						7.93±0.95		
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	1.25	2.41						7.91		
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	2.07±0.30	1.69±0.36						8.35±0.49		
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	1.97±0.77					0.74±0.20	1.47±0.10			
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	2.67					0.89	1.70			
C007	Basella leaves (<i>Basella alba</i>)	2	1.12	0.41	2.65							

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
			← mg →									
							HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC	
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6		1.76±0.15				0.09±0.01	0.02±0.01	0.05±0.01	0.10±0.01	
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2			1.53				0.07	0.06	0.06	0.12
B016	Moth bean (<i>Vigna aconitifolia</i>)	6										
B017	Peas, dry (<i>Pisum sativum</i>)	6										
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2										2.25
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6										2.11±0.49
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3										2.10±0.55
B021	Red gram, dal (<i>Cajanus cajan</i>)	6							0.01±0.01	0.10±0.01	0.05±0.01	
B022	Red gram, whole (<i>Cajanus cajan</i>)	6										0.54±0.13
B023	Ricebean (<i>Vigna umbellata</i>)	1										0.22
B024	Soybean, brown (<i>Glycine max</i>)	6							31.71±1.94	56.30±2.41		
B025	Soybean, white (<i>Glycine max</i>)	1							28.53	47.81		

345

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	1.21	1.01
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6		
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1		
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4		
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4		
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2		
C007	Basella leaves (<i>Basella alba</i>)	2	4.01	

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)-Epigallo catechin	(-)-Epigallo catechin 3-gallate	(+)-Catechin	(-)Gallocatechin gallate	(-)Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
									mg		
			EPICATEGC								
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	0.20±0.07		0.34±0.08		0.13±0.01		13.77±1.70	8.18±0.97	274±21.9
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	0.11		0.24		0.16				266
B016	Moth bean (<i>Vigna aconitifolia</i>)	6									48.87±2.40
B017	Peas, dry (<i>Pisum sativum</i>)	6									30.65±1.97
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2			2.13						358
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6			2.40±0.36						353±4.7
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3			2.79±0.57						360±9.9
B021	Red gram, dal (<i>Cajanus cajan</i>)	6			0.09±0.02		0.02±0.01				15.94±0.87
B022	Red gram, whole (<i>Cajanus cajan</i>)	6			0.24±0.03		0.15±0.02				204±3.8
B023	Ricebean (<i>Vigna umbellata</i>)	1			0.01						11.58
B024	Soybean, brown (<i>Glycine max</i>)	6						7.24±0.08	8.05±0.65		106±2.8
B025	Soybean, white (<i>Glycine max</i>)	1						6.93	7.23		111

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1	89.25
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6	23.81±2.42
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1	27.63
C004	Amaranth leaves, red and green (<i>Amaranthus gangeticus</i>)	4	26.84±1.29
C005	Amaranth spined, leaves, green (<i>Amaranthus spinosus</i>)	4	24.15±1.32
C006	Amaranth spined, leaves, red and green (<i>Amaranthus spinosus</i>)	2	26.19
C007	Basella leaves (<i>Basella alba</i>)	2	23.98

Table 10. Polyphenols

Table 10. Polyphenols

348

Table 10. Polyphenols

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-)- Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← mg →								
			EPICATEGC								
C008	Bathua leaves (<i>Chenopodium album</i>)	2									42.24
C009	Beet greens (<i>Beta vulgaris</i>)	6									2.85±0.56
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6									89.68±3.06
C011	Betel leaves, small (<i>Piper betle</i>)	4									87.01±3.81
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1									16.45
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1									27.97
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1									70.89
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata f. alba</i>)	6									54.92±4.47
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata f. rubra</i>)	2									59.94
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6						0.09±0.01	0.18±0.01		28.94±0.36
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6									124±1.8
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3									29.90±14.48
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5									105±6.3
C021	Garden cress (<i>Lepidium sativum</i>)	2									16.19
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4									199±11.9
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1									208
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2									6.16
C025	Lettuce (<i>Lactuca sativa</i>)	3									19.47±1.92
C026	Mustard leaves (<i>Brassica juncea</i>)	3									38.02±1.14
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1									

Food code	Food Name	No. of Regions	3,4 Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
C028	Parsley (<i>Petroselinum crispum</i>)	3				1.18±0.09		0.41±0.02	0.02±0.01	0.27±0.04	
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	0.41		1.57					0.03	
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6							0.25±0.03	0.40±0.03	
C031	Radish leaves (<i>Raphanus sativus</i>)	6			1.40±0.07		0.04±0.01		0.26±0.03	0.41±0.01	
C032	Rumex leaves (<i>Rumex patientia</i>)	2							0.10	0.77	
C033	Spinach (<i>Spinacia oleracea</i>)	6			2.26±0.51				4.30±0.56		
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3							0.23±0.02		

D OTHER VEGETABLES

351

D001	Ash gourd (<i>Benincasa hispida</i>)	6	0.03±0.02			0.34±0.11	0.93±0.73				
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1					0.36				
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	0.21±0.02					0.85±0.00	1.25±0.00		
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6				0.04±0.01	0.74±0.39			0.05±0.03	
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4				0.05±0.04	1.21±1.15			0.07±0.04	
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1				0.08	1.64			0.05	
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6				0.05±0.02	1.96±0.71			0.60±0.06	
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5				0.05±0.01	1.90±0.67			0.79±0.41	
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1				0.04	1.84			0.59	
D010	Brinjal-1 (<i>Solanum melongena</i>)	1		1.73		0.21			1.39	0.83	
D011	Brinjal-2 (<i>Solanum melongena</i>)	1		1.82		0.29			1.27	0.76	

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-glucoside	Apigenin-7-O-neohesperidose	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			\longleftrightarrow mg \longrightarrow									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
C028	Parsley (<i>Petroselinum crispum</i>)	3	1.52±0.31	0.33±0.02	16.14±1.41				0.01±0.01			
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2	4.31		0.31			4.98	0.75	0.56		
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	0.19±0.01	0.28±0.05						0.54±0.06		
C031	Radish leaves (<i>Raphanus sativus</i>)	6		0.58±0.04				3.26±0.59	8.23±0.66	69.50±2.60		4.57±0.45
C032	Rumex leaves (<i>Rumex patientia</i>)	2	3.83	0.41					10.73	86.33		
C033	Spinach (<i>Spinacia oleracea</i>)	6	3.09±0.40		2.55±0.86	2.70±1.03	0.35±0.06	0.08±0.02	0.49±0.03			
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3										

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6										
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	0.25									
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5	0.10±0.00		2.15±0.00			0.52±0.00	1.52±0.00	3.52±0.00		
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6										
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4										
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1										
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6	2.47±0.49									
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5	2.72±0.26									
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1	2.48									
D010	Brinjal-1 (<i>Solanum melongena</i>)	1		0.77			1.47					
D011	Brinjal-2 (<i>Solanum melongena</i>)	1		0.65			1.43					

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside	mg								
				HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC				
C028	Parsley (<i>Petroselinum crispum</i>)	3										
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2										
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6										
C031	Radish leaves (<i>Raphanus sativus</i>)	6										
C032	Rumex leaves (<i>Rumex patientia</i>)	2										
C033	Spinach (<i>Spinacia oleracea</i>)	6		1.36±0.32								
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3										

D OTHER VEGETABLES

353

D001	Ash gourd (<i>Benincasa hispida</i>)	6										
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1										
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5										
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6										
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4										
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1										
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6										
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5										
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1										
D010	Brinjal-1 (<i>Solanum melongena</i>)	1										
D011	Brinjal-2 (<i>Solanum melongena</i>)	1										

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-)- Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			↔ mg ↔								
			EPICATEGC								
C028	Parsley (<i>Petroselinum crispum</i>)	3									46.58±1.38
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2									53.08
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6									20.33±1.63
C031	Radish leaves (<i>Raphanus sativus</i>)	6						2.89±0.35	0.19±0.04		27.57±7.13
C032	Rumex leaves (<i>Rumex patientia</i>)	2									16.13
C033	Spinach (<i>Spinacia oleracea</i>)	6									233±8.9
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3									27.65±4.01

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6									10.47±1.25
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1									9.00
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5									12.68±0.00
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6									49.76±1.87
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4									50.46±2.48
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1									52.98
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6									34.76±3.15
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5									31.83±5.61
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1									38.20
D010	Brinjal-1 (<i>Solanum melongena</i>)	1									13.14
D011	Brinjal-2 (<i>Solanum melongena</i>)	1									12.16

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
D012	Brinjal-3 (<i>Solanum melongena</i>)	2			1.96		0.28			1.41	0.80
D013	Brinjal-4 (<i>Solanum melongena</i>)	4			1.50±0.27		0.29±0.03			1.40±0.04	0.84±0.07
D014	Brinjal-5 (<i>Solanum melongena</i>)	3			2.32±0.28		0.32±0.03			1.36±0.07	0.78±0.10
D015	Brinjal-6 (<i>Solanum melongena</i>)	2			1.82		0.19			1.33	0.81
D016	Brinjal-7 (<i>Solanum melongena</i>)	1			1.69		0.29			1.41	0.88
D017	Brinjal-8 (<i>Solanum melongena</i>)	3			1.82±0.06		0.31±0.03			1.43±0.06	0.84±0.03
D018	Brinjal-9 (<i>Solanum melongena</i>)	2			1.71		0.35			1.43	0.89
D019	Brinjal-10 (<i>Solanum melongena</i>)	2			1.31		0.28			1.37	0.89
D020	Brinjal-11 (<i>Solanum melongena</i>)	6			1.74±0.12		0.30±0.06			1.46±0.10	0.79±0.11
D021	Brinjal-12 (<i>Solanum melongena</i>)	2			2.47		0.30			1.38	0.88
D022	Brinjal-13 (<i>Solanum melongena</i>)	1			1.82		0.26			1.39	0.86
D023	Brinjal-14 (<i>Solanum melongena</i>)	3			1.73±0.16		0.33±0.04			1.45±0.08	0.84±0.03
D024	Brinjal-15 (<i>Solanum melongena</i>)	4			1.71±0.14		0.29±0.02			1.58±0.13	0.86±0.05
D025	Brinjal-16 (<i>Solanum melongena</i>)	1			1.89		0.31			1.52	0.88
D026	Brinjal-17 (<i>Solanum melongena</i>)	1			1.79		0.27			1.49	0.81
D027	Brinjal-18 (<i>Solanum melongena</i>)	3			1.75±0.18		0.30±0.05			1.44±0.07	0.77±0.13
D028	Brinjal-19 (<i>Solanum melongena</i>)	3			1.65±0.13		0.32±0.03			1.53±0.14	0.76±0.12
D029	Brinjal-20 (<i>Solanum melongena</i>)	5			1.75±0.13		0.28±0.02			1.44±0.11	0.87±0.08
D030	Brinjal-21 (<i>Solanum melongena</i>)	2			2.86		0.30			1.39	0.83
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6			1.81±0.33		0.29±0.04			1.44±0.10	0.82±0.08
D032	Broad beans (<i>Vicia faba</i>)	3			1.68±0.62					0.09±0.01	

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			←———— mg —————→									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
D012	Brinjal-3 (<i>Solanum melongena</i>)	2		0.81			1.50					
D013	Brinjal-4 (<i>Solanum melongena</i>)	4		0.85±0.08			1.56±0.07					
D014	Brinjal-5 (<i>Solanum melongena</i>)	3		0.83±0.09			1.32±0.04					
D015	Brinjal-6 (<i>Solanum melongena</i>)	2		0.90			1.35					
D016	Brinjal-7 (<i>Solanum melongena</i>)	1		0.77			1.26					
D017	Brinjal-8 (<i>Solanum melongena</i>)	3		0.79±0.04			1.46±0.09					
D018	Brinjal-9 (<i>Solanum melongena</i>)	2		0.69			1.43					
D019	Brinjal-10 (<i>Solanum melongena</i>)	2		0.73			1.47					
D020	Brinjal-11 (<i>Solanum melongena</i>)	6		0.85±0.04			1.56±0.12					
D021	Brinjal-12 (<i>Solanum melongena</i>)	2		0.71			1.39					
D022	Brinjal-13 (<i>Solanum melongena</i>)	1		0.74			1.29					
D023	Brinjal-14 (<i>Solanum melongena</i>)	3		0.69±0.05			1.40±0.14					
D024	Brinjal-15 (<i>Solanum melongena</i>)	4		0.67±0.09			1.24±0.07					
D025	Brinjal-16 (<i>Solanum melongena</i>)	1		0.77			1.39					
D026	Brinjal-17 (<i>Solanum melongena</i>)	1		0.74			1.16					
D027	Brinjal-18 (<i>Solanum melongena</i>)	3		0.48±0.17			1.23±0.10					
D028	Brinjal-19 (<i>Solanum melongena</i>)	3		0.66±0.12			1.33±0.08					
D029	Brinjal-20 (<i>Solanum melongena</i>)	5		0.75±0.09			1.47±0.11					
D030	Brinjal-21 (<i>Solanum melongena</i>)	2		0.62			1.32					
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6		0.75±0.12			1.42±0.15					
D032	Broad beans (<i>Vicia faba</i>)	3	3.88±0.08	0.31±0.01	0.77±0.11			0.04±0.01				

Table 10. Polyphenols

Table 10. Polyphenols

358

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-)- Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← → mg								
			EPICATEGC								
D012	Brinjal-3 (<i>Solanum melongena</i>)	2									13.80
D013	Brinjal-4 (<i>Solanum melongena</i>)	4									12.85±1.21
D014	Brinjal-5 (<i>Solanum melongena</i>)	3									13.49±0.86
D015	Brinjal-6 (<i>Solanum melongena</i>)	2									12.88
D016	Brinjal-7 (<i>Solanum melongena</i>)	1									13.17
D017	Brinjal-8 (<i>Solanum melongena</i>)	3									12.63±1.08
D018	Brinjal-9 (<i>Solanum melongena</i>)	2									11.47
D019	Brinjal-10 (<i>Solanum melongena</i>)	2									13.05
D020	Brinjal-11 (<i>Solanum melongena</i>)	6									12.79±2.20
D021	Brinjal-12 (<i>Solanum melongena</i>)	2									13.19
D022	Brinjal-13 (<i>Solanum melongena</i>)	1									13.49
D023	Brinjal-14 (<i>Solanum melongena</i>)	3									12.29±0.72
D024	Brinjal-15 (<i>Solanum melongena</i>)	4									11.52±0.65
D025	Brinjal-16 (<i>Solanum melongena</i>)	1									12.16
D026	Brinjal-17 (<i>Solanum melongena</i>)	1									13.17
D027	Brinjal-18 (<i>Solanum melongena</i>)	3									12.62±0.56
D028	Brinjal-19 (<i>Solanum melongena</i>)	3									13.54±1.63
D029	Brinjal-20 (<i>Solanum melongena</i>)	5									12.90±1.62
D030	Brinjal-21 (<i>Solanum melongena</i>)	2									13.19
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6									12.79±1.34
D032	Broad beans (<i>Vicia faba</i>)	3			16.63±0.37		9.70±0.10				89.14±6.99

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
D033	Capsicum, green (<i>Capsicum annuum</i>)	6			0.46±0.03	0.07±0.02					0.07±0.02
D034	Capsicum, red (<i>Capsicum annuum</i>)	4			0.58±0.00	1.02±0.00					0.84±0.00
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4			0.48±0.00	0.41±0.00					0.35±0.00
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6			0.88±0.05		0.69±0.05			0.57±0.07	1.40±0.29
D037	Celery stalk (<i>Apium graveolens</i>)	3			0.32±0.04						0.30±0.05
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	0.38±0.06				0.36±0.04				0.05±0.01
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6								0.04±0.01	0.78±0.04
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1				1.89			3.82		4.18
693	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5				0.60±0.37			1.38±0.76		1.28±0.59
	Corn, baby (<i>Zea mays</i>)	6	0.03±0.01		0.13±0.03	1.20±0.11			0.20±0.15		0.31±0.10
	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6									
	Cucumber, green, short (<i>Cucumis sativus</i>)	6									
	Cucumber, orange, round (<i>Cucumis sativus</i>)	2									
	Drumstick (<i>Moringa oleifera</i>)	6	2.93±0.51				3.36±0.89				1.67±0.12
	Field beans, tender, broad (<i>Vicia faba</i>)	2									0.81
	Field beans, tender, lean (<i>Vicia faba</i>)	6									0.62±0.08
	French beans, country (<i>Phaseolus vulgaris</i>)	5	0.27±0.05						0.80±0.10		1.54±0.17
	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	0.31						0.92		1.71
	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	3.03±0.86								1.04±0.52
	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	0.56±0.08								0.31±0.10

Table 10. Polyphenols

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
D033	Capsicum, green (<i>Capsicum annuum</i>)	6	0.39±0.09	2.49±0.22	1.46±0.26					1.44±0.27		
D034	Capsicum, red (<i>Capsicum annuum</i>)	4	1.58±0.00	3.82±0.00						4.18±0.00		
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4	0.25±0.00	0.25±0.00						0.03±0.00		
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6		1.49±0.20				0.26±0.03	0.55±0.03	0.40±0.13		
D037	Celery stalk (<i>Apium graveolens</i>)	3	0.26±0.05	0.25±0.02	0.37±0.01				0.32±0.07		0.66±0.04	
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4	0.66±0.07									
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6										
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1	3.12		1.04			1.38		1.02		
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5	1.40±0.53		0.30±0.04			0.27±0.04		1.53±0.25		
D042	Corn, baby (<i>Zea mays</i>)	6	0.76±0.01	0.16±0.02								
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6			0.88±0.39				0.10±0.04	0.07±0.03		
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6			0.82±0.41				0.09±0.03	0.07±0.02		
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2			1.23				0.09	0.07		
D046	Drumstick (<i>Moringa oleifera</i>)	6	4.01±0.68					0.25±0.03	8.14±0.49	23.30±0.80		
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	0.62					0.65				
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	0.45±0.20					0.60±0.22			2.50±0.09	
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5	0.13±0.02		2.61±0.28			0.61±0.08	1.78±0.18	3.17±0.40		
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2	0.13		2.78			0.51	1.82	2.85		
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5	2.39±0.23	0.87±0.06								
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5	0.58±0.06	0.88±0.03								

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
			← mg →									
							HESPT		HESPD	DAIDZN	GNSTEIN	EPICATEC
D033	Capsicum, green (<i>Capsicum annuum</i>)	6					1.45±0.30					
D034	Capsicum, red (<i>Capsicum annuum</i>)	4					4.08±0.00					
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4					0.37±0.00					
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6										
D037	Celery stalk (<i>Apium graveolens</i>)	3										
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4										
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6	2.36±0.44									
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1										
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5										
D042	Corn, baby (<i>Zea mays</i>)	6										
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6										
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6										
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2										
D046	Drumstick (<i>Moringa oleifera</i>)	6		0.35±0.06	2.92±0.40							
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2										
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6									0.67±0.07	
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5										
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2										
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5										
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5										

Table 10. Polyphenols

362

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	0.05±0.02								0.57±0.15
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	0.04±0.02	0.08±0.01							0.44±0.03
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	0.07	0.07							0.49
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6									1.62±0.19
D057	Mango, green, raw (<i>Mangifera indica</i>)	6				0.18±0.31	0.35±0.08				
D058	Onion, stalk (<i>Allium cepa</i>)	6		0.17±0.01						0.16±0.01	0.26±0.01
D059	Papaya, raw (<i>Carica papaya</i>)	6									
D060	Parwar (<i>Trichosanthes dioica</i>)	6			0.44±0.05	0.32±0.07					0.05±0.01
D061	Peas, fresh (<i>Pisum sativum</i>)	6	0.61±0.29							2.10±0.86	1.58±0.20
393	Plantain, flower (<i>Musa x paradisiaca</i>)	6									0.63±0.05
	Plantain, green (<i>Musa x paradisiaca</i>)	6				0.40±0.23					
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6			0.49±0.08	0.04±0.01					0.04±0.02
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1									0.04
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6								0.06±0.02	0.08±0.01
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	0.23		0.37	0.32	0.61			0.46	
D068	Ridge gourd (<i>Luffa acutangula</i>)	6								0.51±0.10	0.54±0.12
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3								0.54±0.03	0.49±0.06
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	0.36±0.14					0.47±0.15	0.06±0.01	0.47±0.16	
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	0.31					0.45	0.07	0.40	
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	0.31					0.31	0.09	0.52	
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	0.42±0.10					0.34±0.03	0.04±0.02		

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-glucoside	Apigenin-7-O-neohesperidose	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
D053	Knol - Khol (<i>Brassica oleracea</i>)	6	0.06±0.01		0.40±0.14							
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6	0.35±0.05	0.05±0.02	0.14±0.01				0.07±0.02		0.13±0.02	
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1	0.43	0.08	0.17				0.08		0.16	
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6	2.80±0.61								1.69±0.28	2.22±0.51
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	0.31±0.13						0.64±0.07		2.16±0.55	
D058	Onion, stalk (<i>Allium cepa</i>)	6	0.63±0.01	1.15±0.18					1.53±0.26	1.42±0.23	1.55±0.10	
D059	Papaya, raw (<i>Carica papaya</i>)	6	0.55±0.03	0.23±0.05	0.05±0.01			0.15±0.02	0.25±0.04			
D060	Parwar (<i>Trichosanthes dioica</i>)	6	0.08±0.01					0.35±0.10	0.79±0.09	0.63±0.03	1.30±0.24	1.37±0.10
D061	Peas, fresh (<i>Pisum sativum</i>)	6		0.41±0.09	2.03±0.65		1.82±0.13	1.95±0.86	1.74±0.20			
364	Plantain, flower (<i>Musa x paradisiaca</i>)	6	0.28±0.03	0.77±0.07								
	Plantain, green (<i>Musa x paradisiaca</i>)	6					0.60±0.08	1.65±0.16	0.11±0.01	0.07±0.01		
	Plantain, stem (<i>Musa x paradisiaca</i>)	6	0.29±0.08									
	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	0.24					1.43				
	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	0.28±0.08					1.63±0.21				
	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1		1.41	0.72			1.62			4.25	
	Ridge gourd (<i>Luffa acutangula</i>)	6	0.36±0.11							0.92±0.17		
	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3	0.61±0.02							0.92±0.04		
	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6	0.28±0.11									
	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2	0.32									
	Snake gourd, short (<i>Trichosanthes anguina</i>)	1	0.24									
	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6	0.55±0.07		0.64±0.18							

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-Galactoside	mg								
				HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC				
D053	Knol - Khol (<i>Brassica oleracea</i>)	6		0.42±0.12								
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6										
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1										
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6			1.25±0.43							
D057	Mango, green, raw (<i>Mangifera indica</i>)	6	0.66±0.07									
D058	Onion, stalk (<i>Allium cepa</i>)	6		1.31±0.02								
D059	Papaya, raw (<i>Carica papaya</i>)	6			0.32±0.07							
D060	Parwar (<i>Trichosanthes dioica</i>)	6										
D061	Peas, fresh (<i>Pisum sativum</i>)	6										
963	Plantain, flower (<i>Musa x paradisiaca</i>)	6										
	Plantain, green (<i>Musa x paradisiaca</i>)	6			0.02±0.02							0.08±0.01
	Plantain, stem (<i>Musa x paradisiaca</i>)	6										
	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1										
	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6										
	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1										0.33
D068	Ridge gourd (<i>Luffa acutangula</i>)	6										
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3										
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6										
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2										
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1										
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6			0.14±0.02							

Table 10. Polyphenols

366

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P- Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6			0.43±0.07						0.05±0.01
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6								0.05±0.02	0.41±0.11
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6								0.10±0.02	0.66±0.08
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2	0.05								
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2	0.03								

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6	0.84±0.06								0.39±0.11
E002	Apple, green (<i>Malus domestica</i>)	6	0.81±0.10								0.27±0.05
E003	Apple, small (<i>Malus domestica</i>)	6	0.77±0.10								0.47±0.17
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	0.63								0.65
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6								0.83±0.08	0.12±0.02
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3								0.59±0.02	0.05±0.01
E007	Avocado fruit (<i>Persea sp.</i>)	1		0.06							0.12
E008	Bael fruit (<i>Aegle marmelos</i>)	1			0.09						0.21
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1				0.31					
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2					0.12				
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1					0.12				
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6				0.13±0.02	0.12±0.03				
E013	Black berry (<i>Rubus sp.</i>)	5					4.68±0.19				0.46±0.06
E014	Cherries, red (<i>Prunus cerasus</i>)	4				0.65±0.13				0.08±0.01	0.38±0.11

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← → mg									
			CHLRAC	FERAC	APIGEN		LUTEOL	KAEMF	QUERCE			
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6	1.22±0.21	0.08±0.01				0.03±0.01	1.90±0.04			
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6	1.30±0.05	0.68±0.03				1.17±0.49	4.42±0.66	8.10±0.64	0.15±0.01	
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6	1.89±0.11	0.91±0.03				2.33±0.22	3.49±0.36	10.68±0.62	0.16±0.02	
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2										1.35
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2										1.33
E FRUITS												
E001	Apple, big (<i>Malus domestica</i>)	6	1.63±0.13	0.79±0.09				2.96±0.49	0.87±0.07	2.87±0.41	1.54±0.06	
E002	Apple, green (<i>Malus domestica</i>)	6	1.44±0.14	0.71±0.12				2.45±0.37	0.55±0.13	2.42±0.45	0.55±0.03	
E003	Apple, small (<i>Malus domestica</i>)	6	1.53±0.27	0.77±0.40				2.67±0.26	0.92±0.21	2.66±0.34	1.10±0.60	
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	2.15	0.31				2.63	1.63	3.13	0.63	
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6		0.28±0.04				0.96±0.09	0.83±0.10		2.04±0.70	
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3		0.24±0.02				2.56±0.38	2.80±0.29		0.85±0.04	
E007	Avocado fruit (<i>Persea sp.</i>)	1		0.16			0.33		0.23			
E008	Bael fruit (<i>Aegle marmelos</i>)	1		0.19			0.41		0.29			
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1										
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2										
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1										
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6										
E013	Black berry (<i>Rubus sp.</i>)	5								3.18±0.50	3.58±0.32	
E014	Cherries, red (<i>Prunus cerasus</i>)	4	5.93±0.02	0.32±0.05				1.39±0.43	0.88±0.02			

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
				←	mg	→						
							HESPT		HESPD	DAIDZN	GNSTEIN	EPICATEC
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6										
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6										
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6										
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2										
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2										

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6	1.50±0.19									7.99±0.64
E002	Apple, green (<i>Malus domestica</i>)	6	0.64±0.14									2.92±0.46
E003	Apple, small (<i>Malus domestica</i>)	6	1.16±0.34									6.96±1.06
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1	1.68									7.90
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6										0.30±0.07
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3										6.48±0.70
E007	Avocado fruit (<i>Persea sp.</i>)	1		0.11					0.36			0.34
E008	Bael fruit (<i>Aegle marmelos</i>)	1		0.19					0.31			0.29
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1										
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2										
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1										
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6										
E013	Black berry (<i>Rubus sp.</i>)	5	4.36±0.54									11.46±0.27
E014	Cherries, red (<i>Prunus cerasus</i>)	4		0.10±0.02	2.07±0.63							1.66±0.29

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-)- Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← → mg								
			EPICATEGC								
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6									7.62±0.69
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6									26.35±2.20
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6									36.69±2.09
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2								34.77	42.94
D078	Zucchini, yellow(<i>Cucurbita pepo</i>)	2								2.62	295

E FRUITS											
E001	Apple, big (<i>Malus domestica</i>)	6				1.21±0.17					35.81±4.13
E002	Apple, green (<i>Malus domestica</i>)	6				0.81±0.06					45.76±4.22
E003	Apple, small (<i>Malus domestica</i>)	6				0.96±0.14					34.87±2.45
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1				1.00					38.25
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6				3.72±0.64					57.33±3.72
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3				2.53±0.51					51.31±1.88
E007	Avocado fruit (<i>Persea sp.</i>)	1				11.35					105
E008	Bael fruit (<i>Aegle marmelos</i>)	1				10.26					21.36
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1	0.72	0.61	0.41						10.70
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2	0.56	0.61	0.52						18.60
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1	0.63	0.56	0.64						11.10
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6	0.62±0.17	0.53±0.15	0.53±0.08						14.41±1.64
E013	Black berry (<i>Rubus sp.</i>)	5	0.56±0.05		1.44±0.35					3.11±0.43	165±6.8
E014	Cherries, red (<i>Prunus cerasus</i>)	4	0.07±0.01		2.61±0.20						126±2.1

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
E015	Currants, black (<i>Ribes nigrum</i>)	1									
E016	Custard apple (<i>Annona squamosa</i>)	1									
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6			0.51±0.31	0.59±0.22	1.55±0.03		2.90±0.53	0.25±0.03	
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2			1.36	1.27	1.57			0.03	
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2			0.22	0.63	0.16		2.38	0.22	
E020	Fig (<i>Ficus carica</i>)	6									
E021	Gooseberry (<i>Emblica officinalis</i>)	5	1.34±0.18		0.47±0.10		93.12±4.37		0.66±0.07	0.20±0.01	
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4			0.54±0.18	0.43±0.28			2.63±0.44	0.10±0.01	
371	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5			1.61±0.83	2.15±0.85			2.71±0.20	0.25±0.09	
	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5			2.84±0.00	2.63±0.00			2.96±0.00	0.37±0.00	
	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5			0.63±0.00	0.84±0.00			2.57±0.00	0.14±0.00	
	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5			0.85±0.01	1.81±0.09			3.15±0.01	0.22±0.10	
	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5			0.60±0.00	0.87±0.00			2.78±0.00	0.12±0.00	
	Guava, white flesh (<i>Psidium guajava</i>)	5					2.51±0.36				
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5					5.42±0.49				
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	2.90±0.28							1.54±0.36	
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2			0.06		0.39			0.02	
E032	Karonda fruit (<i>Carissa carandas</i>)	1	0.03			0.12			0.16		
E033	Lemon, juice (<i>Citrus limon</i>)	6							1.61±0.22	3.04±0.58	
E034	Lime, sweet, pulp (<i>Citrus limetta</i>)	6									

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-glucoside	Apigenin-7-O-neohesperidose	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
E015	Currants, black (<i>Ribes nigrum</i>)	1							0.02	3.12		4.65
E016	Custard apple (<i>Annona squamosa</i>)	1										
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6	0.64±0.21	1.18±0.87						0.02±0.01		
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2	0.29	0.13						0.03		
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2		1.57								
E020	Fig (<i>Ficus carica</i>)	6	0.04±0.00	0.01±0.00						0.01±0.00		
E021	Gooseberry (<i>Emblica officinalis</i>)	5	0.56±0.04	0.30±0.09		0.23±0.04			0.84±0.04	1.26±0.05	1.37±0.03	7.81±0.82
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4	0.63±0.08	0.95±0.08					0.15±0.03	0.70±0.06		0.11±0.01
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5	0.56±0.28	2.46±1.07					0.13±0.07	0.70±0.03		0.10±0.01
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5	0.52±0.00	2.78±0.00					0.34±0.00	0.71±0.00		0.09±0.00
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5	0.62±0.00	2.85±0.00					0.16±0.00	0.72±0.00		0.12±0.00
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5	0.65±0.03	1.63±0.06					0.09±0.10	0.68±0.01		0.08±0.01
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5	0.75±0.00	2.14±0.00					0.15±0.00	0.68±0.00		0.10±0.00
E028	Guava, white flesh (<i>Psidium guajava</i>)	5			3.61±0.30					1.44±0.10		
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5			4.67±0.31					1.99±0.50		
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5	2.48±0.42	1.23±0.45								
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2	0.13									
E032	Karonda fruit (<i>Carissa carandas</i>)	1						1.21		1.16		
E033	Lemon, juice (<i>Citrus limon</i>)	6						1.59±0.11		0.07±0.01		
E034	Lime, sweet, pulp (<i>Citrus limetta</i>)	6	1.48±0.51	0.02±0.01						0.08±0.01		

372

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
			← mg →									
							HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC	
E015	Currants, black (<i>Ribes nigrum</i>)	1		0.08	0.08							0.47
E016	Custard apple (<i>Annona squamosa</i>)	1										5.63
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6										
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2										
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2										
E020	Fig (<i>Ficus carica</i>)	6										0.03±0.00
E021	Gooseberry (<i>Emblica officinalis</i>)	5										
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4			0.38±0.11	0.04±0.01	0.02±0.01					7.83±0.45
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5			0.52±0.24	0.03±0.01	0.02±0.01					0.46±0.29
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5			0.57±0.00	0.06±0.00	0.03±0.00					2.68±0.00
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5			0.67±0.00	0.07±0.00	0.02±0.00					5.02±0.00
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5			0.31±0.29	0.09±0.01	0.04±0.01					0.27±0.02
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5			0.62±0.00	0.05±0.00	0.03±0.00					8.31±0.00
E028	Guava, white flesh (<i>Psidium guajava</i>)	5			4.57±0.55							
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5			7.10±0.62							
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5										
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2										
E032	Karonda fruit (<i>Carissa carandas</i>)	1			0.46			0.99				0.12
E033	Lemon, juice (<i>Citrus limon</i>)	6			0.15±0.02		2.64±0.27	0.51±0.34	17.33±0.44			
E034	Lime, sweet, pulp (<i>Citrus limetta</i>)	6					22.17±21.06	1.64±0.17	13.45±0.56			

Table 10. Polyphenols

374

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
GALLAC											
E035	Litchi (<i>Litchi chinensis</i>)	4			2.26±0.85		0.70±0.30				2.12±0.41
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6					0.43±0.12		0.74±0.19	0.64±0.13	
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2					0.56		0.67	0.93	
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3					1.29±0.67		0.85±0.08	1.43±0.55	
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4					0.56±0.20		0.81±0.21	1.01±0.53	
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2					0.41		1.02	0.74	
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2					1.22		0.93	1.11	
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1					0.93		0.74	0.81	
E043	Mangosteen (<i>Garcinia mangostana</i>)	1									
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1									
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5							0.04±0.01		
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6							0.02±0.01		
E047	Orange, pulp (<i>Citrus aurantium</i>)	6									
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	0.03				0.09			0.12	
E049	Papaya, ripe (<i>Carica papaya</i>)	6									
E050	Peach (<i>Prunus communis</i>)	1	0.03								
E051	Pear (<i>Pyrus sp.</i>)	6		0.05±0.01	0.39±0.05						
E052	Phalsa (<i>Grewia asiatica</i>)	2			0.53						0.60
E053	Pineapple (<i>Ananas comosus</i>)	6							0.62±0.06	0.90±0.04	
E054	Plum (<i>Prunus domestica</i>)	3									
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6					0.09±0.02				

Table 10. Polyphenols

376

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperidose	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
E035	Litchi (<i>Litchi chinensis</i>)	4	1.47±0.17							0.55±0.33	2.72±0.43	1.38±0.12
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	1.79±0.52		1.42±0.41				0.99±0.75		2.17±0.56	
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	1.41		1.33				2.12		1.64	
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	1.95±0.64		1.43±0.36				1.16±0.43		2.76±0.25	
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	1.66±0.35		0.96±0.63				0.94±0.54		2.61±0.32	
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	1.35		1.84				3.14		1.84	
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	1.71		1.65				1.68		2.06	
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	1.39		1.78				1.52		1.84	
E043	Mangosteen (<i>Garcinia mangostana</i>)	1										
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1										
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5	0.05±0.01	0.03±0.01				0.49±0.03				
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6	0.07±0.01	0.05±0.01				0.47±0.02				
E047	Orange, pulp (<i>Citrus aurantium</i>)	6	0.42±0.02	0.19±0.01				0.06±0.02	0.14±0.02	1.07±0.04		
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1								1.12		
E049	Papaya, ripe (<i>Carica papaya</i>)	6	2.02±0.53	1.65±0.14				0.06±0.02	0.11±0.02	0.03±0.02		
E050	Peach (<i>Prunus communis</i>)	1										
E051	Pear (<i>Pyrus</i> sp.)	6	1.27±0.02							1.56±0.25		0.99±0.09
E052	Phalsa (<i>Grewia asiatica</i>)	2	1.28							0.47		
E053	Pineapple (<i>Ananas comosus</i>)	6	0.74±0.05							0.09±0.02		
E054	Plum (<i>Prunus domestica</i>)	3									5.58±0.44	
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	1.60±0.23							2.52±0.42		

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
			← mg →									
							HESPT		HESPD	DAIDZN	GNSTEIN	EPICATEC
E035	Litchi (<i>Litchi chinensis</i>)	4	1.40±0.35				0.53±0.10					
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6	0.92±0.50									
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2	0.38									
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3	0.85±0.15									
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4	0.76±0.07									
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2	0.81									
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2	0.79									
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1	1.02									
377	Mangosteen (<i>Garcinia mangostana</i>)	1										
	Manila tamarind (<i>Pithecellobium dulce</i>)	1										
	Musk melon, orange flesh (<i>Cucumis melon</i>)	5										
	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6										
	Orange, pulp (<i>Citrus aurantium</i>)	6					37.19±5.42	12.73±1.22	24.13±2.65			
	Palm fruit, tender (<i>Borassus flabellifer</i>)	1										0.12
E049	Papaya, ripe (<i>Carica papaya</i>)	6										
E050	Peach (<i>Prunus communis</i>)	1										5.64
E051	Pear (<i>Pyrus</i> sp.)	6	0.08±0.01									1.09±0.36
E052	Phalsa (<i>Grewia asiatica</i>)	2										
E053	Pineapple (<i>Ananas comosus</i>)	6										
E054	Plum (<i>Prunus domestica</i>)	3										2.16±0.07
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6					1.44±0.14					0.09±0.02

Table 10. Polyphenols

378

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-) Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			↔ mg ↔								
			EPICATEGC								
E035	Litchi (<i>Litchi chinensis</i>)	4									124±7.2
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6			1.55±0.38						18.39±3.44
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2			1.54						22.38
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3			1.64±0.08						15.45±0.72
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4			1.82±0.35						14.74±0.44
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2			1.45						16.92
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2			1.54						18.52
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1			1.89						23.87
E043	Mangosteen (<i>Garcinia mangostana</i>)	1									
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1									10.35
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5									4.95±1.22
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6									5.33±0.67
E047	Orange, pulp (<i>Citrus aurantium</i>)	6									54.73±9.78
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1	0.21	0.06	0.15						28.36
E049	Papaya, ripe (<i>Carica papaya</i>)	6									17.88±1.20
E050	Peach (<i>Prunus communis</i>)	1			2.33						279
E051	Pear (<i>Pyrus sp.</i>)	6			0.04±0.01						10.50±1.95
E052	Phalsa (<i>Grewia asiatica</i>)	2									57.25
E053	Pineapple (<i>Ananas comosus</i>)	6						1.43±0.16			22.69±1.07
E054	Plum (<i>Prunus domestica</i>)	3			4.58±0.44						28.36±0.00
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6	0.10±0.03	0.22±0.08	0.44±0.05	0.31±0.12					67.10±3.36

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
E056	Pummelo (<i>Citrus maxima</i>)	3									
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6							0.55±0.04	0.71±0.06	
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6							1.66±0.13	0.48±0.13	
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	0.06			0.12			1.21	1.32	
E060	Sapota (<i>Achras sapota</i>)	6				1.51±0.48				0.61±0.07	
E061	Soursop (<i>Annona muricata</i>)	1				0.55				0.12	
E062	Star fruit (<i>Averrhoa carambola</i>)	1				0.49					
E063	Strawberry (<i>Fragaria x ananassa</i>)	6					0.22±0.03		0.20±0.08		
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6									
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	0.34±0.10						1.77±0.13	0.38±0.10	
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	0.34±0.11						1.53±0.14	0.33±0.07	
E067	Wood Apple (<i>Limonia acidissima</i>)	3							0.02±0.01	1.11±0.14	
E068	Zizyphus (<i>Zizyphus jujube</i>)	1							0.04		

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6		0.29±0.03		0.05±0.02	0.14±0.02
F002	Carrot, orange (<i>Daucus carota</i>)	6					0.73±0.12
F003	Carrot, red (<i>Daucus carota</i>)	4					0.89±0.11
F004	Colocasia (<i>Colocasia esculenta</i>)	6		0.52±0.21		1.61±0.25	2.63±0.34
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3				0.03±0.01	0.37±0.01
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6					2.40±0.38

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
E056	Pummelo (<i>Citrus maxima</i>)	3	15.68±0.00		0.82±0.00							
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6	7.10±1.09									6.20±0.76
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6	20.98±2.24									5.69±0.97
E059	Rambutan (<i>Nephelium lappaceum</i>)	1	0.56									0.12
E060	Sapota (<i>Achras sapota</i>)	6										
E061	Soursop (<i>Annona muricata</i>)	1						0.16				0.66
E062	Star fruit (<i>Averrhoa carambola</i>)	1							0.32	0.16		
E063	Strawberry (<i>Fragaria x ananassa</i>)	6										
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6			3.13±0.45			2.59±0.77				
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6	0.58±0.14			0.53±0.14	0.58±0.08	0.27±0.02				
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6	0.51±0.12			0.57±0.22	0.70±0.20	0.28±0.03				
E067	Wood Apple (<i>Limonia acidissima</i>)	3	14.71±4.19	0.32±0.04								
E068	Zizyphus (<i>Zizyphus jujube</i>)	1		0.14				0.11		1.84		0.48

380

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	0.38±0.08				0.34±0.08			0.15±0.05		
F002	Carrot, orange (<i>Daucus carota</i>)	6	2.66±0.41	5.35±0.58				2.66±0.25	1.49±0.22	0.54±0.09		
F003	Carrot, red (<i>Daucus carota</i>)	4	4.57±0.45	5.89±0.03				3.64±0.69	1.67±0.05	0.63±0.00		
F004	Colocasia (<i>Colocasia esculenta</i>)	6	2.01±0.61	1.55±0.15								
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	0.37±0.04									
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	2.98±0.32		2.99±0.29			0.11±0.02	0.15±0.02	6.87±0.71		

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
			← mg →									
							HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC	
E056	Pummelo (<i>Citrus maxima</i>)	3					8.26±0.00	2.54±0.00				
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6						1.29±0.10	0.05±0.01	0.06±0.01	2.34±0.07	
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6						1.43±0.21	0.03±0.01	0.05±0.01	1.46±0.17	
E059	Rambutan (<i>Nephelium lappaceum</i>)	1						0.16	0.21	0.06		
E060	Sapota (<i>Achras sapota</i>)	6										
E061	Soursop (<i>Annona muricata</i>)	1										
E062	Star fruit (<i>Averrhoa carambola</i>)	1					0.63					
E063	Strawberry (<i>Fragaria x ananassa</i>)	6					0.36±0.03					
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6										7.88±0.97
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6										
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6										
E067	Wood Apple (<i>Limonia acidissima</i>)	3										
E068	Zizyphus (<i>Zizyphus jujube</i>)	1										0.31

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6										
F002	Carrot, orange (<i>Daucus carota</i>)	6										
F003	Carrot, red (<i>Daucus carota</i>)	4										
F004	Colocasia (<i>Colocasia esculenta</i>)	6										
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3										
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6					2.66±0.43					

Table 10. Polyphenols

382

Food code	Food Name	No. of Regions	(-)-Epigallo catechin	(-)Epigallo catechin 3-gallate	(+)-Catechin	(-)Gallocatechin gallate	(-)Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← → mg ← →								
			EPICATEGC								
E056	Pummelo (<i>Citrus maxima</i>)	3									25.35±0.00
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6			1.44±0.33						286±2.8
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6			4.10±0.55						170±5.1
E059	Rambutan (<i>Nephelium lappaceum</i>)	1			1.21						11.21
E060	Sapota (<i>Achras sapota</i>)	6			1.40±0.10						17.27±0.97
E061	Soursop (<i>Annona muricata</i>)	1	1.01	0.16	0.21						16.54
E062	Star fruit (<i>Averrhoa carambola</i>)	1	1.21		0.99						21.69
E063	Strawberry (<i>Fragaria x ananassa</i>)	6	0.05±0.02		6.42±0.15		0.03±0.01				135±17.1
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6			4.00±0.68						183±3.2
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6									5.89±0.40
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6									5.78±0.33
E067	Wood Apple (<i>Limonia acidissima</i>)	3									411±5.4
E068	Zizyphus (<i>Zizyphus jujube</i>)	1			2.89						131

F ROOTS AND TUBERS

F001	Beet root (<i>Beta vulgaris</i>)	6	57.56±1.74
F002	Carrot, orange (<i>Daucus carota</i>)	6	49.44±2.56
F003	Carrot, red (<i>Daucus carota</i>)	4	50.69±0.37
F004	Colocasia (<i>Colocasia esculenta</i>)	6	59.20±1.25
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3	
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6	24.61±1.89

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1									4.12
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1									4.18
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3				0.05±0.01			4.27±1.30	2.17±0.85	
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6				0.03±0.01			4.39±0.60	2.46±0.33	
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1				0.07			4.71	1.69	
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2				0.06			4.26	2.01	
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4		0.37±0.04							0.08±0.02
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3		0.52±0.10							0.09±0.01
F015	Tapioca (<i>Manihot esculenta</i>)	3							0.04±0.02	0.32±0.01	
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1									
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6			0.06±0.01						
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4			0.13±0.01						
F019	Yam, wild (<i>Dioscorea villosa</i>)	2			0.13						

383

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5		0.07±0.03		0.65±0.16	3.20±0.66
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3		0.08±0.01		0.09±0.01	2.46±1.02
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5		0.10±0.02		0.23±0.11	3.10±1.16
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3		0.09±0.02		0.15±0.09	2.59±0.41
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2		0.08±0.03		0.49±0.07	3.84±0.95

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1	3.74		2.97				0.12	0.22	6.47	
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1	2.63		2.18				0.15	0.12	6.01	
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3	1.79±0.05						0.56±0.03			
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6	1.74±0.43						0.59±0.07			
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	1.68						0.61			
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2	1.46						0.52			
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4	1.75±0.29	0.11±0.02	1.36±0.13			0.02±0.01	0.03±0.01	0.01±0.01		
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3	2.51±0.53	0.14±0.02	1.79±0.57			0.05±0.01	0.04±0.02	0.04±0.01		
F015	Tapioca (<i>Manihot esculenta</i>)	3	0.32±0.17									
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1										
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6							0.26±0.06			
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4							0.48±0.02			
F019	Yam, wild (<i>Dioscorea villosa</i>)	2							0.53			

384

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	5.81±1.52	11.01±1.58
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	2.69±0.19	15.91±1.48
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	3.12±0.58	11.65±2.24
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	4.50±3.42	5.11±1.62
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	5.85±2.16	9.77±1.92

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside	mg								
				HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC				
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1			2.84							
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1			2.84							
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3										
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6										
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1										
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2										
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4			0.03±0.01							
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3			0.06±0.02							
F015	Tapioca (<i>Manihot esculenta</i>)	3										
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1										
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6										
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4										
F019	Yam, wild (<i>Dioscorea villosa</i>)	2										

385

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5										
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3										
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5										
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3										
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2										

Table 10. Polyphenols

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annuum</i>)	5	56.58±3.37
G002	Chillies, green-2 (<i>Capsicum annuum</i>)	3	55.69±7.63
G003	Chillies, green-3 (<i>Capsicum annuum</i>)	5	56.27±4.45
G004	Chillies, green-4 (<i>Capsicum annuum</i>)	3	53.86±4.73
G005	Chillies, green-5 (<i>Capsicum annuum</i>)	2	56.50±1.82

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1					0.09		0.62	3.66	
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1					0.07		0.06	1.94	
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6					0.08±0.02		0.35±0.25	3.03±0.88	
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	2.38±0.69		2.29±0.59					0.80±0.12	
G010	Curry leaves (<i>Murraya koenigii</i>)	6								0.15±0.03	
G011	Garlic, big clove (<i>Allium sativum</i>)	6				2.13±0.87			5.88±1.32	6.88±0.30	
G012	Garlic, small clove (<i>Allium sativum</i>)	3				2.49±0.44			5.97±0.75	6.74±0.53	
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1				2.14			5.98	6.89	
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6								11.84±0.41	
G015	Mango ginger (<i>Curcuma amada</i>)	3			0.31±0.01	0.05±0.01					
G016	Mint leaves (<i>Mentha spicata</i>)	4					0.99±0.15		0.03±0.02	5.66±0.40	
G017	Onion, big (<i>Allium cepa</i>)	6			2.91±0.49						
G018	Onion, small (<i>Allium cepa</i>)	5			2.71±0.65						
G CONDIMENTS AND SPICES-DRY											
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6				0.52±0.31			0.23±0.07		
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6			2.73±0.47	1.40±0.25			1.46±0.25		
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4			2.78±0.19	1.80±0.12			3.57±0.32		
G022	Chillies, red (<i>Capsicum annum</i>)	6				0.28±0.03			0.34±0.12	0.72±0.14	
G023	Cloves (<i>Syzygium aromaticum</i>)	6			0.70±0.09	23.77±2.98			7.42±0.75		
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6							0.04±0.02	0.10±0.03	
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6							0.03±0.02	0.42±0.20	

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			←———— mg —————→									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1			5.82		4.34					
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1			2.34		16.34					
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6			4.37±1.98		10.27±4.19					
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	0.53±0.26	0.95±0.39						7.74±0.81	2.55±0.36	
G010	Curry leaves (<i>Murraya koenigii</i>)	6	0.18±0.03						0.24±0.02			
G011	Garlic, big clove (<i>Allium sativum</i>)	6		0.03±0.02					0.52±0.19	2.05±0.58		
G012	Garlic, small clove (<i>Allium sativum</i>)	3		0.04±0.02					0.61±0.25	1.81±0.57		
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1		0.05					0.71	1.04		
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6					0.27±0.05	4.81±0.11	32.23±1.84			
G015	Mango ginger (<i>Curcuma amada</i>)	3	0.45±0.06	0.05±0.01								
G016	Mint leaves (<i>Mentha spicata</i>)	4	0.09±0.01	4.64±0.46	0.43±0.07			1.49±0.07				
G017	Onion, big (<i>Allium cepa</i>)	6	0.19±0.05	0.08±0.02	0.05±0.02			0.04±0.02	0.68±0.24	1.62±0.16	2.79±0.21	0.36±0.06
G018	Onion, small (<i>Allium cepa</i>)	5	0.18±0.02	0.04±0.01	0.04±0.01			0.01±0.01	0.62±0.23	5.78±0.46	1.61±0.11	0.18±0.08
G CONDIMENTS AND SPICES-DRY												
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6		36.33±2.34							0.14±0.02	
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	3.96±0.62	1.78±0.57								
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	4.86±0.15	2.35±0.27								
G022	Chillies, red (<i>Capsicum annum</i>)	6			14.08±1.73		30.49±1.92					
G023	Cloves (<i>Syzygium aromaticum</i>)	6							15.82±0.97	13.35±0.74		
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	2.91±0.20	0.13±0.02						0.47±0.16		6.39±1.11
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	5.88±0.55		0.41±0.07				35.68±3.05	0.15±0.02	3.78±0.34	13.74±2.21

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperidin	Daidzein	Genistein	(-)-Epicatechin
			β -galactoside									
			mg									
							HESPT	HESPD	DAIDZN	GNSTEIN	EPICATEC	
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1										
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1										
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6										
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6										
G010	Curry leaves (<i>Murraya koenigii</i>)	6			1.55±0.27							
G011	Garlic, big clove (<i>Allium sativum</i>)	6			1.83±0.51				0.04±0.01	0.04±0.01		
G012	Garlic, small clove (<i>Allium sativum</i>)	3			1.61±0.12				0.01±0.01	0.02±0.02		
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1			1.87				0.03	0.04		
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6										
G015	Mango ginger (<i>Curcuma amada</i>)	3										
G016	Mint leaves (<i>Mentha spicata</i>)	4										
G017	Onion, big (<i>Allium cepa</i>)	6		7.24±0.73	0.08±0.01							
G018	Onion, small (<i>Allium cepa</i>)	5		5.73±0.46	0.03±0.01							

G CONDIMENTS AND SPICES-DRY

G019	Asafoetida (<i>Ferula assa-foetida</i>)	6				
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6	1.52±0.19			0.88±0.05
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4	1.92±0.07			2.50±0.25
G022	Chillies, red (<i>Capsicum annum</i>)	6				
G023	Cloves (<i>Syzygium aromaticum</i>)	6				
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6				
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6				

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)-Epigallo catechin	(-)-Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← EPICATEGC → mg								
G006	Chillies, green-6 (<i>Capsicum annuum</i>)	1									54.38
G007	Chillies, green-7 (<i>Capsicum annuum</i>)	1									53.20
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6									55.66±4.56
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6									60.28±3.95
G010	Curry leaves (<i>Murraya koenigii</i>)	6									153±1.2
G011	Garlic, big clove (<i>Allium sativum</i>)	6									95.26±4.55
G012	Garlic, small clove (<i>Allium sativum</i>)	3									96.42±7.01
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1									99.22
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6									225±8.1
G015	Mango ginger (<i>Curcuma amada</i>)	3									23.61±1.60
G016	Mint leaves (<i>Mentha spicata</i>)	4									79.99±9.66
G017	Onion, big (<i>Allium cepa</i>)	6									35.12±3.56
G018	Onion, small (<i>Allium cepa</i>)	5									18.91±3.97
G CONDIMENTS AND SPICES-DRY											
G019	Asafoetida (<i>Ferula assa-foetida</i>)	6							0.56±0.09		45.23±2.90
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6		0.79±0.03							117±1.7
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4		1.72±0.26							134±6.9
G022	Chillies, red (<i>Capsicum annum</i>)	6									211±5.7
G023	Cloves (<i>Syzygium aromaticum</i>)	6				2.03±0.53					2546±4.8
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6									79.69±2.44
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6									165±4.4

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6									0.05±0.02
G027	Mace (<i>Myristica fragrans</i>)	6	0.11±0.02		0.65±0.06	1.52±0.27			1.52±0.27	0.85±0.10	
G028	Nutmeg (<i>Myristica fragrans</i>)	6			0.05±0.01	0.35±0.16			0.07±0.01	16.04±0.82	
G029	Omum (<i>Trachyspermum ammi</i>)	6			2.02±0.74	0.05±0.01			0.07±0.02	1.91±0.69	
G030	Pippali (<i>Piper longum</i>)	6			6.56±1.17						
G031	Pepper, black (<i>Piper nigrum</i>)	6				4.39±0.68			0.23±0.05		
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	0.40±0.03		0.36±0.04				0.17±0.03		
G033	Turmeric powder (<i>Curcuma domestica</i>)	6							1.62±0.57	0.02±0.01	

H NUTS AND OIL SEEDS							
H001	Almond (<i>Prunus amygdalus</i>)	6		0.43±0.14	0.36±0.02		
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6		0.86±0.05	0.04±0.01		
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3		0.43±0.18	0.09±0.04		
H004	Arecanut, fresh (<i>Areca catechu</i>)	2		1.04	0.05		
H005	Cashew nut (<i>Anacardium occidentale</i>)	6					
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	1.80±0.24		0.77±0.15		0.43±0.06
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	0.31±0.04		0.18±0.04		0.26±0.06
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5					0.09±0.01
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6		0.14±0.01	1.45±0.23		
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4		0.24±0.04	0.41±0.04		
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5		0.13±0.02	1.54±0.25		

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperidose	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			mg									
			CHLRAC	FERAC	APIGEN		LUTEOL	KAEMF	QUERCE			
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	1.44±0.19	1.73±0.51								2.67±0.28
G027	Mace (<i>Myristica fragrans</i>)	6										
G028	Nutmeg (<i>Myristica fragrans</i>)	6					4.96±0.39		2.83±0.40		4.19±0.63	
G029	Omum (<i>Trachyspermum ammi</i>)	6	48.23±4.77						0.05±0.01		3.01±0.34	
G030	Pippali (<i>Piper longum</i>)	6									32.83±1.78	
G031	Pepper, black (<i>Piper nigrum</i>)	6	2.96±0.56									
G032	Poppy seeds (<i>Papaver somniferum</i>)	6							0.04±0.01		0.73±0.08	
G033	Turmeric powder (<i>Curcuma domestica</i>)	6							2.85±0.79			

392

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6			3.61±0.26	0.08±0.01	0.64±0.04
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6					0.49±0.23
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3					0.97±0.65
H004	Arecanut, fresh (<i>Areca catechu</i>)	2					0.46
H005	Cashew nut (<i>Anacardium occidentale</i>)	6				0.03±0.01	
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6	2.94±0.60	0.03±0.01			1.14±0.06
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6	0.45±0.06	0.02±0.01			0.59±0.12
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	0.65±0.14	0.05±0.02		1.21±0.38	
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	0.06±0.01	0.14±0.01			
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	0.23±0.03	0.08±0.01			
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	0.07±0.01	0.13±0.02			

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
			← mg →									
							HESPT		HESPD	DAIDZN	GNSTEIN	EPICATEC
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6								0.03±0.01	0.02±0.01	
G027	Mace (<i>Myristica fragrans</i>)	6										
G028	Nutmeg (<i>Myristica fragrans</i>)	6										
G029	Omum (<i>Trachyspermum ammi</i>)	6										
G030	Pippali (<i>Piper longum</i>)	6										
G031	Pepper, black (<i>Piper nigrum</i>)	6										
G032	Poppy seeds (<i>Papaver somniferum</i>)	6										
G033	Turmeric powder (<i>Curcuma domestica</i>)	6				4.12±0.60						

393

H NUTS AND OIL SEEDS

H001	Almond (<i>Prunus amygdalus</i>)	6	0.84±0.03	0.51±0.11				0.07±0.01			0.03±0.01	
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6										
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3										
H004	Arecanut, fresh (<i>Areca catechu</i>)	2										
H005	Cashew nut (<i>Anacardium occidentale</i>)	6								0.03±0.01	2.43±0.18	
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6										
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6										
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5		9.82±1.86								
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6										
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4										
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5										

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-)- Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← mg →								
			EPICATEGC								
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6									94.73±3.32
G027	Mace (<i>Myristica fragrans</i>)	6						0.25±0.04	0.43±0.10		782±5.2
G028	Nutmeg (<i>Myristica fragrans</i>)	6						10.97±2.19			645±3.9
G029	Omum (<i>Trachyspermum ammi</i>)	6									129±5.5
G030	Pippali (<i>Piper longum</i>)	6									194±4.0
G031	Pepper, black (<i>Piper nigrum</i>)	6									254±3.9
G032	Poppy seeds (<i>Papaver somniferum</i>)	6									221±5.9
G033	Turmeric powder (<i>Curcuma domestica</i>)	6									988±6.8

394

H NUTS AND OIL SEEDS						
H001	Almond (<i>Prunus amygdalus</i>)	6	2.52±0.11	1.24±0.25	0.55±0.04	84.94±1.88
H002	Arecanut, dried, brown (<i>Areca catechu</i>)	6		8.96±0.69		2986±2.5
H003	Arecanut, dried, red color (<i>Areca catechu</i>)	3		2.10±0.36		2770±7.3
H004	Arecanut, fresh (<i>Areca catechu</i>)	2		8.70		2563
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	0.94±0.10	0.42±0.08	1.55±0.35	32.86±1.76
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6				72.17±3.90
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6				35.22±3.14
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5				115±9.1
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6				153±1.5
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4				102±1.6
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5				23.00±1.29

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
			← mg →								
			GALLAC								
H012	Ground nut (<i>Arachis hypogaea</i>)	6					2.60±0.26		0.59±0.06	0.86±0.04	
H013	Mustard seeds (<i>Brassica nigra</i>)	6							1.24±0.10	0.05±0.01	
H014	Linseeds (<i>Linum usitatissimum</i>)	6								2.07±0.31	
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	0.26±0.04							0.74±0.03	
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	0.15±0.01							0.63±0.03	
H017	Pine seed (<i>Pinus</i> sp.)	5								0.35±0.03	
H018	Pistachio nuts (<i>Pistacia vera</i>)	6									
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5							0.25±0.02	0.05±0.02	
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5							0.50±0.08	0.16±0.01	
H021	Walnut (<i>Juglans regia</i>)	6	0.10±0.03		6.61±0.88						
I SUGARS											
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	0.95±0.19		0.50±0.44	0.18±0.17	0.63±0.29		0.07±0.02	0.15±0.02	
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6							0.61±0.07	0.55±0.25	
J MUSHROOMS											
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1									
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1									
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1									
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1									

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			← mg →									
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE		
H012	Ground nut (<i>Arachis hypogaea</i>)	6	2.89±0.82		2.64±0.19					0.05±0.01		
H013	Mustard seeds (<i>Brassica nigra</i>)	6	1.77±0.42				1.04±0.15				4.51±0.89	
H014	Linseeds (<i>Linum usitatissimum</i>)	6	1.44±0.19	1.44±0.12								
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	6.49±0.33	0.55±0.03								
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	5.40±0.45	0.30±0.06								
H017	Pine seed (<i>Pinus</i> sp.)	5	0.33±0.06									
H018	Pistachio nuts (<i>Pistacia vera</i>)	6						1.46±0.11		0.43±0.28		0.03±0.01
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	0.03±0.01	0.14±0.01				0.17±0.04	0.17±0.03			
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	8.29±1.69	3.81±0.87								
H021	Walnut (<i>Juglans regia</i>)	6										
I SUGARS												
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	0.49±0.26			7.76±0.93			0.18±0.02			
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6		0.31±0.08								
J MUSHROOMS												
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1										
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1										
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1										
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1										

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β-galactoside									
				←	mg	→						
							HESPT		HESPD	DAIDZN	GNSTEIN	EPICATEC
H012	Ground nut (<i>Arachis hypogaea</i>)	6		1.35±0.43								
H013	Mustard seeds (<i>Brassica nigra</i>)	6			8.08±0.33							
H014	Linseeds (<i>Linum usitatissimum</i>)	6				1.82±0.61						
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4										
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5										
H017	Pine seed (<i>Pinus</i> sp.)	5										
H018	Pistachio nuts (<i>Pistacia vera</i>)	6				0.14±0.07			0.09±0.02	0.59±0.02	1.78±0.30	
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5		0.27±0.02								
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5										
H021	Walnut (<i>Juglans regia</i>)	6										

I SUGARS

I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6	
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6	

J MUSHROOMS

J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1	
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1	
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1	
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1	

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-)- Epigallo catechin	(-)- Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← mg →								
			EPICATEGC								
H012	Ground nut (<i>Arachis hypogaea</i>)	6									127±10.6
H013	Mustard seeds (<i>Brassica nigra</i>)	6									48.81±6.17
H014	Linseeds (<i>Linum usitatissimum</i>)	6									31.60±13.38
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4									539±3.8
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5									359±6.9
H017	Pine seed (<i>Pinus</i> sp.)	5	0.28±0.04								59.85±4.92
H018	Pistachio nuts (<i>Pistacia vera</i>)	6		2.99±0.30	0.69±0.30						132±6.4
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5									22.09±1.13
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5									289±6.8
H021	Walnut (<i>Juglans regia</i>)	6							1.23±0.30		216±1.2
I SUGARS											
I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6						0.06±0.01			127±5.1
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6									5.25±1.27
J MUSHROOMS											
J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1									
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1									
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1									
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1									

Food code	Food Name	No. of Regions	3,4-Dihydroxy benzoic acid	3-Hydroxy benzaldehyde	Protocatechuic acid	Vanillic acid	Gallic acid	Cinnamic acid	O-Coumaric acid	P-Coumaric acid	Caffeic acid
← mg →											
GALLAC											
K	MISCELLANEOUS FOODS										
K001	Toddy (<i>Borassus flabellifer</i>)	10									
K002	Coconut Water (<i>Cocos nucifera</i>)	6	0.15±0.03				0.23±0.03				
L	MILK AND MILK PRODUCTS										
L001	Milk, whole, Buffalo	6									
L002	Milk, whole, Cow	6									
L003	Paneer	6									
L004	Khoa	6									

Table 10. Polyphenols

Food code	Food Name	No. of Regions	Chlorogenic acid	Ferulic acid	Apigenin	Apigenin-6-C-gluoside	Apigenin-7-O-neohesperid oside	Luteolin	Kaempferol	Quercetin	Quercetin-3-β-D-glucoside	Quercetin-3-O-rutinoside
			CHLRAC	FERAC	APIGEN			LUTEOL	KAEMF	QUERCE	mg	
K MISCELLANEOUS FOODS												
K001	Toddy (<i>Borassus flabellifer</i>)	10			0.03±0.01							
K002	Coconut Water (<i>Cocos nucifera</i>)	6		0.43±0.15							0.13±0.02	
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6										
L002	Milk, whole, Cow	6										
L003	Paneer	6										
L004	Khoa	6										

Food code	Food Name	No. of Regions	Quercetin-3-	Isorhamnetin	Myricetin	Resveratrol	Hesperetin	Naringenin	Hesperdin	Daidzein	Genistein	(-)-Epicatechin
			β -galactoside									
				←	mg	→						
K MISCELLANEOUS FOODS												
K001	Toddy (<i>Borassus flabellifer</i>)	10										
K002	Coconut Water (<i>Cocos nucifera</i>)	6										
L MILK AND MILK PRODUCTS												
L001	Milk, whole, Buffalo	6										
L002	Milk, whole, Cow	6										
L003	Paneer	6										
L004	Khoa	6										

Table 10. Polyphenols

Food code	Food Name	No. of Regions	(-) Epigallo catechin	(-) Epigallo catechin 3-gallate	(+)-Catechin	(-) Gallocatechin gallate	(-) Gallo catechin	Syringic acid	Sinapinic acid	Ellagic acid	Total polyphenols
			← EPICATEGC → mg								
K MISCELLANEOUS FOODS											
K001	Toddy (<i>Borassus flabellifer</i>)	10			0.03±0.01						113±1.4
K002	Coconut Water (<i>Cocos nucifera</i>)	6									19.76±3.14
L MILK AND MILK PRODUCTS											
L001	Milk, whole, Buffalo	6									
L002	Milk, whole, Cow	6									
L003	Paneer	6									
L004	Khoa	6									

Table 11

**OLIGOSACCHARIDES
PHYSTEROOLS
PHYTATES
AND
SAPONINS**



Table 11. OLIGOSACCHARIDES, PHYTOSTEROLS, PHYTATES AND SAPONINS

(All values are expressed per 100g edible portion; All blank space in the table represent below detectable limit)

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
A CEREALS AND MILLETS											
A001	Amaranth seed, black (<i>Amaranthus cruentus</i>)	1					1.75	8.24	61.36	393	1.42
A002	Amaranth seed, pale brown (<i>Amaranthus cruentus</i>)	6					1.58±0.15	8.51±0.37	60.15±1.49	341±13.9	1.28±0.21
A003	Bajra (<i>Pennisetum typhoideum</i>)	6	0.08±0.039	0.01±0.004			15.84±1.36	4.97±0.25	75.87±2.25	485±12.1	
A004	Barley (<i>Hordeum vulgare</i>)	6	0.06±0.013	0.01±0.002			6.16±0.03	1.17±0.10	42.83±0.84	386±18.2	
A005	Jowar (<i>Sorghum vulgare</i>)	6	0.02±0.005	0.01±0.004			21.59±0.72	5.31±0.18	38.27±1.04	549±27.2	
A006	Maize, dry (<i>Zea mays</i>)	6					12.49±0.24	4.22±0.18	87.70±2.61	646±19.4	
A007	Maize, tender, local (<i>Zea mays</i>)	6					5.78±0.14	2.91±0.05	43.81±0.99	148±8.1	
A008	Maize, tender, sweet (<i>Zea mays</i>)	4					5.63±0.06	2.63±0.06	41.71±0.52	221±17.1	
A009	Quinoa (<i>Chenopodium quinoa</i>)	1					0.91	1.89	46.10	120	
A010	Ragi (<i>Eleusine coracana</i>)	5	0.02±0.006				5.67±0.15	2.55±0.03	57.36±1.80	306±6.9	
A011	Rice flakes (<i>Oryza sativa</i>)	6					3.48±0.32	2.15±0.05	21.26±0.88	474±21.1	
A012	Rice puffed (<i>Oryza sativa</i>)	6					2.72±0.07	1.52±0.07	16.61±0.85	115±12.3	
A013	Rice, raw, brown (<i>Oryza sativa</i>)	6	0.08±0.058				3.22±0.03	1.73±0.04	17.21±0.79	742±14.5	
A014	Rice, parboiled, milled (<i>Oryza sativa</i>)	6	0.08±0.016				2.83±0.06	1.85±0.06	20.68±0.77	274±10.6	
A015	Rice, raw, milled (<i>Oryza sativa</i>)	6					2.68±0.16	1.75±0.14	21.86±0.71	266±9.6	
A016	Samai (<i>Panicum miliare</i>)	6	0.01±0.000				10.70±0.23	3.07±0.07	73.44±2.02	265±20.1	0.44±0.04
A017	Varagu (<i>Paspalum scrobiculatum</i>)	5	0.02±0.027				3.08±0.02	4.40±0.13	37.03±1.56	452±6.5	

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

406

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			$\leftarrow g \rightarrow$				$\leftarrow mg \rightarrow$				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
A018	Wheat flour, refined (<i>Triticum aestivum</i>)	6	0.35±0.016				3.77±0.12	0.53±0.03	25.63±0.90	123±16.0	
A019	Wheat flour, atta (<i>Triticum aestivum</i>)	6	0.47±0.100	0.04±0.005			6.21±0.20	0.77±0.03	36.60±2.69	632±15.9	
A020	Wheat, whole (<i>Triticum aestivum</i>)	6	0.47±0.171	0.05±0.030			9.73±0.15	1.42±0.12	55.25±2.06	638±29.2	
A021	Wheat, bulgur (<i>Triticum aestivum</i>)	6	0.35±0.062				4.14±0.02	0.75±0.03	25.41±0.18	679±14.9	
A022	Wheat, semolina (<i>Triticum aestivum</i>)	6	0.47±0.194	0.05±0.003			10.36±0.26	1.36±0.04	54.28±2.53	549±11.7	
A023	Wheat, vermicelli (<i>Triticum aestivum</i>)	6					2.80±0.08	0.40±0.02	22.37±0.28	168±14.6	
A024	Wheat, vermicelli, roasted (<i>Triticum aestivum</i>)	6					3.23±0.02	0.47±0.01	25.58±0.15	165±12.9	

B GRAIN LEGUMES											
B001	Bengal gram, dal (<i>Cicer arietinum</i>)	6	0.23±0.048	0.61±0.153			8.03±0.59	3.61±0.16	90.28±2.92	450±23.2	1.10±0.16
B002	Bengal gram, whole (<i>Cicer arietinum</i>)	6	0.23±0.059	0.58±0.131			7.10±0.68	6.26±0.60	85.27±1.44	578±11.2	1.70±0.20
B003	Black gram, dal (<i>Phaseolus mungo</i>)	6	0.03±0.013	0.17±0.053	1.13±0.158	0.06±0.030	3.45±0.33	11.21±0.45	42.37±2.23	579±11.8	1.20±0.05
B004	Black gram, whole (<i>Phaseolus mungo</i>)	6	0.02±0.009	0.17±0.054	1.00±0.125	0.04±0.022	3.08±0.11	13.39±0.63	41.57±0.73	679±12.4	1.82±0.15
B005	Cowpea, brown (<i>Vigna catjang</i>)	6	0.14±0.011	1.24±0.075	0.01±0.000		6.56±0.08	32.19±1.27	62.19±1.80	550±8.7	2.99±0.15
B006	Cowpea, white (<i>Vigna catjang</i>)	1	0.12	1.13	0.01		6.86	32.64	65.43	573	2.98
B007	Field bean, black (<i>Phaseolus vulgaris</i>)	1	0.12	0.38	0.01		2.51	42.15	51.63	759	1.63
B008	Field bean, brown (<i>Phaseolus vulgaris</i>)	1	0.16	0.31	0.01		2.80	46.17	51.14	773	1.71
B009	Field bean, white (<i>Phaseolus vulgaris</i>)	5	0.13±0.015	0.33±0.046	0.01±0.001		2.47±0.18	43.19±2.38	53.83±1.78	791±15.8	1.75±0.18
B010	Green gram, dal (<i>Vigna radiata</i>)	6	0.07±0.014	0.32±0.057	0.90±0.121	0.02±0.019	3.29±0.22	12.19±0.37	55.33±1.51	170±15.0	1.08±0.08

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			$\leftarrow g \rightarrow$				$\leftarrow mg \rightarrow$				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
B011	Green gram, whole (<i>Vigna radiata</i>)	6	0.11±0.053	0.30±0.076	1.57±0.308	0.03±0.018	3.03±0.11	12.38±0.97	51.77±0.25	375±12.3	1.28±0.07
B012	Horse gram, whole (<i>Dolichos biflorus</i>)	6	0.04±0.015	1.59±0.235			3.41±0.30	11.57±0.29	47.56±1.15	339±31.3	2.30±0.44
B013	Lentil dal (<i>Lens culinaris</i>)	6	0.07±0.015	0.57±0.066	0.08±0.018		5.74±0.18	3.32±0.16	75.75±4.23	218±6.2	1.63±0.14
B014	Lentil whole, brown (<i>Lens culinaris</i>)	6	0.21±0.031	0.92±0.099	0.02±0.009		4.66±0.13	4.94±0.04	74.08±0.96	564±16.4	1.95±0.24
B015	Lentil whole, yellowish (<i>Lens culinaris</i>)	2	0.24	0.96	0.04		4.47	4.96	73.59	585	0.89
B016	Moth bean (<i>Vigna aconitifolia</i>)	6	0.18±0.007	1.62±0.061	0.02±0.002		10.40±0.29	27.32±1.35	93.84±1.32	609±9.3	3.12±0.20
B017	Peas, dry (<i>Pisum sativum</i>)	6	0.10±0.017	0.61±0.082	0.17±0.060		6.13±0.11	2.91±0.09	84.85±1.82	413±17.8	1.40±0.20
B018	Rajmah, black (<i>Phaseolus vulgaris</i>)	2	0.10	1.44	0.02		2.59	16.50	63.20	470	2.30
B019	Rajmah, brown (<i>Phaseolus vulgaris</i>)	6	0.05±0.019	1.41±0.312	0.02±0.008		2.50±0.13	16.44±0.26	64.18±2.25	481±12.0	2.85±0.65
B020	Rajmah, red (<i>Phaseolus vulgaris</i>)	3	0.07±0.040	1.42±0.565	0.03±0.010		2.60±0.20	16.23±0.15	64.67±2.18	465±19.0	2.79±0.40
B021	Red gram, dal (<i>Cajanus cajan</i>)	6	0.33±0.052	0.81±0.120	0.67±0.139		7.39±0.25	9.46±0.74	68.59±1.39	277±23.4	1.56±0.19
B022	Red gram, whole (<i>Cajanus cajan</i>)	6	0.24±0.072	0.64±0.174	0.61±0.142		6.60±0.22	10.49±0.74	69.10±1.35	604±10.8	1.89±0.09
B023	Ricebean (<i>Vigna umbellata</i>)	1	0.05	5.00			0.85	3.13	25.45	486	
B024	Soybean, brown (<i>Glycine max</i>)	6	0.33±0.087	2.01±0.456	0.04±0.016		14.48±0.38	10.38±0.26	88.47±1.53	443±24.6	7.39±0.85
B025	Soybean, white (<i>Glycine max</i>)	1	0.31	1.81	0.05		14.40	10.40	88.09	460	7.51

C GREEN LEAFY VEGETABLES

C001	Agathi leaves (<i>Sesbania grandiflora</i>)	1				4.42	1.37	5.94	63.33	0.69
C002	Amaranth leaves, green (<i>Amaranthus gangeticus</i>)	6				1.07±0.02	2.69±0.09	16.76±1.29	5.42±0.25	
C003	Amaranth leaves, red (<i>Amaranthus gangeticus</i>)	1				1.08	2.85	16.34	4.90	

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

408

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			↔	g	→		↔	mg	→		g
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
C004	Amaranth leaves, red and green mix (<i>Amaranthus gangeticus</i>)	4					1.06±0.02	2.71±0.14	16.91±1.45	4.89±1.20	
C005	Amaranth spinosus, leaves, green (<i>Amaranthus spinosus</i>)	4					0.72±0.01	5.71±0.17	33.33±2.14	7.40±0.68	
C006	Amaranth spinosus, leaves, red and green mix (<i>Amaranthus spinosus</i>)	2					0.77	5.54	32.38	7.15	
C007	Basella leaves (<i>Basella alba</i>)	2					1.17	2.25	9.91	49.57	0.06
C008	Bathua leaves (<i>Chenopodium album</i>)	2					0.57	3.01	8.99	18.48	0.63
C009	Beet greens (<i>Beta vulgaris</i>)	6					0.86±0.00	3.21±0.00	15.56±0.00	19.01±2.53	0.43±0.00
C010	Betel leaves, big (Kolkata) (<i>Piper betle</i>)	6	0.01±0.000				4.09±0.02	3.53±0.05	32.83±0.21	57.98±14.04	0.42±0.03
C011	Betel leaves, small (<i>Piper betle</i>)	4	0.01±0.000				3.86±0.03	3.39±0.06	31.61±0.36	45.34±13.15	0.40±0.02
C012	Brussels sprouts (<i>Brassica oleracea</i> var. <i>gemmifera</i>)	1					4.01	0.93	38.20	18.32	0.25
C013	Cabbage, Chinese (<i>Brassica rupa</i>)	1					2.06	0.13	17.27	16.85	
C014	Cabbage, collard greens (<i>Brassica oleracea</i> var. <i>viridis</i>)	1	0.06				2.55	0.28	16.43	12.08	
C015	Cabbage, green (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>alba</i>)	6					2.46±0.04	0.27±0.03	16.10±1.16	11.77±0.14	
C016	Cabbage, violet (<i>Brassica oleracea</i> var. <i>capitata</i> f. <i>rubra</i>)	2					2.54	0.25	15.80	12.81	
C017	Cauliflower leaves (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6	0.04±0.004				1.96±0.02	0.44±0.03	15.55±0.51	13.60±0.13	
C018	Colocasia leaves, green (<i>Colocasia esculenta</i>)	6					3.66±0.12	10.50±0.29	23.67±0.26	14.41±0.42	0.39±0.05
C019	Drumstick leaves (<i>Moringa oleifera</i>)	3	0.01±0.010	0.03±0.013			4.27±0.14	2.02±0.03	28.92±1.03	128±9.0	0.48±0.05
C020	Fenugreek leaves (<i>Trigonella foenum graecum</i>)	5	0.03±0.021				1.39±0.03	2.37±0.14	28.31±0.78	18.67±0.41	
C021	Garden cress (<i>Lepidium sativum</i>)	2					1.77	12.14	13.48	16.64	0.62

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			↔	g	→	↔	mg	→	g		
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
C022	Gogu leaves, green (<i>Hibiscus cannabinus</i>)	4					4.55±0.25	6.25±0.43	72.17±1.15	48.43±0.66	
C023	Gogu leaves, red (<i>Hibiscus cannabinus</i>)	1					4.04	5.94	75.89	43.17	
C024	Knol-Khol, leaves (<i>Brassica oleracea</i> var. <i>gongylodes</i>)	2					3.90	0.29	23.38	47.33	0.88
C025	Lettuce (<i>Lactuca sativa</i>)	3					0.42±0.01	1.73±0.04	6.39±0.17	42.28±7.52	0.11±0.05
C026	Mustard leaves (<i>Brassica juncea</i>)	3	0.01±0.008	0.01±0.00	0.01±0.004		2.05±0.06	0.57±0.04	16.16±0.28	34.69±2.32	0.48±0.15
C027	Pak Choi leaves (<i>Brassica rapa</i> var. <i>Chinensis</i>)	1					2.02	0.93	14.35	18.05	
C028	Parsley (<i>Petroselinum crispum</i>)	3					2.08±0.04	16.48±0.38	13.64±0.26	54.32±0.54	1.03±0.08
C029	Ponnaganni (<i>Alternanthera sessilis</i>)	2					1.07	6.11	24.72	32.02	0.88
C030	Pumpkin leaves, tender (<i>Cucurbita maxima</i>)	6	0.03±0.009				0.33±0.02	2.52±0.08	18.32±0.77	38.27±1.20	
C031	Radish leaves (<i>Raphanus sativus</i>)	6					2.15±0.03	0.94±0.03	17.44±0.41	56.23±10.05	0.08±0.02
C032	Rumex leaves (<i>Rumex patientia</i>)	2					0.13	7.47	3.81	30.07	0.31
C033	Spinach (<i>Spinacia oleracea</i>)	6					0.77±0.03	5.44±0.13	17.39±0.14	12.01±0.34	
C034	Tamarind leaves, tender (<i>Tamarindus indica</i>)	3					4.81±0.10	0.64±0.12	46.05±3.16	33.87±0.12	

D OTHER VEGETABLES

D001	Ash gourd (<i>Benincasa hispida</i>)	6					0.16±0.01	0.45±0.02	2.38±0.13	14.60±0.32	
D002	Bamboo shoot, tender (<i>Bambusa vulgaris</i>)	1	0.01	0.01			2.44	1.27	15.49	19.78	0.05
D003	Bean scarlet, tender (<i>Phaseolus coccineus</i>)	5					1.64±0.38	5.90±0.73	19.20±1.45	17.33±2.13	0.17±0.00
D004	Bitter gourd, jagged, teeth ridges, elongate (<i>Momordica charantia</i>)	6					0.45±0.03	1.62±0.27	11.88±0.75	13.84±1.43	

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

410

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β -Sitosterol		
			↔	g	→	↔	mg	→	g		
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
D005	Bitter gourd, jagged, teeth ridges, short (<i>Momordica charantia</i>)	4					0.45±0.02	1.71±0.30	12.26±1.18	14.39±1.16	
D006	Bitter gourd, jagged, smooth ridges, elongate (<i>Momordica charantia</i>)	1					0.43	1.39	12.24	12.68	
D007	Bottle gourd, elongate, pale green (<i>Lagenaria vulgaris</i>)	6					0.22±0.01	0.92±0.06	6.40±0.10	10.64±0.73	
D008	Bottle gourd, round, pale green (<i>Lagenaria vulgaris</i>)	5					0.21±0.01	1.00±0.06	6.02±0.20	11.83±0.27	
D009	Bottle gourd, elongate, dark green (<i>Lagenaria vulgaris</i>)	1					0.25	1.08	6.61	10.86	
D010	Brinjal-1 (<i>Solanum melongena</i>)	1					0.68	1.60	8.44	14.63	
D011	Brinjal-2 (<i>Solanum melongena</i>)	1					0.74	1.96	7.01	15.46	
D012	Brinjal-3 (<i>Solanum melongena</i>)	2					0.78	1.30	7.97	12.79	
D013	Brinjal-4 (<i>Solanum melongena</i>)	4					0.73±0.05	1.52±0.19	7.82±0.26	14.43±1.44	
D014	Brinjal-5 (<i>Solanum melongena</i>)	3					0.69±0.04	1.71±0.23	7.85±0.66	12.55±4.14	
D015	Brinjal-6 (<i>Solanum melongena</i>)	2					0.73	1.83	7.13	9.51	
D016	Brinjal-7 (<i>Solanum melongena</i>)	1					0.76	1.65	8.13	18.39	
D017	Brinjal-8 (<i>Solanum melongena</i>)	3					0.72±0.05	1.73±0.09	8.42±0.32	11.29±5.13	
D018	Brinjal-9 (<i>Solanum melongena</i>)	2					0.69	1.51	8.57	11.49	
D019	Brinjal-10 (<i>Solanum melongena</i>)	2					0.71	1.78	7.86	15.03	
D020	Brinjal-11 (<i>Solanum melongena</i>)	6					0.70±0.05	1.60±0.21	8.24±0.38	13.32±3.27	
D021	Brinjal-12 (<i>Solanum melongena</i>)	2					0.68	1.66	8.01	13.41	
D022	Brinjal-13 (<i>Solanum melongena</i>)	1					0.76	1.80	8.10	7.00	
D023	Brinjal-14 (<i>Solanum melongena</i>)	3					0.68±0.02	1.68±0.09	7.83±0.18	15.75±1.44	
D024	Brinjal-15 (<i>Solanum melongena</i>)	4					0.72±0.06	1.58±0.28	8.59±0.23	11.01±3.09	

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasteryl	β -Sitosterol		
			\leftarrow g \rightarrow				\leftarrow mg \rightarrow				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
D025	Brinjal-16 (<i>Solanum melongena</i>)	1					0.66	1.58	8.13	5.82	
D026	Brinjal-17 (<i>Solanum melongena</i>)	1					0.75	1.81	7.08	15.41	
D027	Brinjal-18 (<i>Solanum melongena</i>)	3					0.71±0.05	1.81±0.24	8.15±0.09	9.42±5.15	
D028	Brinjal-19 (<i>Solanum melongena</i>)	3					0.73±0.08	1.84±0.13	8.54±0.16	10.96±5.14	
D029	Brinjal-20 (<i>Solanum melongena</i>)	5					0.72±0.05	1.82±0.09	8.21±0.27	10.55±4.33	
D030	Brinjal-21 (<i>Solanum melongena</i>)	2					0.71	1.78	7.52	8.24	
D031	Brinjal - all varieties (<i>Solanum melongena</i>)	6					0.71±0.05	1.67±0.21	8.09±0.47	12.28±3.87	
D032	Broad beans (<i>Vicia faba</i>)	3					0.82±0.02	3.26±0.01	13.58±0.34	5.78±0.42	0.45±0.04
D033	Capsicum, green (<i>Capsicum annuum</i>)	6					1.25±0.03	0.25±0.01	4.84±0.03	15.96±2.94	0.33±0.04
D034	Capsicum, red (<i>Capsicum annuum</i>)	4					1.09±0.12	0.35±0.25	4.19±1.53	17.68±0.52	0.47±0.15
D035	Capsicum, yellow (<i>Capsicum annuum</i>)	4					0.79±0.48	0.23±0.05	6.18±2.97	14.81±0.00	0.31±0.00
D036	Cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i>)	6					1.84±0.06	1.30±0.13	12.56±0.49	18.48±1.72	
D037	Celery stalk (<i>Apium graveolens</i>)	3					4.75±0.08	0.39±0.01	4.12±0.07	25.66±2.55	0.07±0.01
D038	Cho-cho-marrow (<i>Sechium edule</i>)	4					0.08±0.01	0.44±0.03	1.66±0.21	19.42±0.61	
D039	Cluster beans (<i>Cyamopsis tetragonoloba</i>)	6					1.03±0.03	8.83±0.08	16.50±0.26	8.66±0.19	2.44±1.18
D040	Colocasia, stem, black (<i>Colocasia esculenta</i>)	1					3.15	2.03	16.77	25.85	0.70
D041	Colocasia, stem, green (<i>Colocasia esculenta</i>)	5					3.42±0.06	2.03±0.02	17.77±0.06	26.49±0.68	0.56±0.02
D042	Corn, baby (<i>Zea mays</i>)	6	0.02±0.000	0.01±0.000			3.82±0.00	4.69±0.00	20.20±0.00	26.44±1.43	
D043	Cucumber, green, elongate (<i>Cucumis sativus</i>)	6					1.36±0.09	0.34±0.03	7.54±0.15	17.52±0.43	
D044	Cucumber, green, short (<i>Cucumis sativus</i>)	6					1.36±0.13	0.35±0.02	7.57±0.27	16.35±0.37	

411

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

14

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			↔	g	→		↔	mg	→		g
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
D045	Cucumber, orange, round (<i>Cucumis sativus</i>)	2					1.32	0.36	7.33	15.80	
D046	Drumstick (<i>Moringa oleifera</i>)	6					3.76±0.13	2.40±0.20	16.61±0.30	85.74±2.67	
D047	Field beans, tender, broad (<i>Vicia faba</i>)	2	0.01				0.74	4.59	15.17	4.81	3.00
D048	Field beans, tender, lean (<i>Vicia faba</i>)	6	0.01±0.005				0.75±0.03	4.38±0.35	15.07±0.69	5.24±0.34	2.93±0.14
D049	French beans, country (<i>Phaseolus vulgaris</i>)	5					0.96±0.02	4.45±0.21	17.35±1.15	6.11±0.27	3.44±0.20
D050	French beans, hybrid (<i>Phaseolus vulgaris</i>)	2					0.98	4.09	17.65	7.51	2.90
D051	Jack fruit, raw (<i>Artocarpus heterophyllus</i>)	5					2.94±0.04	16.36±1.44	43.10±1.68	68.79±1.14	
D052	Jack fruit, seed, mature (<i>Artocarpus heterophyllus</i>)	5					1.59±0.07	3.66±0.18	24.26±0.69	141±13.2	
D053	Knol - Khol (<i>Brassica oleracea</i>)	6					1.57±0.05	0.21±0.01	8.53±0.32	16.16±1.30	
D054	Kovai, big (<i>Coccinia cordifolia</i>)	6					2.29±0.13	0.87±0.05	23.62±1.66	9.81±0.42	
D055	Kovai, small (<i>Coccinia cordifolia</i>)	1					2.36	0.93	25.22	8.79	
D056	Ladies finger (<i>Abelmoschus esculentus</i>)	6					2.80±0.12	3.72±0.25	16.23±0.67	3.63±0.24	
D057	Mango, green, raw (<i>Mangifera indica</i>)	6					2.09±0.08	1.62±0.12	27.62±1.32	15.26±0.29	
D058	Onion, stalk (<i>Allium cepa</i>)	6					1.14±0.02	18.49±0.02	17.32±0.08	61.02±2.54	0.54±0.04
D059	Papaya, raw (<i>Carica papaya</i>)	6					3.18±0.08	2.40±0.02	9.19±0.09	22.08±1.80	0.43±0.04
D060	Parwar (<i>Trichosanthes dioica</i>)	6					0.12±0.01	0.95±0.02	7.60±0.10	29.19±0.64	0.29±0.03
D061	Peas, fresh (<i>Pisum sativum</i>)	6	0.01±0.000	0.05±0.011	0.01±0.000		2.56±0.03	1.54±0.02	42.23±0.80	162±10.8	1.26±0.43
D062	Plantain, flower (<i>Musa x paradisiaca</i>)	6					6.28±0.25	6.19±0.21	9.59±0.31	2.52±0.23	
D063	Plantain, green (<i>Musa x paradisiaca</i>)	6					2.25±0.21	1.71±0.07	16.32±0.20	40.44±0.21	
D064	Plantain, stem (<i>Musa x paradisiaca</i>)	6					6.22±0.03	8.31±0.06	31.92±0.90	15.33±0.46	0.76±0.04

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			↔	g	→		↔	mg	→		
			RAFS	STAS	VERS		CAMT	STGSTR	PHYTAC		
D065	Pumpkin, green, cylindrical (<i>Cucurbita maxima</i>)	1	0.02				0.18	0.72	2.34	22.51	
D066	Pumpkin, orange, round (<i>Cucurbita maxima</i>)	6	0.01±0.005				0.17±0.01	0.73±0.02	2.48±0.10	19.72±1.81	
D067	Red gram, tender, fresh (<i>Cajanus cajan</i>)	1	0.01	0.03	0.01		3.15	2.44	32.41	6.22	0.46
D068	Ridge gourd (<i>Luffa acutangula</i>)	6					0.13±0.02	0.61±0.05	3.93±0.17	14.91±0.79	
D069	Ridge gourd, smooth skin (<i>Luffa acutangula</i>)	3					0.13±0.01	0.65±0.04	4.05±0.12	14.98±0.80	
D070	Snake gourd, long, pale green (<i>Trichosanthes anguina</i>)	6					0.26±0.02	0.87±0.02	4.28±0.10	13.44±0.44	
D071	Snake gourd, long, dark green (<i>Trichosanthes anguina</i>)	2					0.25	0.85	4.46	13.04	
D072	Snake gourd, short (<i>Trichosanthes anguina</i>)	1					0.22	0.81	4.20	12.82	
D073	Tinda, tender (<i>Praecitrullus fistulosus</i>)	6					1.33±0.14	0.73±0.01	7.02±0.52	5.75±0.19	
D074	Tomato, green (<i>Solanum lycopersicum</i>)	6					0.34±0.01	0.86±0.01	3.55±0.02	1.08±0.10	0.37±0.02
D075	Tomato, ripe, hybrid (<i>Solanum lycopersicum</i>)	6					0.33±0.02	0.85±0.03	2.33±0.09	2.59±0.28	
D076	Tomato, ripe, local (<i>Solanum lycopersicum</i>)	6					0.29±0.02	0.76±0.03	2.24±0.12	2.39±0.18	
D077	Zucchini, green (<i>Cucurbita pepo</i>)	2					1.01	0.35	7.65	10.57	
D078	Zucchini, yellow (<i>Cucurbita pepo</i>)	2					0.88	0.42	8.77	11.50	

E FRUITS

E001	Apple, big (<i>Malus domestica</i>)	6					0.41±0.00	0.35±0.00	14.94±0.00	0.57±0.07	
E002	Apple, green (<i>Malus domestica</i>)	6					0.22±0.00	0.54±0.00	13.76±0.00	0.64±0.05	
E003	Apple, small (<i>Malus domestica</i>)	6					0.66±0.07	0.51±0.01	14.15±1.00	0.45±0.04	
E004	Apple, small, Kashmir (<i>Malus domestica</i>)	1					0.72	0.61	15.33	0.36	

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

414

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			\longleftrightarrow g \longrightarrow				\longleftrightarrow mg \longrightarrow				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
E005	Apricot, dried (<i>Prunus armeniaca</i>)	6	0.24±0.039				1.17±0.05	5.18±0.20	7.76±0.18		194±19.5
E006	Apricot, processed (<i>Prunus armeniaca</i>)	3					1.03±0.03	4.65±0.14	7.20±0.12		112±3.0
E007	Avocado fruit (<i>Persea</i> sp.)	1					12.88	2.58	156		356
E008	Bael fruit (<i>Aegle marmelos</i>)	1					0.30	0.41	3.39		28.65
E009	Banana, ripe, montham (<i>Musa x paradisiaca</i>)	1					1.18	1.23	10.15		12.49
E010	Banana, ripe, poovam (<i>Musa x paradisiaca</i>)	2					1.31	1.46	12.10		11.03
E011	Banana, ripe, red (<i>Musa x paradisiaca</i>)	1					1.22	1.39	12.20		10.06
E012	Banana, ripe, robusta (<i>Musa x paradisiaca</i>)	6					0.85±0.03	0.84±0.07	9.66±0.13		13.98±1.75
E013	Black berry (<i>Rubus</i> sp.)	5					0.80±0.03	0.12±0.01	34.65±1.66		8.97±0.17
E014	Cherries, red (<i>Prunus cerasus</i>)	4					0.56±0.01	0.07±0.00	17.65±0.18	39.88±0.57	1.60±0.02
E015	Currants, black (<i>Ribes nigrum</i>)	1					3.53	1.72	17.88	9.60	1.60
E016	Custard apple (<i>Annona squamosa</i>)	1					0.65	2.19	3.81		15.22
E017	Dates, dry, pale brown (<i>Phoenix dactylifera</i>)	6					1.83±0.08	1.35±0.14	29.78±0.34		134±20.5
E018	Dates, dry, dark brown (<i>Phoenix dactylifera</i>)	2					1.73	1.27	27.24		126
E019	Dates, processed (<i>Phoenix dactylifera</i>)	2					1.73	1.22	26.30		106
E020	Fig (<i>Ficus carica</i>)	6					0.58±0.00	1.67±0.00	32.31±0.00	48.59±4.55	1.00±0.17
E021	Gooseberry (<i>Emblica officinalis</i>)	5					0.23±0.01	0.23±0.01	11.50±0.27	49.34±3.36	0.40±0.12
E022	Grapes, seeded, round, black (<i>Vitis vinifera</i>)	4					0.55±0.02	0.26±0.01	12.34±0.20		1.52±0.22
E023	Grapes, seeded, round, green (<i>Vitis vinifera</i>)	5					0.47±0.01	0.24±0.02	10.29±0.15		1.27±0.11
E024	Grapes, seeded, round, red (<i>Vitis vinifera</i>)	5					0.46±0.07	0.28±0.03	10.66±0.67		1.60±0.19

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			↔	g	→		↔	mg	→		
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
E025	Grapes, seedless, oval, black (<i>Vitis vinifera</i>)	5					0.54±0.15	0.29±0.03	13.06±1.73	1.00±0.12	
E026	Grapes, seedless, round, green (<i>Vitis vinifera</i>)	5					0.42±0.08	0.27±0.05	14.30±0.66	0.85±0.05	
E027	Grapes, seedless, round, black (<i>Vitis vinifera</i>)	5					0.53±0.05	0.28±0.02	13.56±0.94	0.69±0.09	
E028	Guava, white flesh (<i>Psidium guajava</i>)	5					0.57±0.01	0.11±0.01	43.09±1.33	55.36±2.30	
E029	Guava, pink flesh (<i>Psidium guajava</i>)	5					0.59±0.05	0.22±0.01	40.40±0.23	45.89±6.29	1.05±0.15
E030	Jack fruit, ripe (<i>Artocarpus heterophyllus</i>)	5					1.04±0.04	19.21±1.16	34.84±1.02	52.94±3.15	
E031	Jambu fruit, ripe (<i>Syzygium samarangense</i>)	2					0.76	0.14	25.45	8.65	1.55
E032	Karonda fruit (<i>Carissa carandas</i>)	1					0.72	0.48	4.92	7.80	
E033	Lemon, juice (<i>Citrus limon</i>)	6									
E034	Lime, sweet,pulp (<i>Citrus limetta</i>)	6									
E035	Litchi (<i>Litchi chinensis</i>)	4					5.30±0.03	1.43±0.03	10.67±0.15	2.57±0.14	1.04±0.04
E036	Mango, ripe, banganapalli (<i>Mangifera indica</i>)	6					0.87±0.04	0.47±0.01	11.41±0.68	85.83±3.60	
E037	Mango, ripe, gulabkhas (<i>Mangifera indica</i>)	2					0.84	0.41	12.34	80.24	
E038	Mango, ripe, himsagar (<i>Mangifera indica</i>)	3					0.88±0.06	0.44±0.02	11.39±0.73	79.46±1.30	
E039	Mango, ripe, kesar (<i>Mangifera indica</i>)	4					0.87±0.03	0.43±0.01	11.07±0.51	90.02±1.55	
E040	Mango, ripe, neelam (<i>Mangifera indica</i>)	2					0.91	0.43	10.15	79.49	
E041	Mango, ripe, paheri (<i>Mangifera indica</i>)	2					0.90	0.47	11.66	81.12	
E042	Mango, ripe, totapari (<i>Mangifera indica</i>)	1					0.94	0.49	10.22	75.13	
E043	Mangosteen (<i>Garcinia mangostana</i>)	1					0.67	0.37	4.32	16.75	

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

416

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			RAFS	STAS	VERS		CAMT	STGSTR		mg	g
E044	Manila tamarind (<i>Pithecellobium dulce</i>)	1					0.29	0.97	16.43	22.55	
E045	Musk melon, orange flesh (<i>Cucumis melon</i>)	5					0.15±0.00	0.38±0.01	2.74±0.07	12.18±1.26	
E046	Musk melon, yellow flesh (<i>Cucumis melon</i>)	6					0.16±0.00	0.40±0.00	2.89±0.03	11.11±1.25	
E047	Orange, pulp (<i>Citrus aurantium</i>)	6									
E048	Palm fruit, tender (<i>Borassus flabellifer</i>)	1								2.80	
E049	Papaya, ripe (<i>Carica papaya</i>)	6					1.80±0.04	1.12±0.04	4.82±0.14	25.44±1.66	0.49±0.06
E050	Peach (<i>Prunus communis</i>)	1					0.50	0.71	14.42	4.55	
E051	Pear (<i>Pyrus</i> sp.)	6					0.64±0.02	0.23±0.02	13.33±0.08	4.83±0.81	0.99±0.05
E052	Phalsa (<i>Grewia asiatica</i>)	2					2.28	1.48	24.97	43.03	0.63
E053	Pineapple (<i>Ananas comosus</i>)	6					1.38±0.06	0.22±0.02	9.25±0.16	8.59±0.33	1.13±0.11
E054	Plum (<i>Prunus domestica</i>)	3					0.86±0.10	0.45±0.09	13.63±3.20	3.81±0.32	
E055	Pomegranate, maroon seeds (<i>Punica granatum</i>)	6					0.83±0.03	0.34±0.02	20.79±0.46	45.71±2.97	0.44±0.05
E056	Pummelo (<i>Citrus maxima</i>)	3					34.39±2.85	0.92±0.09	23.70±3.22	20.36±0.51	88.76±4.50
E057	Raisins, dried, black (<i>Vitis vinifera</i>)	6					1.89±0.04	1.05±0.05	41.10±0.10	20.34±1.86	2.60±0.13
E058	Raisins, dried, golden (<i>Vitis vinifera</i>)	6					1.76±0.11	0.93±0.04	38.46±0.69	20.12±1.58	2.74±0.20
E059	Rambutan (<i>Nephelium lappaceum</i>)	1								5.65	
E060	Sapota (<i>Achras sapota</i>)	6					1.48±0.10	1.48±0.13	72.80±1.95	8.32±0.67	
E061	Soursop (<i>Annona muricata</i>)	1					4.71	1.12	10.88	2.75	
E062	Star fruit (<i>Averrhoa carambola</i>)	1					0.96	0.41	41.65	3.80	
E063	Strawberry (<i>Fragaria x ananassa</i>)	6					1.71±0.10	0.33±0.02	9.00±0.96	25.07±3.24	

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			$\leftarrow g \rightarrow$				$\leftarrow mg \rightarrow$				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
E064	Tamarind, pulp (<i>Tamarindus indica</i>)	6					4.30±0.20	0.54±0.02	43.29±1.46	3.07±0.32	
E065	Water melon, dark green (sugar baby) (<i>Citrullus vulgaris</i>)	6								0.61±0.09	
E066	Water melon, pale green (<i>Citrullus vulgaris</i>)	6								0.47±0.06	
E067	Wood Apple (<i>Limonia acidissima</i>)	3	0.01±0.000	0.01±0.000			3.86±0.10	4.63±0.02	20.55±0.40	101±7.7	0.28±0.01
E068	Zizyphus (<i>Zizyphus jujube</i>)	1					0.63	0.39	10.09	85.60	

F ROOTS AND TUBERS

417

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

F001	Beet root (<i>Beta vulgaris</i>)	6	0.01±0.005				0.44±0.02	3.34±0.09	12.15±0.91	10.82±0.41	
F002	Carrot, orange (<i>Ducus carota</i>)	6	0.01±0.005				1.63±0.15	2.47±0.12	17.22±0.78	19.60±0.28	
F003	Carrot, red (<i>Ducus carota</i>)	4	0.01±0.006				1.80±0.14	2.37±0.03	17.90±0.45	17.03±0.16	
F004	Colocasia (<i>Colocasia esculenta</i>)	6					3.55±0.20	2.30±0.10	28.45±1.08	13.57±1.07	
F005	Lotus root (<i>Nelumbium nelumbo</i>)	3					1.17±0.02	1.06±0.02	14.75±0.14	7.84±0.08	0.55±0.06
F006	Potato, brown skin, big (<i>Solanum tuberosum</i>)	6					0.02±0.00	0.16±0.01	2.10±0.08	55.77±9.06	
F007	Potato, brown skin, small (<i>Solanum tuberosum</i>)	1					0.03	0.16	2.19	62.58	
F008	Potato, red skin (<i>Solanum tuberosum</i>)	1					0.03	0.15	2.07	59.74	
F009	Radish, elongate, red skin (<i>Raphanus sativus</i>)	3					1.57±0.10	0.34±0.01	9.55±0.11	6.90±1.06	
F010	Radish, elongate, white skin (<i>Raphanus sativus</i>)	6					1.61±0.09	0.36±0.02	9.71±0.21	1.75±0.06	
F011	Radish, round, red skin (<i>Raphanus sativus</i>)	1	0.01				1.54	0.32	9.88	7.07	
F012	Radish, round, white skin (<i>Raphanus sativus</i>)	2					1.62	0.33	9.40	1.07	

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			↔	g	↔		↔	mg	↔		g
			RAFS	STAS	VERS		CAMT	STGSTR	PHYTAC		
F013	Sweet potato, brown skin (<i>Ipomoea batatas</i>)	4					2.18±0.03	0.52±0.01	13.75±0.14	54.02±0.63	1.19±0.04
F014	Sweet potato, pink skin (<i>Ipomoea batatas</i>)	3					2.31±0.03	0.57±0.01	13.68±0.28	63.69±3.86	1.56±0.10
F015	Tapioca (<i>Manihot esculenta</i>)	3	0.02±0.006				2.13±0.07	0.82±0.05	15.72±0.87	64.42±4.53	
F016	Water Chestnut (<i>Eleocharis dulcis</i>)	1					0.16	0.43	4.55	25.86	
F017	Yam, elephant (<i>Amorphophallus campanulatus</i>)	6					2.66±0.09	3.36±0.08	13.46±0.15	16.23±0.80	
F018	Yam, ordinary (<i>Amorphophallus</i> sp.)	4	0.02±0.016				2.51±0.10	1.56±0.15	19.00±0.72	20.99±1.37	
F019	Yam, wild (<i>Dioscorea villosa</i>)	2					2.30	3.03	13.58	24.71	0.46

418

G CONDIMENTS AND SPICES-FRESH

G001	Chillies, green-1 (<i>Capsicum annum</i>)	5					3.59±0.38	0.85±0.09	15.09±0.49	13.54±0.35	
G002	Chillies, green-2 (<i>Capsicum annum</i>)	3					3.65±0.19	0.87±0.07	15.07±0.65	13.96±2.21	
G003	Chillies, green-3 (<i>Capsicum annum</i>)	5					3.73±0.19	0.86±0.09	15.07±0.47	14.56±2.74	
G004	Chillies, green-4 (<i>Capsicum annum</i>)	3					3.52±0.26	0.86±0.04	14.85±0.46	12.31±1.85	
G005	Chillies, green-5 (<i>Capsicum annum</i>)	2					3.60±0.43	0.86±0.10	15.09±0.63	12.45±2.55	
G006	Chillies, green-6 (<i>Capsicum annum</i>)	1					3.54	0.83	15.30	10.39	
G007	Chillies, green-7 (<i>Capsicum annum</i>)	1					3.81	0.84	15.15	13.29	
G008	Chillies, green - all varieties (<i>Capsicum annum</i>)	6					3.64±0.26	0.86±0.07	15.06±0.49	13.38±2.05	
G009	Coriander leaves (<i>Coriandrum sativum</i>)	6	0.01±0.004				0.73±0.03	9.35±0.18	18.49±0.97	38.68±0.55	
G010	Curry leaves (<i>Murraya koenigii</i>)	6					10.47±0.13	0.74±0.03	73.92±1.71	40.99±2.41	0.23±0.02
G011	Garlic, big clove (<i>Allium sativum</i>)	6	0.13±0.047	0.13±0.034	0.06±0.022		1.27±0.03	0.32±0.01	12.36±1.10	36.55±4.46	

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g		
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol				
			$\leftarrow g \rightarrow$				$\leftarrow mg \rightarrow$						
			RAFS	STAS	VERS		CAMT	STGSTR	PHYTAC				
G012	Garlic, small clove (<i>Allium sativum</i>)	3	0.19±0.050	0.14±0.059	0.06±0.028		1.33±0.03	0.31±0.01	12.88±0.25	35.43±4.19			
G013	Garlic, single clove, Kashmir (<i>Allium sativum</i>)	1	0.22	0.12	0.06		1.21	0.37	13.66	31.95			
G014	Ginger, fresh (<i>Zingiber officinale</i>)	6					1.34±0.04	1.16±0.09	13.29±0.20	14.50±1.26			
G015	Mango ginger (<i>Curcuma amada</i>)	3					0.78±0.01	0.56±0.01	11.17±0.03	15.52±0.51	0.38±0.03		
G016	Mint leaves (<i>Mentha spicata</i>)	4	0.01±0.009	0.02±0.005			1.74±0.03	2.45±0.03	36.70±1.42	48.05±1.69	0.35±0.06		
G017	Onion, big (<i>Allium cepa</i>)	6	1.64±0.153	1.31±0.143	0.85±0.242		0.47±0.02	0.31±0.02	7.35±0.48	13.90±2.11			
G018	Onion, small (<i>Allium cepa</i>)	5	0.08±0.023				0.77±0.02	0.47±0.02	7.90±0.11	8.28±0.88	1.11±0.10		

G CONDIMENTS AND SPICES-DRY

419

G019	Asafoetida (<i>Ferula assa-foetida</i>)	6					4.21±0.14	2.02±0.11	29.13±0.62	806±46.4	1.78±0.31
G020	Cardamom, green (<i>Elettaria cardamomum</i>)	6					3.29±0.25	2.37±0.15	46.54±1.66	721±33.7	1.68±0.18
G021	Cardamom, black (<i>Elettaria cardamomum</i>)	4					3.36±0.03	2.59±0.01	50.80±0.72	670±38.7	1.40±0.17
G022	Chillies, red (<i>Capsicum annum</i>)	6					16.06±0.68	4.93±0.56	81.78±2.50	264±22.4	
G023	Cloves (<i>Syzygium aromaticum</i>)	6					1.28±0.14	5.02±0.28	211±5.1	349±22.5	0.55±0.02
G024	Coriander seeds (<i>Coriandrum sativum</i>)	6	0.37±0.052				9.60±0.17	17.60±0.28	75.77±2.45	1008±23.4	
G025	Cumin seeds (<i>Cuminum cyminum</i>)	6	0.44±0.050				9.36±0.29	33.96±1.29	106±3.2	445±24.9	
G026	Fenugreek seeds (<i>Trigonella foenum graecum</i>)	6	0.60±0.093	1.43±0.098	0.26±0.026		12.35±0.48	6.69±0.25	126±3.1	570±13.6	6.33±0.72
G027	Mace (<i>Myristica fragrans</i>)	6					3.56±0.22	5.95±0.19	44.96±1.47	691±23.0	1.48±0.11
G028	Nutmeg (<i>Myristica fragrans</i>)	6					6.10±0.14	8.91±0.28	94.48±2.01	704±13.9	2.26±0.09
G029	Omum (<i>Trachyspermum ammi</i>)	6					5.89±0.17	20.98±0.31	75.29±2.60	895±11.6	4.50±0.29
G030	Pippali (<i>Piper longum</i>)	6	0.02±0.005				8.28±0.14	17.94±0.39	29.18±1.09	503±9.9	0.04±0.01

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

420

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			\longleftrightarrow g \longrightarrow				\longleftrightarrow mg \longrightarrow				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
G031	Pepper, black (<i>Piper nigrum</i>)	6					4.90±0.17	10.16±0.15	64.74±1.05	383±16.0	0.87±0.05
G032	Poppy seeds (<i>Papaver somniferum</i>)	6	0.46±0.056				20.96±0.48	5.52±0.24	146±2.5	1109±3.9	5.53±0.29
G033	Turmeric powder (<i>Curcuma domestica</i>)	6					5.19±0.13	7.19±0.14	64.15±2.03	358±17.6	
H NUTS AND OIL SEEDS											
H001	Almond (<i>Prunus amygdalus</i>)	6	0.10±0.025	0.02±0.007			3.73±0.15	2.81±0.10	184±2.8	964±13.4	9.05±0.58
H002	Areca nut, dried, brown (<i>Areca catechu</i>)	6					5.28±0.11	3.36±0.12	44.73±0.48	474±16.0	
H003	Areca nut, dried, red color (<i>Areca catechu</i>)	3					5.37±0.23	3.46±0.11	48.93±0.44	403±9.9	
H004	Areca nut, fresh (<i>Areca catechu</i>)	2					5.17	3.39	45.24	414	
H005	Cashew nut (<i>Anacardium occidentale</i>)	6	2.62±0.433	0.21±0.047	0.01±0.002		3.64±0.07	0.89±0.04	110±2.5	929±22.9	9.84±0.31
H006	Coconut, kernel, dry (<i>Cocos nucifera</i>)	6					1.75±0.07	4.39±0.30	21.97±0.71	390±20.8	
H007	Coconut, kernel, fresh (<i>Cocos nucifera</i>)	6					1.17±0.06	2.45±0.07	14.59±0.20	136±2.5	
H008	Garden cress, seeds (<i>Lepidium sativum</i>)	5	3.56±0.741	0.91±0.224			63.85±0.83	7.98±0.09	261±3.3	1037±21.6	3.42±0.25
H009	Gingelly seeds, black (<i>Sesamum indicum</i>)	6	1.00±0.038	0.01±0.001	0.01±0.002		30.80±1.08	14.08±0.64	206±2.3	845±20.7	3.25±0.37
H010	Gingelly seeds, brown (<i>Sesamum indicum</i>)	4	0.86±0.275	0.01±0.003	0.01±0.001		32.34±0.60	14.11±0.22	207±2.0	921±10.4	6.40±0.23
H011	Gingelly seeds, white (<i>Sesamum indicum</i>)	5	0.93±0.332	0.01±0.008	0.02±0.000		34.13±1.23	14.89±0.17	219±1.1	927±38.8	5.64±0.20
H012	Ground nut (<i>Arachis hypogea</i>)	6	0.03±0.020	0.06±0.019			17.23±0.58	9.46±0.29	124±3.6	582±9.8	3.58±0.36
H013	Mustard seeds (<i>Brassica nigra</i>)	6	0.35±0.118	0.56±0.178			43.10±1.88	7.63±0.15	117±2.3	132±15.3	
H014	Linseeds (<i>Linum usitatissimum</i>)	6	3.52±0.359				31.48±0.23	7.25±0.03	112±0.2	1859±15.8	2.21±0.29
H015	Niger seeds, black (<i>Guizotia abyssinica</i>)	4	0.14±0.021				24.76±0.32	35.44±0.47	175±3.2	1974±13.6	9.30±0.56

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin		
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol				
			\longleftrightarrow g \longrightarrow				\longleftrightarrow mg \longrightarrow						
			RAFS	STAS	VERS		CAMT	STGSTR	PHYTAC				
H016	Niger seeds, gray (<i>Guizotia abyssinica</i>)	5	0.23±0.022	0.01±0.001			24.32±0.80	34.16±1.11	174±2.5	1709±70.7	5.02±0.81		
H017	Pine seed (<i>Pinus</i> sp.)	5					22.30±0.17	2.34±0.02	182±0.2	883±9.6	3.21±0.42		
H018	Pistachio nuts (<i>Pistacia vera</i>)	6	4.21±0.421	0.13±0.032			12.38±0.17	2.22±0.08	369±4.2	808±16.5	3.01±0.15		
H019	Safflower seeds (<i>Carthamus tinctorius</i>)	5	3.07±0.209	0.10±0.006	0.36±0.022		17.59±0.31	6.63±0.21	144±2.1	1083±10.7	4.41±0.30		
H020	Sunflower seeds (<i>Helianthus annuus</i>)	5	0.09±0.018				11.76±0.26	14.42±0.58	175±3.0	423±15.4	13.93±0.81		
H021	Walnut (<i>Juglans regia</i>)	6					2.99±0.13	1.36±0.08	125±3.2	1001±17.3	10.03±0.14		

I SUGARS

421

I001	Jaggery, cane (<i>Saccharum officinarum</i>)	6
I002	Sugarcane, juice (<i>Saccharum officinarum</i>)	6

J MUSHROOMS

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

J001	Button mushroom, fresh (<i>Agaricus</i> sp.)	1		0.93	1.25	7.04
J002	Chicken mushroom, fresh (<i>Lactiporus</i> sp.)	1		6.83	1.94	2.05
J003	Shiitake mushroom, fresh (<i>Lentinula</i> sp.)	1		7.35	2.19	2.91
J004	Oyster mushroom, dried (<i>Pleurotus</i> sp.)	1		7.72	2.03	2.72

K MISCELLANEOUS FOODS

K001	Toddy (<i>Saccharum officinarum</i>)	10				
K002	Coconut Water (<i>Cocos nucifera</i>)	6		0.02±0.00	0.04±0.00	0.05±0.00

Table 11. Oligosaccharides, Phytosterols, Phytates & Saponins

Food code	Food Name	No. of Regions	Oligosaccharides				Phytosterols			Phytate	Total Saponin g
			Raffinose	Stachyose	Verbascose	Ajugose	Campesterol	Stigmasterol	β-Sitosterol		
			\longleftrightarrow g \longrightarrow				\longleftrightarrow mg \longrightarrow				
			RAFS	STAS	VERS		CAMT	STGSTR		PHYTAC	
L MILK AND MILK PRODUCTS											
L001	Milk, whole, Buffalo	6									
L002	Milk, whole, Cow	6									
L003	Paneer	6									
L004	Khoa	6									

Table 12

**FATTY ACID PROFILE
OF
EDIBLE OILS AND FATS**



Table 12. FATTY ACID PROFILE OF EDIBLE OILS AND FATS

(All values are expressed in % of total methyester of fatty acid; All blank space in the table represent below detectable limit)

Food Code	Oil Name	No. of Regions	Butyric (C4:0)	Caproic (C6:0)	Caprylic (C8:0)	Capric (C10:0)	Lauric (C12:0)	Myristic (C14:0)	Palmitic (C16:0)	Stearic (C18:0)	Arachidic (C20:0)	Behenic (C22:0)	Lignoceric (C24:0)	
			← → %											
			F4D0	F6D0	F8D0	F10D0	F12D0	F14D0	F16D0	F18D0	F20D0	F22D0	F24D0	
T EDIBLE OILS AND FATS														
T001	Coconut oil	6			2.76±0.37	5.18±0.20	49.57±0.81	21.12±0.67	9.26±0.39	2.97±0.23				
T002	Corn oil	1							12.94	2.12	0.68	0.39	0.47	
T003	Cotton seed oil	1						0.91	23.40	2.79	0.42	0.34	0.31	
T004	Gingelly oil	6							9.34±0.57	5.75±0.40	0.67±0.05	0.25±0.04	0.22±0.07	
T005	Groundnut oil	5							10.27±0.72	3.38±0.08	1.39±0.13	2.66±0.32	1.25±0.13	
T006	Mustard oil	6							2.18±0.10	1.17±0.02	0.98±0.02	1.39±0.04		
T007	Palm oil	4							39.79±0.57	4.24±0.09				
T008	Rice bran oil	5						0.29±0.15	19.51±0.89	2.03±0.05	1.03±0.51	0.33±0.04	0.51±0.04	
T009	Safflower oil	3						0.18±0.10	6.24±0.53	2.35±0.16	0.26±0.06	0.17±0.05		
T010	Safflower oil (blended)	4							15.71±0.48	2.28±0.08	0.83±0.33	0.31±0.04	0.40±0.03	
T011	Soyabean oil	6							11.51±0.38	4.08±0.58	0.37±0.02			
T012	Sunflower oil	6							6.43±0.18	3.69±0.07	0.32±0.04	0.66±0.03	0.29±0.04	
T013	Ghee	6	0.22±0.08	0.30±0.13	0.47±0.20	1.87±0.34	2.81±0.38	11.81±0.57	39.13±1.15	13.89±1.17	0.52±0.12			
T014	Vanaspati	6						0.37±0.05	1.19±0.05	53.10±1.55	5.98±0.44	0.81±0.07		

Table 12. Fatty acid profile of edible oils and fats

426

Food Code	Oil Name	No. of Regions	Myristoleic (C14:1)	Palmitoleic (C16:1)	Elaidic (C18:1n9t)	Oleic (C18:1n9)	Eicosenoic (C20:1n9)	Erucic (C22:1n9)	Linoleic (C18:2n6)	α -Linolenic (C18:3n3)	Total Saturated Fatty Acids (TSFA)	Total Mono Unsaturated Fatty Acids (TMUFA)	Total Poly Unsaturated Fatty Acids (TPUFA)
			% ← →										
			F14D1	F16D1	F18D1TN9	F18D1N9	F20D1N9	F22D1N9	F18D2N6	F18D3N3	FASAT	FAMS	FAPU
T EDIBLE OILS AND FATS													
T001	Coconut oil	6				7.24±0.25			1.90±0.14		90.86±0.33	7.24±0.25	1.90±0.14
T002	Corn oil	1		1.70		31.97			48.97	0.76	16.60	33.67	49.74
T003	Cotton seed oil	1		1.84		17.82			51.81	0.35	28.17	19.66	52.16
T004	Gingelly oil	6		0.27±0.09		40.87±0.54	0.27±0.04		41.96±0.87	0.39±0.08	16.25±0.73	41.41±0.62	42.34±0.89
T005	Groundnut oil	5				53.89±1.08			27.17±0.99		18.94±1.26	53.89±1.08	27.17±0.99
T006	Mustard oil	6		0.16±0.04		10.18±0.48	5.45±0.25	51.30±0.96	15.55±0.15	11.64±0.34	5.72±0.09	67.09±0.48	27.19±0.44
T007	Palm oil	4		0.27±0.03		43.26±0.42			11.18±0.28	0.30±0.03	44.98±0.67	43.53±0.40	11.49±0.29
T008	Rice bran oil	5		0.28±0.03		43.84±0.76			31.56±0.65	0.56±0.13	23.76±0.58	44.12±0.74	32.12±0.68
T009	Safflower oil	3		0.24±0.02		13.80±0.62	0.17±0.02		76.58±1.10	0.13±0.03	9.19±0.58	14.04±0.60	76.78±1.15
T010	Safflower oil (blended)	4		0.24±0.04		37.37±1.68			42.09±1.94	0.78±0.23	19.53±0.54	37.61±1.71	42.86±2.16
T011	Soyabean oil	6				24.06±1.75			54.78±1.45	5.20±0.33	15.96±0.37	24.06±1.75	59.98±1.57
T012	Sunflower oil	6				25.96±1.54			62.65±1.56		11.39±0.10	25.96±1.54	62.65±1.56
T013	Ghee	6	0.95±0.17	1.86±0.16	0.44±0.09	23.19±1.46			2.00±0.62	0.55±0.11	71.02±4.13	26.44±1.88	2.54±0.73
T014	Vanaspati	6			4.68±0.92	29.19±1.35			4.69±0.56		61.44±1.60	33.87±1.42	4.69±0.56

FOOD PICTURE AND DESCRIPTION





A001. Amaranth seed, black (*Amaranthus cruentus*); A. Moricha guti; H. Ramdana; Kan. Danthu beeja; Kash. Mawal; Mal. Cheera vithu; M. Chengkruk Maru; Mar. Cavali biya; O. Kosala sag manji Dhala; P. Chaulai beej; Tam. Keerai vidai; Tel. Thotakoora ginjalu.



A002. Amaranth seed, pale brown (*Amaranthus cruentus*); A. Moricha guti; G. Rajagaro; H. Ramdana; Kan. Danthu beeja; Kash. Mawal; Mal. Cheera vithu; M. Chengkruk Maru; Mar. Cavali biya; O. Kosala sag maji kale; P. Chaulali beej; Tam. Keerai vidai; Tel. Thotakoora ginjalu.



A003. Bajra (*Pennisetum typhoideum*); A., Kash. Baajra; B. Bajra; G. Bajri; H. Bajra; Kan. Sajje; Kh. Krai; Mal. Kambam; Mar. Bajra; N. Bajara; O. Bajra; P. Bajra; Tam. Kambu; Tel. Sajjalu; U. Bajra.



A004. Barley (*Hordeum vulgare*); A. Barli; B. Barley; G. Jav; H. Jau; Kan. Barley; Kash. Wushke; Kh. Krai; Mal. Barley; Mar. Sath; N. Jau; O. Jaba; P. Jao; S. Yava; Tam. Baarli Arisi; Tel. Barley; U. Jau.



A005. Jowar (*Sorghum vulgare*); A. Jowar; B. Jowar; G. Jowar; H. Jowar; Kan. Jolada; Kash. Pingu; Kh. Krai; Mal. irunku; Mar. Jondhahlaa; O. Janha; P. Javara; Tam. Chołam; Tel. Jonna; U. Jowar.



A006. Maize, dry (*Zea mays*); A. Makoi; B. Bhutta; G. Makai; H. Makka; Kan. Mekke jola; Kash. Makai; Kh. Symbai riewhadem stem; Mal. Maize; M. Chujaak; Mar. Maka; N. Sukha makai; O. Maka; P. Chhali; S. Yaavanaala; Tam. Makka Cholam; Tel. Mokkajonna; U. makai.



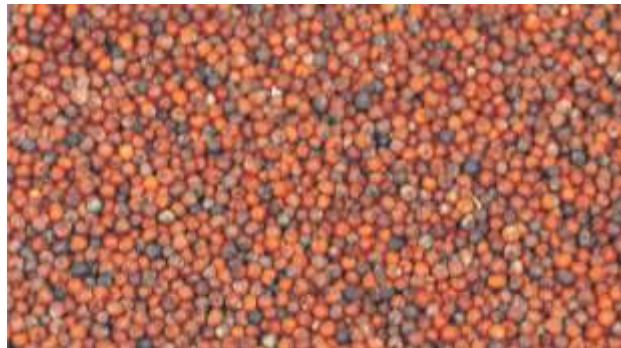
A007. Maize, tender, local (*Zea mays*); A. Makoi; B. Bhutta; G. Lili makai; H. Makka; Kan. Mekke jola; Kash. Makai; Kh. Riewhadem Stem; Mal. Maize; M. Chujaak; Mar. Maka; N. Makai; O. Maka; P. Chhali; Tam. Makka Cholam; Tel. Mokkajonna; U. Makai.



A008. Maize, tender, sweet (*Zea mays*); A. Makoi; B. Bhutta; G. Lili makai; H. Makka; Kan. Mekke jola; Kash. Makai; Kh. Riewhadem lieh; Mal. Maize; M. Chujaak; Mar. Maka; N. Makai; O. Maka; P. Chhali; Tam. Makka Cholam; Tel. Mokkajonna; U. makai.



A009. Quinoa (*Chenopodium quinoa*)



A010. Ragi (*Eleusine coracana*); A. Ragi; B. Ragi; G. Bavato; H. Ragi; Kan. Ragi; Kh. Ukrat; Mal. Panjapulle; Mar. Bakri; N. Kodo; O. Mandia; P. Mandal; S. Madhulika; Tam. Kelvaragu; Tel. Ragi; U. Mandwa.



A011. Rice, flakes (*Oryza sativa*); A. Chira; B. Chide; G. Paunva; H. Poha; Kan. Avalakki; Kash. Chevri; Kh. Shira; Mal. Aval; M. Chengpaak; Mar. Pohe; O. Chudaa; P. Chirwre; Tam. Aval; Tel. Atukulu.



A012. Rice, puffed (*Oryza sativa*); A. Muri; B. Muri; G. Mamra; H. Muramure; Kan. Kalle Puri; Kash. Tomul; Kh. Muri; Mal. Pori; M. Kabok Mur; Mar. Chirmure; N. Murai; O. Mudhi; P. Phulian; Tam. Pori; Tel. Maramaralu; U. Murmure.



A013. Rice, raw, brown (*Oryza sativa*); A. Matia rangar chaul; G. Kathai chokha; H. Chawal; P. Bhura choul; Kash. Tomul; Kh. Khaw saw; Mal. Kuthari ; M. Cheng; Tam. Arisi; Tel. Dampudu biyyam.



A014. Rice, parboiled, milled (*Oryza sativa*); A. Ukhua chaul; B. Siddha chowl; G. Bafela Chokha; H. Usna chawal; Kan. Kusubalakki; Kash. Tomul; Kh. Khaw boil; Mal. Puzhngal ari; M. Cheng; Mar. Ukadla tandoor; O. Usuna chaula; P. Biga hua chawal; Tam. Puzhngal arisi; Tel. Uppudu biyyam.



A015. Rice, raw, milled (*Oryza sativa*); A. Milat khunda chaul; B. Chowl; G. Choka; H. Chawal; Kan. Akki; Kash. Tomul; Kh. Khaw boil; M. Cheng; Mar. Tondool; O. Chaula; P. Chaul; Tam. Arisi; Tel. Biyyam.



A016. Samai (*Panicum miliare*); B. Sama; G. Kuri; H. Shavan; Kan. Sama; Kash. Ganuhaar; Mal. Chama; Mar. Sava; O. Suan; P. Swank; Tam. Samai; Tel. Sama.



A017. Varagu (*Paspalum scrobiculatum*); A. Konidhan; B. Kodoadhan; G. Kodra; H. Koden; Kan. Harka; Kash. Snol; Mal. Koovaragu; Mar. Karik; O. Kodus; P. Kodra; Tam. Varagu; Tel. Arikelu.



A018. Wheat, flour, refined (*Triticum aestivum*); A. Moida; B. Maida; G. Maido; H. Maida; Kan. Maida; Kash. Oat; Kh. Moida; Mal. Maida mavu; M. Moida; Mar. Maida; N. Maida; O. Maida; P. Maida; Tam. Maida mavu; Tel. Maida pindi; U. Maida.



A019. Wheat flour, atta (*Triticum aestivum*); B. Ata; G. Samagra gha; H. Atta; Kan. Sampurna godhi hittu; Kash. Oat unno lota ghaun no lot; Mal. Godhambu mavu; Mar. Kaneek; O. Gahama atta; P. Atta Tam. Mulu Godumai maavu; Tel. Sampurna godhuma pindi.



A020. Wheat, whole (*Triticum aestivum*); A. Ghehu; B. Gom; G. Ghaun; H. Gehun; Kan. Godhi; Kash. Kinek; Kh. Ukew; Mal. Godhumbu; M. Ghehu; Mar. Gehu; N. Gau; O. Gahama; P. Kanak; S. Godhum; Tam. Godumai; Tel. Godhumalu; U. Gehun.



A021. Wheat, bulgar (*Triticum aestivum*); A. Dalia; B. Dalia; G. Bulgur ghaum; H. Dalia; Kan. Bulgur godhi; Kash. Kinek; Kh. Kew Mal. Godhambu Rava; Mar. Bulgur gahu; N. Gau ko pitho; O. Dalia; P. Dalia; Tam. Godumai rava; Tel. Bulgur; U. Dalia.



A022. Wheat, semolina (*Triticum aestivum*) A. Suji; B. Suji; G. Ghaum soji; H. Gehun suji; Kan. Godhi rave; Kash. Sooj; Kh. Suji; Mal. Uppumavu; M. Suji; Mar. Gahu rava; N. Suji; O. Suji; P. Suji; Tam. Godumai rava; Tel. Godhuma rava.



A023. Wheat, vermicelli (*Triticum aestivum*); A. Sewai; B. Semai; G. Ghaun ni sev; H. Siwain; Kan. Shevige; Kash. Sewian; Kh. Sewai lieh; Mal. Semiya; Mar. Siwain; O. Simai; P. Sevian; Tam. Semiya; Tel. Semiya; U. Semiya.



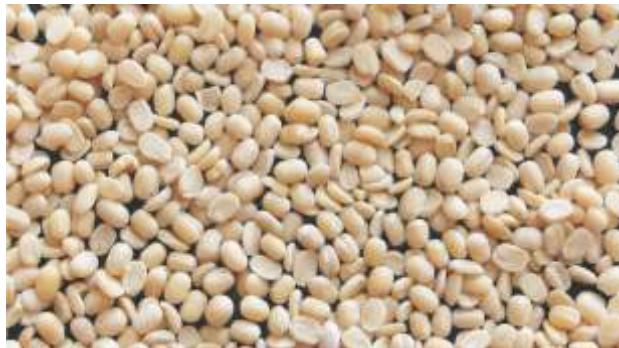
A024. Wheat, vermicelli, roasted (*Triticum aestivum*); A. Gom sewai; B. Semai; G. Ghaun ni Shekeli sev; H. Siwain; Kan. Shevige; Kash. Sewian; Kh. Sewai saw; Mal. Semiya; Mar. Siwain; O. Simai; P. Bhooni sevian; Tam. Semiya; Tel. Semiya; U. Semiya.



B001. Bengal gram, dal (*Cicer arietinum*); A. Boot dail; B. Cholar dal; G. Chana-ni-daad; H. Chan-ki-dal; Kan. Kadale bele; Kash. Chanu dal; Kh. Dai shana; Mal. Kadala parippu; M. Chana Tangkhai; Mar. Harabara dal; N. Chana ko Dal; O. Channa dali (Buta dali); P. Sholedi dal; Tam. Kadalaiparuppu; Tel. Sanaga papu; U. Chane ki dal.



B002. Bengal gram, whole (*Cicer arietinum*); A. Boot; B. Chola; G. Chana; H. Chana; Kan. Kadale; Kash. Chanu; Kh. Shana kulai; Mal. Kadala; Mar. Harbara; M. Chana Mapum; N. Kabuli Chana; O. Buta; P. Shole; S. Chanak; Tam. Kondaikadalai; Tel. Sanagalu; U. Chana.



B003. Black gram, dal (*Phaseolus mungo*); A. Matir dail phola; B. Biulir dal; G. Aadad ni daad; H. Urd dal; Kan. Uddhina bele; Kash. Kaha; Mal. Uzhunnu parippu; M. Sagol Hawai Tangkhai; Mar. Uddachi dal; N. Maas ko dal; O. Birri dali; P. Maa ki daal; S. Maassa; Tam. Ulutham paruppu; Tel. Minapappu; U. Mash ki dal.



B004. Black gram, whole (*Phaseolus mungo*); A. Gota mati mah; B. Mashkolail; G. Adad; H. Chhilke wali urad dal; Kan. Uddhina bele; Kash. Kaha; Kh. Dai iong; Mal. Uzhunnu; M. Sagol Hawai; Mar. Uddachi dal; O. Birri; P. Sabut maa ki daal; Tam. Ulundhu; Tel. Minumulu. Mapum;



B005. Cowpea, brown (*Vigna catjang*); A. Lesera mahor guti; B. Barbat; G. Chorap; H. Lobia; Kan. Alasande; Kh. Rymbai; Mal. Vella payaru; M. Pong Hawai; Mar. Chavli; N. Bodi; O. Jhudunga; P. Lobia; S. Raajamaassa; Tam. Karamani; Tel. Bobbarlu; U. baunir.



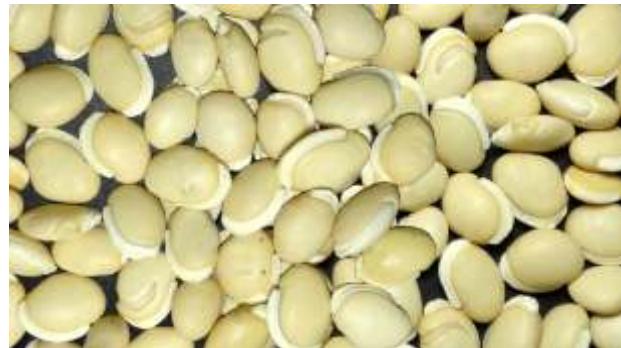
B006. Cowpea, white (*Vigna catjang*); A. Lesera mahor guti; B. Barbat; G. Chorap; H. Lobia; Kan. Alasande; Kh. Rymbai lieh; Mal. Vella payaru; M. Pong Hawai; Mar. Chavli; N. Bodi; O. Jhudunga; P. Lobia; S. Raajamaassa; Tam. Karamani; Tel. Bobbarlu; U. Baunir.



B007. Field bean, black (*Phaseolus vulgaris*); A. Urohi guti; B. Shim; G. Valpapdi; H. Sem; Kan. Avare; Kash. Moang; Kh. Symbai Ri iong; Mal. Avar; Mar. Papta; O. Baragudi; P. Sem dal; Tam. Mochai; Tel. Chikkudu ginjalu.



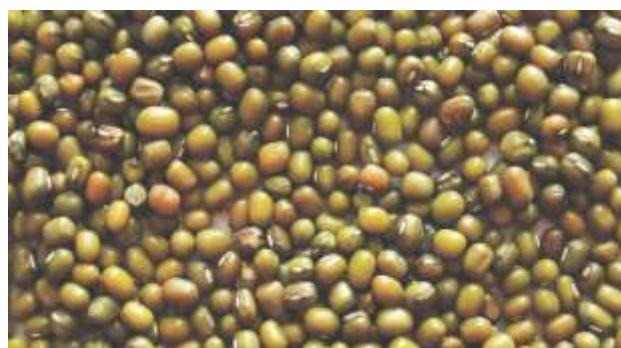
B008. Field bean, brown (*Phaseolus vulgaris*); A. Urohi guti; B. Shim; G. Valpapdi; H. Sem; Kan. Avare; Kash. Moang; Kh. Symbai ri saw; Mal. Avar; Mar. Papta; O. Baragudi; P. Sem dal; Tam. Mochai; Tel. Chikkudu ginjalu.



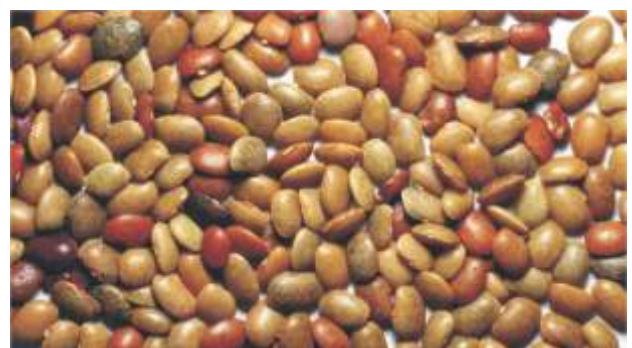
B009. Field bean, white (*Phaseolus vulgaris*); A. Urohi guti; B. Shim; G. Valpapdi; H. Sem; Kan. Avare; Kash. Moang; Kh. Symbai Ri lieh; Mal. Avar; Mar. Papta; O. Baragudi; P. Sem dal; Tam. Mochai; Tel. Chikkudu ginjalu.



B010. Green gram, dal (*Vigna radiata*); A. Dhua mogu dail; B. Mung dal; G. Mug ni daad; H. Mug dal; Kan. Hesara bele; Kash. Muang dal; Kh. U dai stem; Mal. Cheru payar parippu; M. Mung Hawaii; Mar. Mug dal; N. Moong ko khoste; O. Muga Dali; P. Mungi-di-dal; Tam. Payatham paruppu; Tel. Pesara pappu; U. Moong dal.



B011. Green gram, whole (*Vigna radiata*); A. Gota mogu mah; B. Moog; G. Mug; H. Mung; Kan. Hesare kalu; Kash. Muang; Kh. U dai jyrngam; Mal. Cheru Pararu; M. Mung Hawaii; Mar. Mun; N. Moong; O. Muga; P. Sabut moong dal; S. Mudra; Tam. Pasipayir; Tel. Pesalu; U. Moong.



B012. Horse gram, whole (*Dolichos biflorus*); B. Kulotto-kalai; G. Kuleeth; H. Kulthi; Kan. Hurule; Kash. Kurath; Mal. Muthira; Mar. Kuleeth; N. Bakulla; O. Kolatha; S. Kulattha; Tam. Kollu; Tel. Ulavalu; U. Kulthi.



B013. Lentil, dal (*Lens culinaris*); A. Masur dail; B. Mosur dal; G. Masoor ni daad; H. Masoor dal; Kan. Laki Bele; Kash. Masoor; Kh. U dai saw; Mal. Vattu parippu; M. Hawai Masuri; Mar. lank dal; N. Musuroo ko dal; O. Masura dali; P. Dhooli masari dal; S. Triputta; Tam. Khesari paruppu; Tel. Lanka pappu.



B014. Lentil whole, brown (*Lens culinaris*); A. Gota masur mah; B. Mosur; G. Masoor (Kathai); H. Masur dal; Kan. Masur bele; Kash. Masoor; Kh. U dai saw; Mal. Masur parippu; M. Hawai Masuri; Mar. Masur dal; N. Musuroo; O. Masura; P. Saboot masari dal; S. Masura; Tam. Mysore paruppu; Tel. Misur pappu; U. Masur dal.



B015. Lentil whole, yellowish (*Lens culinaris*); A. Gota masur mah; B. Mosur; G. Masoor (Kathai); H. Masur dal; Kan. Masur bele; Kash. Masoor; Kh. U dai saw; Mal. Masur parippu; M. Hawai Masuri; Mar. Masur dal; N. Musuroo; O. Masura; P. Saboot masari dal; S. Masura; Tam. Mysore paruppu; Tel. Misur pappu; U. Masur dal.



B016. Moth bean (*Vigna aconitifolia*); H. Motha; Tam. Narippayir; Kan. Matki Kal; Mar. Matki; B. Kheri; G.Math; P. Moth dal; Kh. Rymbai.



B017. Peas, dry (*Pisum sativum*); A. Gota motor; B. Matar; G. Sukha vatana; H. Sukhi Matar; Kan. Batani; Kash. Kaza; Kh. Shana mator; Mal. Pattani; M. Hawai mangal; O. Matara; P. Sukhe hare matar; Tam. Pattani; Tel. Batani.



B018. Rajmah, black (*Phaseolus vulgaris*); A. Rajmah; B. Barbati beej; G. Phansi (Kadi); H. Rajmah; Kan. Thugare bele; Kash. Razma; Kh. Rajma heh; Mal. Rajmah; M. Rajmah; Mar. Shravangheveda; N. Rajma; P. Kale rajmah; S. Makussttaka; Tam. Karamani Payir; Tel. Barigalu; U. Rajma.



B019. Rajmah, brown (*Phaseolus vulgaris*); A. Rajmah; B. Barbati beej; G. Phansi (Gulabi); H. Rajmah; Kan. Thugare bele; Kash. Razma; Kh. Rajma lieh; Mal. Rajmah; M. Rajmah; Mar. Shravangheveda; N. Rajma; P. Bhoore rajmah; S. Makussttaka; Tam. Karamani Payir; Tel. Barigalu; U. Rajma.



B020. Rajmah, red (*Phaseolus vulgaris*); A. Rajmah; B. Barbati beej; G. Phansi (lal); H. Rajmah; Kan. Thugare bele; Kash. Razma; Kh. Rajma rit; Mal. Rajmah; M. Rajmah; Mar. Shravangheveda; N. Rajma; P. Lal rajmah; S. Makussttaka; Tam. Karamani Payir; Tel. Barigalu; U. Rajma.



B021. Red gram, dal (*Cajanus cajan*); A. Rohor dail; B., Kash., H. Arhar dal; G. Tuver ni daad; Kan. Thugare bele; Kash. Arhar; Kh. Dai shana; Mal. Tuvaru parippu; M. Mairongbi; Mar. Turdal; N. Rahar ko dal; O. Harada dal; P. Arhar dal; S. Aaddhakii; Tel. Kandi pappu; Tam. Tuvaram paruppu; U. Tuvar ki dal.



B022. Red gram, whole (*Cajanus cajan*); A. Gota rohor; G. Tuver; H. Arhar sabud; Kash. Arhar; Kh. Rymbai ja; Mal. Tuvaru parippu; M. Mairongbi; Mar. Turdal; O. Harada; P. Arhar sabut dal; Tam. Tuvarai; Tel. Kandulu; U. Tuvar.



B023. Rice Bean (*Vigna umbellata*); B. Galmoong; H. Meth; Kh. Rymbai ja; Mal. Kattuzhunnu; M. Chakwai ; N. Shiltong.



B024. Soybean, brown (*Glycine max*); A. Soya bean; B. Garikalai; G. Soya bean; H. Bhatmas; Kan. Soya bean; Kash. Muth; Kh. Toh rymbai; Mal. Soya bean; M. Nunghawai; Mar. Soya bean; N. Bhatmas; O. Soya bean; P. Soya bean dal; Tam. Soya bean; Tel. Soya bean; U. Soya.



B025. Soybean, white (*Glycine max*); A. Soya bean; B. Garikalai; G. Soya bean; H. Bhatmas; Kan. Soya bean; Kash. Muth; Kh. Toh rymbai; Mal. Soya bean; M. Nunghawai; Mar. Soya bean; N. Bhatmas; O. Soya bean; P. Soya bean dal; Tel. Soya bean; Tam. Soya bean; U. Soya.



C001. Agathi leaves (*Sesbania grandiflora*); A. Bok phular paat; B. Bak ful shak; G. Agathio; H. Agasthi; Kan. Agase soppu; Mal. Agathi cheera; M. Chu chu Rangmei; Mar. Agasthi ka sag; O. Agasti; Tam. Agathi keerai; Tel. Avise akulu.



C002. Amaranth leaves, green (*Amaranthus gangeticus*); A. Moricha sak; B. Notya Shaakh; G. Taldalja ni bhaaji; H. Chaulai; Kan. Danthu; Kash. Mawal; Mal. Cheera; M. Chengkruk; Mar. Math; N. Latte to saag; O. Neutia sag; P. Chaulai sag; S. Maarissa; Tam. Thandu keerai; Tel. Thotakoora; U. Cholai.



C003. Amaranth leaves, red (*Amaranthus gangeticus*); A. Moricha; B. Lal Shaakh; G. Lal tandaljo; H. Chaulai; Kan. Danthu; Kash. Mawal; Mal. Cheera; M. Chengkruk; Mar. Math; N. Latte to saag; O. Neutia sag; P. Lal chaulai sag; S. Maarissa; Tel. Thotakoora; Tam. Thandu keerai; U. Cholai.



C004. Amaranth leaves, red and green mix (*Amaranthus gangeticus*); A. Moricha sak; B. Notya Shaakh; G. Tandaljo H. Chaulai; Kan. Danthu; Kash. Mawal; Mal. Cheera; M. Chengkruk; Mar. Math; N. Latte to saag; O. Neutia sag; P. Chaulai sag; S. Maarissa; Tam. Thandu keerai; Tel. Thotakoora; U. Cholai.



C005. Amaranth, spined, leaves, green (*Amaranthus spinosus*); A. Moricha sak; B. Kanta-notya; G. Kanta vado tandaljo; H. Kantewali-notya; Kan. Mulla danthu; Kash. Mawal; Mal. Mullancheru- cheera; M. Chengkruk; Mar. Kantemanth; O. Kanta notay shak; P. Kantewali chaulai; Tam. Mulaikeerai; Tel. Mulla thotakura.



C006. Amaranth, spined, leaves, red and green (*Amaranth spinosus*); A. Kanta-notya shaak; G. Kanta vado tandaljo; H. Kantewali-notya; Kan. Mulla danthu; Kash. Mawal; Kh. Sla longmar; Mal. Mullancheru-cheera; M. Chengkruk; Mar. Kantemanth; O. Kanta neutia sag; P. Kantewali chaulai; Tam. Mulakeerai; Tel. Mulla thotakura.



C007. Basella, leaves (*Basella alba*); A. Puroi sak; B. Pui shaak; G. Poi ni bhaji; H. Poi; Kan. Basale soppu; Kh. Sla palong dkhar; Mal. Vallicheera; Mar. Mayalu; O. Poi saaga; P. Poi; Tam. Kodippasali; Tel. Bachhali.



C008. Bathua leaves (*Chenopodium album*.); A. Jilmil sak; B. Beto sak; G. Chilni bhaji; H. Bathua sag; Kan. Sakothina soppu; Kash. Ushtahak; Kh. Sla jada; Mal. Parippuchira; M. Monsaobi; Mar. Chakavath; N. Bethe ko saag; O. Bathua sag; P. Bathu sag; Tel. Pappukura; Tam. Paruppukkeerai.



C009. Beet greens (*Beta vulgaris*); A. Beetar sak; G. Beet ni bhaji; H. Chukandhar sag; Kan. Beet root soppu; Kash. Chogander Munji; Kh. Sla bit; Mal. Beet root cheera; Mar. Beet root ka sag; N. Bengali Palungo ko Saag; P. Chukandhar da sag; Tam. Beet root keerai; Tel. Beet root; U. beet patta.



C010. Betel, leaves, big (Kolkata) (*Piper betle*); A. paan; B. Pan; G. Nagarvelna pan; H. Pan ka patha; Kan. Kadale soppu; Kh. Tympew Dkhar; Mal. Vettilai; M. Kwa Mana; Mar. Pan-ka-patta; O. Pana; P. Pan-da-patta; Tam. Vetrilai; Tel. Thamala paku; U. Paan ka patta.



C011. Betel, leaves, small (*Piper betle*); A. Paan; B. Pan; G. Nagarvelna pan; H. Pan ka patha; Kan. Kadale soppu; Kh. Tympew; Mal. Vettilai; M. Kwa Mana; Mar. Pan-ka-patta; O. Pana; P. Pan-da-patta; Tel. Thamala paku; Tam. Vetrilai; U. Paan ka patta.



C012. Brussels sprouts (*Brassica oleracea* var. *gemmifera*); A. Biliti Bandhakopi; B. Nani kobi; C. Choote gobi; D. Kan. Mara kosu; E. Kash. Haakh; F. Mal. Kalakose; G. Mar. Chotee gobi; H. O. Chota bandha; I. P. Chooti band gobi; J. Tam. Kalaikose; K. Tel. Chinna cabbage; L. U. Choti bund gobh.



C013. Cabbage, Chinese (*Brassica rupa*) A. China lai; B. Chinese kobi; C. Kash. Bandh; D. Kh. Salat chaina.



C014. Cabbage, collard greens (*Brassica oleracea* var. *viridis*); A. G. Kobi na pan; B. Kash. Bandh; C. Kh. Sla kubi; D. Tam. Seemai parattai keerai.



C015. Cabbage, green (*Brassica oleracea* var. *capitata f. alba*); A. Bondhakobi; B. Badha kopi; C. Lili kobi; D. Bandh gobi; E. Kan. Kosu; F. Kash. Bandh gobi; G. Kh. Kubi; H. Mal. Muttu gose; I. M. Kobi Mana; J. Mar. Kobi; K. N. Banda kovi; L. O. Bandha kobi; M. Patta gobhi; N. Shaakaprabhedah; O. Tel. Gos koora; P. Tam. Muttaikose; Q. U. Gobhi.



C016. Cabbage, violet (*Brassica oleracea* var. *capitata f. rubra*); A. Bondhakobi; B. Badha kopi; C. Lal kobi; D. Bandh gobi; E. Kan. Kosu; F. Kash. Bandh gobi; G. Kh. Kubi saw; H. Mal. Muttu gose; I. Mar. Kobi; J. N. Banda kovi; K. O. Bandha kopee; L. P. Patta gobhi; M. Shaakaprabhedah; N. Tam. Muttaikose; O. Tel. Gos koora; P. U. Gobhi.



C017. Cauliflower leaves (*Brassica oleracea* var. *botrytis*); A. Phul kobil pat; B. Phul gopi pata; C. Fulawar na pan; D. Phul gobi patta; E. Kan. Hukosu; F. Kash. Phoolgobi panwathir; G. Kh. Sla phul; H. Mal. Cauliflower ila; I. M. Kobithamchetmai mana; J. Mar. Phul gobi; K. N. Kauli; L. O. Phula Kobi patra; M. P. Phool gobi di patte; N. S. Gojihvaa; O. Tam. Pookosu keerai; P. Tel. Go puvvu; Q. Phul gobi.



C018. Colocasia, leaves, green (*Colocasia esculenta*); A. Kasu sak; B. Kochu pata; G. Advi na pan; H. Arvi ka sag; Kan. Shamangadda yele; Kh. Sla wang; Mal. Chembu ilagal; M. Paan mana; Mar. Alu pan; N. Karkalo; O. Saru saga; P. Arbi-di-patte; Tam. Seppam ilaigal; Tel. Chama akulu; U. Arvi ka patta.



C019. Drumstick, leaves (*Moringa oleifera*); A. Sajina paat; B. Sajna pata; G. Saragwa na pan; H. Sajian patta; Kan. Nuggeyele; Mal. Muringa ela; M. Sajana mana; Mar. Shevaga pan; O. Sajna sag; P. Soanjhna da patta; Tam. Murungai keerai; Tel. Mulaga akulu; U. Sujineki palli.



C020. Fenugreek leaves (*Trigonella foenum-graecum*); A. Methi paat; B. Methi shak; G. Methi pandada; H. Methi sag; Kan. Mentyha soppu; Kash. Kasori Methi; Kh. Sla methi; Mal. Uluva ila; M. Methi man; Mar. Methi sag; N. Methi pata; O. Methi sag; P. Methi di patte; Tel. Menthikoora; Tam. Vendhaiya keerai; U. Methi.



C021. Garden cress (*Lepidium sativum*); A. Bor manimuni; B. Halim sag; G. Asadio na pan; H. Halim ka patta; Kan. Allibija soppu; Kash. Halyun; Kh. Khliang syiar; Mal. Alivirai cheera; Mar. Ahiva ka patta; N. Chamsoor ko Saag; O. Kakharu Saga; P. Halim-da-sag; Tam. Alivirai keerai; Tel. Adityala akulu.



C022. Gogu leaves, green stem (*Hibiscus cannabinus*); A. Tengamora; B. Mestapat; G. Ambadi; H. Pitwa; Kan. Pundi; Kh. Sla jajew jyrngam; Mal. Pulichai cheera; M. Sougri mana; Mar. Ambadi; O. Nalite saga; P. Pitwa sag; Tam. Pulichchai keerai; Tel. Gongura; U. Ambada ki bhaji.



C023. Gogu leaves, red stem (*Hibiscus cannabinus*); A. Tengamora; B. Mestapat; G. Ambadi; H. Pitwa; Kan. Pundi; Kh. Sla jajew saw; Mal. Pulichai cheera; M. Sougri mana; Mar. Ambadi; O. Nalite saga; P. Pitwa sag; Tam. Pulichchai keerai; Tel. Gongura; U. Ambada ki bhaji.



C024. Knol-Khol, leaves (*Brassica oleracea* var. *gongylodes*); A. Ool kobi; B. Olkopi sag; G. Gath kobi na pan; H. Ganth gobi ka sag; Kan. Gedde kosu; Kash. Hakh Monji; Kh. Phan Kubi; Mal. Knol-khol cheera; M. Kobi Maru Kabi; Mar. Nol khol ka patta; N. Gyathkopi ko saag; O. Ulgobi saga; P. Ganth gobi sag; Tam. Knol-Khol keerai; Tel. Knol-khol akulu.



C025. Lettuce (*Lactuca sativa*); A. Salad paat; G. Lettuce na pan; H. Salad ka patta; Kan. Lettuce soppu; Kash. Hakh; Kh. Salat dkhar; Mal. Lettuce cheera; Mar. Lettuce ka patta; N. Saalad ko paat; P. Salad da sag; Tam. Ilaikosu; Tel. Kavu akulu; U. Kismisaag.



C026. Mustard, leaves (*Brassica juncea*); A. Horiyo paat; B. Sorisa sag; G. Sarasava pandada; H. Sarson ka sag; Kan. Sasuve yele; Kash. Hakh; Kh. Tyrso; Mal. Kadugu ila; M. Hangaam; Mar. Mochari-chi pan; N. Raayo ko Saag; O. Sarson ka saga; P. Saro da sag; Tam. Kadugu ilai; Tel. Ava akulu; U. Sarson ki patta.



C027. Pak Choi leaves (*Brassica rapa* var. *chinensis*) G. Pak choi na pan.



C028. Parsley (*Petroselinum crispum*); A. Sugandhi lota; G. Leela dhana; Mal. Seema malli; Mar. Kothimbir/dhane Tam. Verkosu; Kan. Auchumooda; ; U. Ajmod; P. Parsley.



C029. Ponnaganni (*Alternanthera sessilis*); A. Matikaduri; B. Khanchari; G. Saranthi na pan; H. Saranthi sag; Kan. Honagone soppu; Mal. Ponnaganni cheera; M. Phakchet; Mar. Saranthi sag; O. Madarangh; Tam. Ponnaganni keerai; Tel. Ponnaganti koora; U. Kunte ki bhaji.



C030. Pumpkin leaves, tender (*Cucurbit maxima*); A. Rongalao paat; B. Kumra shak; G. Kolam na pan; H. Kumhra sag; Kan. Kumbale soppu; Kash. Aal kaniji; Kh. Sla pathaw; Mal. Manthan elakai; M. Mairen mana; Mar. Bhopla chipan; O. Khakaru saga; P. Petha de pate; Tel. Gummadi akulu; Tam. Parangi ilai; U. Kaddu ka patta.



C031. Radish leaves (*Raphanus sativus*); A. Dherua; B. Mulo shak; G. Muda na pan; H. Muli ka sag; Kan. Mullangi soppu; Kash. Mooji Hakh; Kh. Sla muli; Mal. Mullangi ilaigal; M. Hangham mula; Mar. Mula ka sag; N. Moolaa ko saag; O. Mula ka sag; P. Muli di patte; Tel. Mullangi akulu; Tam. Mullangi ilai; U. Muli ka patta.



C032. Rumex leaves (*Rumex patientia*); A. Suka sak; B. Bun palung; G. Ambada (sorrel); Kan. Chukki soppu; Mar. Amlavetasa; S. Amlavetasa; U. Tukhm hummaz.



C033. Spinach (*Spinacia oleracea*); A. Paleng; B. Palong shak; G. Palak ni bhaji; H. Palak; Kan. Spinak soppu; Kash. Palak; Kh. Palong heh; Mal. Basala cheera; M. Palak; Mar. Palak; N. Paalungo ko Saag; O. Palang sag; P. Palak; S. Paalakya; Tam. Pasalai keerai; Tel. Palakoora; U. Palak.



C034. Tamarind leaves, tender (*Tamaridus indica*); B. Tetul pata; G. Amli na pan; H., P. Imli patte; K. Hunise chiguru; Mal., Tam. Puliam ilaigal; Mar. Chinchecha pala; O. Tentuli; Tel. Chinta chiguru; A. Teteli paat; M. Mange Mana; Kh. Sla sohkyntoi.



D001. Ash gourd (*Benincasa hispida*); A. Kumura; B. Chalkumra; G. Bhuru kodu; H. Petha; Kan. Budagumbala; Kash. Aal; Kh. Pathaw iiwbih; Mal. Kumbalanga; M. Torbot; Mar. Kohala; N. Kubhindo; O. Panikakharu; P. Petha; Tam. Venpoosani; Tel. Boodida gummadi; U. Peta.



D002. Bamboo shoot, tender (*Bambusa vulgaris*); A. Bahgaj; B. Bansber ankur; G. Lilo vans; H. Baans; Kan. Baimbale, Kanile; Kh. Ka lung siej; Mal. Mulankoombu; M. Soidon; Mar. Kalkipan; O. Bhet ki lakdi; P. Baans; Tam. Moongil kuruthu; Tel. Veduru chiguru; U. Bhet ki lakdi.



D003. Bean scarlet, tender (*Phaseolus coccineus*); A. Lesera mah; G. Chodi; H. Sem; Kash. Hyambi; Kh. U buri; M. Hawai Ashaangbi; P. Sem fali.



D004. Bitter gourd, jagged, teeth ridges, elongate (*Momordica charantia*); A. Kerela; B. Korola; G. Karela; H. Karela; Kan. Hagal kai; Kash. Karela; Kh. Kerela heh; Mal. Kaippakka; M. Karon Akhabi; Mar. Karle ; N. Tite karela; O. Kalara; P. Karela; S. Tillikaa; Tel. Kakara kaya; Tam. Paavakkai; U. Karela.



D005. Bitter gourd, jagged, teeth ridges, short (*Momordica charantia*); A. Kerela; B. Uchhe; G. Marela; H. Karela; Kan. Hagal kai; Kash. Karela; Kh. Kerela rit Mal. Kaippakka; M. Karon Akhabi; Mar. Karle; N. Tite karela; O. Kalara; P. Karela; S. Tillikaa; Tam. Paavakkai; Tel. Kakara kaya; U. Karela.



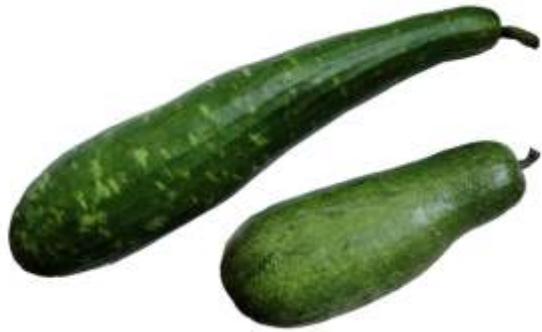
D006. Bitter gourd, jagged, smooth ridges, elongate (*Momordica charantia*); A. Kerela; B. Korola; G. Karela; H. Karela; Kan. Hagal kai; Kash. Karela; Kh. Kerela; Mal. Kaippakka; M. Karon Akhabi; Mar. Karle; N. Tite karela; O. Kalara; P. Karela; S. Tillikaa; Tam. Paavakkai; Tel. Kakara kaya; U. Karela.



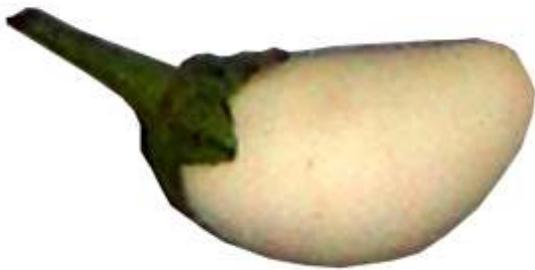
D007. Bottle gourd, elongate, pale green (*Lagenaria vulgaris*); A. Jatilao; B. Lau; G. Dudhi; H. Lowki; Kan. Sorekai; Kash. Zeeth aal; Kh. Uklong; Mal. Cheranga; M. Khongdrum; Mar. Pandhara; N. Lauka; O. Lau; P. Kadu; S. Kaarabellam; Tam. Suraikkai; Tel. Sorrakaya; U. Lowki.



D008. Bottle gourd, round, pale green (*Lagenaria vulgaris*); A. Jatilao; B. Lau; G. Dudhi; H. Lowki; Kan. Sorekai; Kash. Gool aal; Kh. U klong heh; Mal. Cheranga; M. Khongdrum; Mar. Pandhara; N. Lauka; O. Lau; P. Kadu; S. Kaarabellam; Tam. Suraikkai; Tel. Sorrakaya; U. Lowki.



D009. Bottle gourd, elongate, dark green (*Lagenaria vulgaris*); A. Jatilao; B. Lau; G. Dudhi; H. Lowki; Kan. Sorekai; U. Lowki; Kash. Zeth aal; Kh. Klong jrong; Mal. Cheranga; M. Khongdrum; Mar. Pandhara; N. Lauka; O. Lau; P. Kadu; S. Kaarabellam; Tam. Suraikkai; Tel. Sorrakaya.



D010. Brinjal 1 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D011. Brinjal 2 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D012. Brinjal 3 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D013. Brinjal 4 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D014. Brinjal 5 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan



D015. Brinjal 6 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan



D016. Brinjal 7 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan



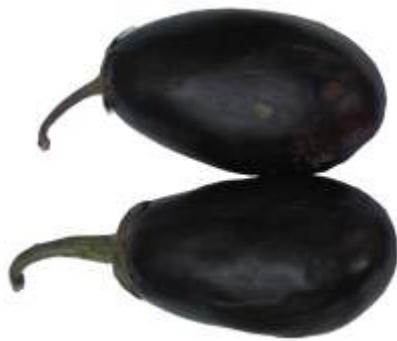
D017. Brinjal 8 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan



D018. Brinjal 9 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D019. Brinjal 10 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D020. Brinjal 11 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D021. Brinjal 12 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D022. Brinjal 13 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D023. Brinjal 14 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D024. Brinjal 15 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D025. Brinjal 16 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vaṅkaya; U. Baigan.



D026. Brinjal 17 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D027. Brinjal 18 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D028. Brinjal 19 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D029. Brinjal 20 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D030. Brinjal 21 (*Solanum melongena*); A. Bengena; B. Begun; G. Ringna; H. Baingan; Kan. Badane; Kash. Wagun; Kh. Sohbaingon jyrngam; Mal. Vazhuthiniga; M. Lam Khamen; Mar. Vange; N. Bhantaa; O. Baigan; P. Baigan; S. Vruntaakam; Tam. Kathirikkai; Tel. Vañkaya; U. Baigan.



D032. Broad beans (*Vicia faba*); A. Urahi; B. Makhon shim; G. Fafda papdi; H. Bakla; Kan. Chkaooradavare; Kash. Thool Haymbe; Kh. Ri majai; Mal. Amarakka; Mar. Ghewda; O. Simba; Tam. Avarai; Tel. Pedda chikkudu.



D033. Capsicum, green (*Capsicum annuum*); A. Kashmiri jalakia; B. Lanka (bilathi); G. Bhuler marcha; H. Shimla mirch; Kan. Donnmena-sinakayi; Kash. Shimla marchwangan; Kh. Sohmynken jhur jyrngam; Mal. Undamulagu; Mar. Bhoplimirchi; O. Shimla Lanka; P. Shimle-di-mirchi; Tam. Koda milagai; Tel. Shimla mirchi; U. Shimla mirchi.



D034. Capsicum, red (*Capsicum annuum*); A. Kashmiri jalakia; B. Lanka (bilathi); G. Bhuler marcha; H. Shimla mirch; Kan. Donnmena- sinakayi; Kash. Shimla marchwangan; Kh. Sohmynken jhur jyrngam; Mal. Undamulagu; Mar. Bhoplimirchi; O. Shimla Lanka; P. Shimle-di-mirchi; Tam. Koda milagai; Tel. Shimla mirchi; U. Shimla mirchi.



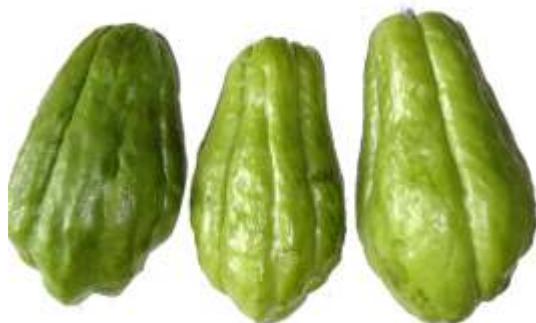
D035. Capsicum, yellow (*Capsicum annuum*) A. Kashmiri jalakia; B. Lanka (bilathi); G. Bhuler marcha; H. Shimla mirch; Kan. Donnmena-sinakayi; Kash. Shimla marchwangan; Kh. Sohmynken jhur stem; Mal. Undamulagu; Mar. Bhoplimirchi; O. Shimla Lanka; P. Shimle-di-mirchi; Tam. Koda milagai; Tel. Shimla mirchi; U. Shimla mirchi.



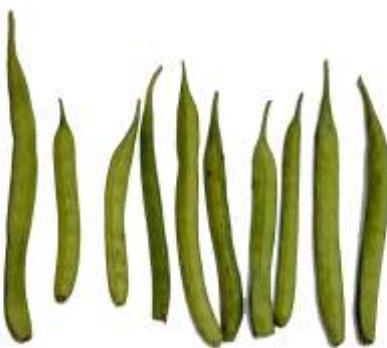
D036. Cauliflower (*Brassica oleracea* var. *botrytis*); A. Phul kobi; B. Phul kopi; G. Fulawar; H. Phul gobi; Kan. Hukosu; Kash. Phoolgobi; Kh. Phul kubi; Mal. Cauliflower; M. Kobithamchetmai; Mar. Phul gobi; N. Kauli; O. Phul Kobi; P. Phul gobi; S. Gojihvaa; Tam. Pookosu; Tel. Go puvvu; U. Phul gobi.



D037. Celery stalk (*Apium graveolens*); B. Randhuni; H. Ajmud; Kh. Dieng seleri; G. Celery daandi; Tam. Sivarikkeerai.



D038. Cho-cho-marrow (*Sechium edule*); A. Squash; H. Cho-cho-marrow; Kan. Cho-cho-marrow; M. Dasakusa; Mal. Cho-cho-marrow; Mar. Cho cho sara; O. Phuti kakudi; Kh. Biskot; Tam. Chow-chow.



D039. Cluster beans (*Cyamopsis tetragonoloba*); A. Mah; B. Jhar sim; G. Govar; H. Gaur-ki-phalli; Kan. Gori koyi; Kash. Hyambi; Mal. Kothavara; Mar. Govari; O. Guanra chhuin; P. Guarae-di-faliya; Tam. Kothavaranga; Tel. Goruchikkudu; U. Gavar ki palli.



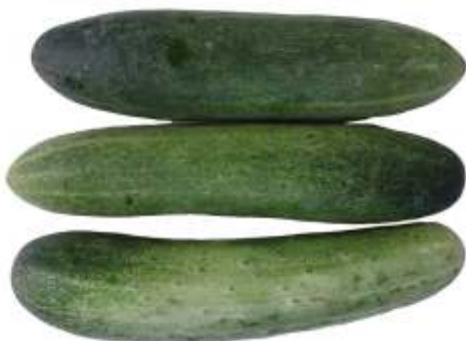
D040. Colocasia, stem, black (*Colocasia esculenta*); A. kosu thari; B. Kochur loti; H. Arwi-ki-dandi; Kan. Kesu danthu; Kh. Kawang iong; Mal. Chembin thandu; M. Paan Makhok; Mar. Alu-che-dath; O. Sarunada; P. Arbi de dande; Tam. Seppanthandu; Tel. Chama kada; U. Arwi ke kade.



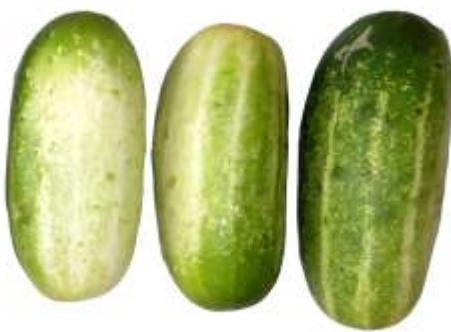
D041. Colocasia stem, green (*Colocasia esculenta*); A. Kosu thari; B. Kochur loti; H. Arwi-ki-dandi; Kan. Kesu danthu; Kh. Ka wang jyrngam; Mal. Chembin thandu; M. Paan Makhok; Mar. Alu-che-dath; O. Sarunada; P. Arbi de dande; Tam. Seppanthandu; Tel. Chama kada; U. Arwi ke kade.



D042. Corn, baby (*Zea mays*); Kash. Makai; Kh. Riewhadem lung; M. Chujaak; P. Shoti shalli.



D043. Cucumber green, elongated (*Cucumis sativus*); A. Tiyoh; B. Sosha; G. Kakdi; H. Kheera; Kan. Southe kayi; Kash. Laar; Kh. Sohkhia; Mal. Vellarikka; M. Thabi; Mar. Kakadi; N. Kakro; O. Kakudi; P. Khira; S. Patolah; Tam. Vellarikkai; Tel. Dosa kaya; U. Kheera.



D044. Cucumber green, short (*Cucumis sativus*); A. Tiyoh; B. Sosha; G. Kakdi; H. Kheera; Kan. Southe kayi; Kash. Laar; Kh. Sohkhia; M. Thabi; Mal. Vellarikka; Mar. Kakadi; N. Kakro; O. Kakudi; P. Khira; S. Patolah; Tam. Vellarikkai; Tel. Dosa kaya; U. Kheera.



D045. Cucumber orange, round (*Cucumis sativus*); A. Tiyoh; B. Sosha; G. Kakdi; H. Kakadi; Kan. Southe kayi; Kash. Laar; Kh. Sohkhia pyllon; Mal. Vellarikkka; Mar. Kakadi; N. Kakro; O. Kakudi; P. Khira; S. Patolah; Tam. Vellarikkai; Tel. Dosa kaya; U. Kheera.



D046. Drumstick (*Moringa oleifera*); A. Sajina; B. Sajna danta; G. Saragavo; H. Saijan-ki-phalli; Kan. Nugga kayi; Kh. Dieng sajana; Mal. Muringakkai; M. Sajana; Mar. Shevanga sheng; O. Sajana chhuin; P. Suhanjana di phalliyia; Tam. Murungakkai; Tel. Mulakaada; U. Sujne ki palli.



D047. Field beans, tender, broad (*Vicia faba*); A. Urohi; B. Shim; G. Valpapdi; H. Sem; Kan. Avare; Kash. Hyambi; Kh. Ri majai; Mal. Avar; Mar. Papta; O. Baragudi; Tam. Vidaivarai; Tel. Chikkudu ginjalu; U. Sem ki palli.



D048. Field beans, tender, lean (*Vicia faba*); A. Urohi; B. Shim; G. Valpapdi; H. Sem; Kan. Avare; Kash. Hyambi; Kh. Ri majai; Mal. Avar; Mar. Papta; O. Baragudi; Tel. Chikkudu ginjalu; Tam. Vidaivarai; U. Sem ki palli.



D049. French beans, country (*Phaseolus vulgaris*); A. French bean; G. Fansi; H. Fras beans; Kan. Huruli kayi; Kash. Hyambi; Kh. Presbin phyrngop; Mal. Beans; Mar. Pharasebee; N. Ghiu Simi; O. Beans; P. Fras beans; Tam. Vidaivarai; Tel. Sannachikkudu; U. Beans.



D050. French beans, hybrid (*Phaseolus vulgaris*); A. French bean; G. Fansi; H. Bakla; Kan. Huruli kayi; Kash. Hyambi; Kh. Presbin; Mal. Beans; Mar. Pharasebee; N. Ghiu Simi; O. Beans; P. Fras bean; Tam. Vidaivarai; Tel. Sannachikkudu; U. Beans.



D051. Jack fruit, raw (*Artocarpus heterophyllus*); A. Kothal; B. Kanthal; G. Phanas; H. Kathal; Kash. Bindu; Kan. Halasu; Kh. Soh phan; M. Theibong; Mal. Chakka; Mar. Phanas; N. Katahar; O. Panasa; P. Kathal; S. Panasa; Tam. Palapazham; Tel. Panasa; U. Kathahal.



D052. Jack fruit, seeds, mature (*Artocarpus heterophyllus*); A. Kothal guti; B. Kanthal; G. Phanas; H. Kathal ke beej; Kan. Halasu; Kash. Bindu; Kh. Shyieng soh phan; Mal. Chakka kuru; M. Theibong maru; Mar. Phanas; N. Katahar; P. Kathal ke beej; S. Panasa; Tam. Palakkottai; Tel. Panasa; U. Kathahal.



D053. Knol - Khol (*Brassica oleracea*); A. Oolkobi; B. Olkopi; G. Nol-kol; H. Kohl-rabi; Kan. Noolkol; Kash. Monjh haak; Kh. Phan kubi; Mal. Noolkol; M. Kobi Maru Kabi; Mar. Nol-kol; N. Gyathkopi; O. Ulkobi; P. Ganth gobi; Tam. Knoolkol; Tel. Noolkol.



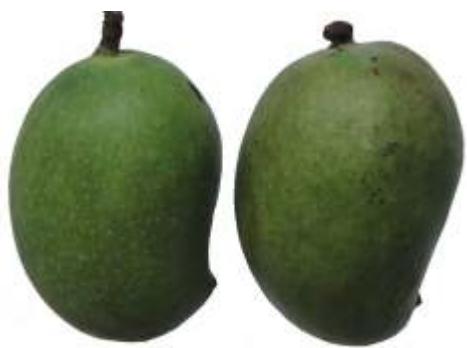
D054. Kovai, big (*Coccinia cordifolia*); A. Kunduli; B. Telakucha; G. Ghole gluru; H. Konduri ; Kan. Tondekayi; Kh. Jhur thliem; Mal. Kova kai; Mar. Tondale; O. Kunduru; Tam. Kova kai; Tel. Donda kaya; U. Tindli.



D055. Kovai, small (*Coccinia cordifolia*); A. Kunduli; B. Telakucha; G. Ghole gluru; H. Konduri; Kan. Tondekayi; Kh. Jhur thliem; Mal. Kova kai; Mar. Tondale; O. Kunduru; Tam. Kova kai; Tel. Donda kaya; U. Tindli.



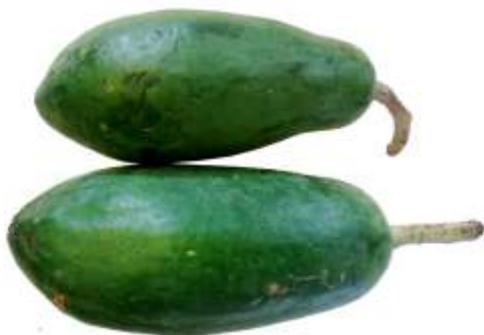
D056. Ladies finger (*Abelmoschus esculentus*); A. Bhendi; B. Dherosh; G. Bhinda; H. Bhindi; Kan. Bende; Kash. Bindi; Kh. bindi; Mal. Vendakkai; M. Belandri; Mar. Bhendi; N. Ramtoriya; O. Bhendi; P. Bhindi; S. Bhindikaa; Tam. Vendaikkai; Tel. Bendakaya; U. Bhendi.



D057. Mango, green, raw (*Mangifera indica*); A. Keasa aam; B. Aam (kancha); G. Ambo; H. Katcha Aam; Kan. Mavinakayi; Kash. Kach Aamb; Kh. Soh pieng im; Mal. Manga; M. Heinou Ashangba; Mar. Amba; O. Ambu (kacha); P. Kaccha aam; Tam. Mangai; Tel. Mamidikaya; U. Kaccha aam.



D058. Onion, stalk (*Allium cepa*); A. Piyaj paat; B. Piyaz kali; G. Dunglina dakkadi (Onion dakkadi); H. Hara Pyaz; Kan. Erulli soppu; Kash. Pichiganda; Kh. Sla piat; Mal. Ulli thandu; M. Tilhou mana; Mar. Pati; N. Chhayapi ko Saag; O. Piaja sandha; P. Hare pyaaz; Tam. Vengaya thaal; Tel. Ulli kadalu; U. Hari pyaaz.



D059. Papaya, raw (*Carica papaya*); A. Kesa omita; B. Pempe (Kacha); G. Papai; H. Katcha pepita; Kan. Parangi; Kh. Soh kymphor im; Kash. Papita; Kon. Dudde; Mal. Omakaya; M. Awathabi Ashangba; Mar. Papaya; O. Amrutabanda; P. Katcha Pepita; Tam. Pappalikkaai; Tel. Boppayi kaya; U. Papaya.



D060. Parwar (*Trichosanthes dioica*); A. Potol; B. Potol; G. Padval; H. Parwal; Kan. Mara thonde; Kh. Patol rit; Mal. Kovakkai; Mar. Parwar; O. Potala; P. Parwal; Tel. Kommu potla; U. Parwal.



D061. Peas, fresh (*Pisum sativum*); A. Matar mah; B. Motor shuti; G., Mar. Vatana; Kash. Kaza; O. Matara; H. Matar; Kan., Tel. Batani; Kash. Matar; Kh. Mator; M. Hawai tharaak; P. Hare matar; Mal., Tam. Paccha pattani.



D062. Plantain, flower (*Musa x paradisiaca*); A. Koldil; B. Mocha; G. Kel phool; H. Kele-ka phool; Kan. Bale motho; Kh. Pashor kait; Mal. Vazhapoo; M. Lafu Tharo; Mar. Kel phool; O. Kadali bhanda; P. Kele-da-phool; Tam. Vazhapoo; Tel. Arati puvvu; U. Kela ka phool.



D063. Plantain, green (*Musa x paradisiaca*); A. Kaskol/Purakol; B. Kela (kanch); G. Kela; H. Kele (hara); Kan. Bale kayi; Kash. Kham kael; Kh. Kait im; Mal. Vazhakkai; M. Laphoi Ashangba; M. Laphoi Ashangba; Mar. Kel (hara); N. Bungo; O. Bantala kadali; P. Kela (hara); S. Rambhaa ; Tam. Vazhakkaai; Tel. Arati kayi; U. Kaccha kela.



D064. Plantain, stem (*Musa x paradisiaca*); A. Posola; B. Thor; G. Kelanu thed; H. Kele-ka-tana; Kan. Bele Dindu; Kh. Nud kait; Mal. Unnipindi; M. Lafu; Mar. Kelicha khunt; O. Kadali manja; P. Kele da tana; Tam. Vazhai thandu; Tel. Arati doota.



D065. Pumpkin green, cylindrical (*Cucurbita maxima*); A. Rongalao; B. Kumro; G. Kohlu; H. Kaddu; Kan. Kumbala kash; Kash. Paarimal; Kh. Pathaw; Mal. Mathan; M. Mairen; Mar. Lal bhopla; N. Farsi; O. Kakharu; P. Kaddu; S. Kummaandah; Tam. Parangikkai; Tel. Gummadi kaya; U. Kaddu.



D066. Pumpkin orange, round (*Cucurbita maxima*); A. Rongalao; B. Kumro; G. Kohlu; H. Kaddu; Kan. Kumbala kash; Kash. Paarimal; Kh. Pathaw saw; Mal. Mathan; M. Mairen; Mar. Lal bhopla; N. Farsi; O. Kakharu; P. Kaddu; S. Kummaandah; Tam. Parangikkai; Tel. Gummadi; U. Kaddu.



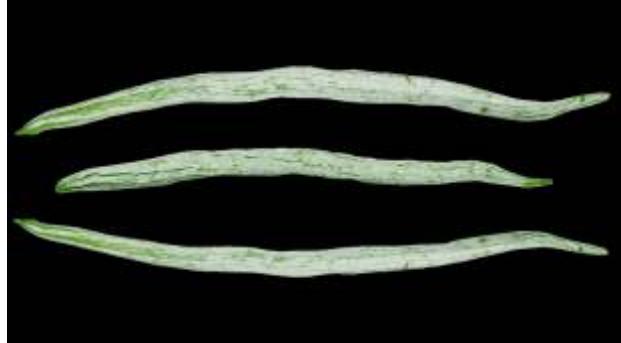
D067. Red gram, tender, fresh (*Cajanus cajan*); H. Arhar ki fali; Tam. Thuvarai; Tel. Pacchi Kandulu; U. Hara tuvar.



D068. Ridge gourd (*Luffa acutangula*); A. Jikaa; B. Jhinge; G. Turia; H. Torai; Kan. Heeraikai; Kash. Turrel ; Kh. Jingka; Kon. Gurdudde; Mal. Peechinga; M. Sebot; Mar. Dodka; O. Janhi; P. Tori; Tam. Peerankankai; Tel. Beera kaya; U. Turai.



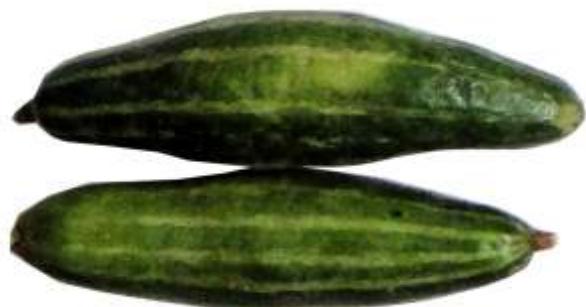
D069. Ridge gourd, smooth skin (*Luffa acutangula*); A. Bhol; B. Jhinge; G. Turia; H. Torai; Kan. Heeraikai; Kash. Turrel; Kh. Jingka; Kon. Gurdudde; Mal. Peechinga; M. Sebot; Mar. Dodka; O. Janchi; P. Tori; Tam. Peerkankai; Tel. Beera kaya; U. Turai.



D070. Snake gourd, long, pale green (*Trichosanthes anguina*); A. Dhunduli; B. Chichinga; G. Pandola; H. Chachinda; Kan. Podavala; Kh. Jingka; Mal. Padavalanga; Mar. Padwal; N. Chichindo; O. Chachinda; P. Galartori; S. Cicinndda; Tam. Pudalangai; Tel. Potla kaya; U. Chichinda.



D071. Snake gourd, long, dark green (*Trichosanthes anguina*); A. Dhunduli; B. Chichinga; G. Pandola; H. Chachinda; Kan. Podavala; Kh. Jingka; Mal. Padavalanga; Mar. Padwal; N. Chichindo; O. Chachinda; P. Galartori; S. Cicinndda; Tam. Pudalangai; Tel. Potla kaya; U. Chichinda.



D072. Snake gourd, short (*Trichosanthes anguina*); A. Dhunduli; B. Chichinga; G. Pandola; H. Chachinda; Kan. Podavala; Kh. Jingka; Mal. Padavalanga; Mar. Padwal; N. Chichindo; O. Chachinda; P. Galartori; S. Cicinndda; Tam. Pudalangai; Tel. Potla kaya; U. Chichinda.



D073. Tinda, tender (*Praecitrullus fistulosus*); G. Tadabuch; H. Tinda; Kan. Thondekkai; Kash. Tinda; Mar. Dhemase; N. Tinda; P. Tinda; U. Tinde.



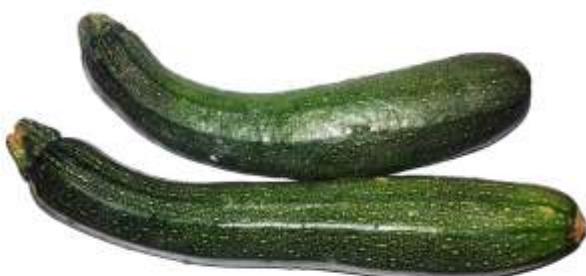
D074. Tomato, green (*Solanum lycopersicum*); A. Kesa bilahi; B. Kacha Tomato; H. Tamator ; Kan. Goore Hannu; Kash. Rowagun; Kh. Soh saw jyrgam; Mal. Takkali; M. Khamen Ashinba; Mar. Hara velvangi; O. Bilati Baigan; P. Kaccha tamator; Tam. Thakkalikkaai; Tel. Ramamulaga-kaya; U. Kaccha tamatar.



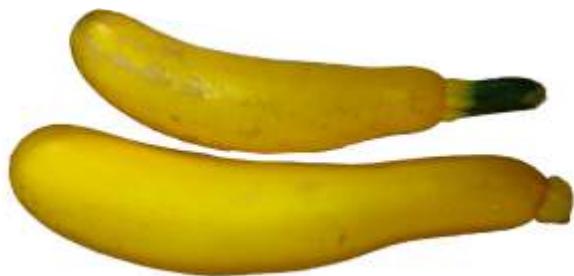
D075. Tomato, ripe, hybrid (*Solanum lycopersicum*); A. Poka bilahi; B. Tomato; G. Tameta; H. Tamator; Kan. Goore Hannu; Kash. Rowangun; Kh. Soh saw dkhar; Mal. Takkali pazham; M. Khamen ashinba; Mar. Velvangi; O. Bilati baigan; P. Pakke tamator; S. Rakta phalam; N. Gholobheda; Tam. Takkali pazham; Tel. Ramamulagakaya; U. Pakka tamatar.



D076. Tomato, ripe, local (*Solanum lycopersicum*); A. Poka bilahi; B. Tomato; G. Tameta; H. Tamator; Kan. Goore Hannu; Kash. Rowangun; Mal. Takkali pazham; M. Khamen ashinba; Mar. Velvangi; N. Gholobheda; O. Bilati Baigan; P. Pakke tamator; S. Rakta phalam; Kh. Soh saw khasii; Tam. Takkali pazham; Tel. Ramamulagakaya; U. Pakka tamatar.



D077. Zucchini, green (*Cucurbita pepo*); B. Dhudul; H. Sabed kaddu; Kan. Dilpasand; Kash. Kaashiral; Mar. Kashi bhopla; O. Golu phubi kakuri; Tam. Seemai suraikayi.



D078. Zucchini, yellow (*Cucurbita pepo*); B. Dhudul; H. Sabed kaddu; Kan. Dilpasand; Kash. Kaashiral; Mar. Kashi bhopla; O. Golu phubi kakuri; Tam. Seemai suraikayi.



E001. Apple, big (*Malus domestica*) A. Apel; B. Sev; G. Safarjan; H. Sev; Kan. Sebu; Kash. Tsoonth; Kh. Soh apple saw; Mal., Tam. Apple pazham; M. Sem; Mar. Safar chand; N. Shau; O. Sev; P. Seb; S. Seva; Tel. Sepu/Sema regu; U. Saib.



E002. Apple, green (*Malus domestica*) A. Apel; B. Sev; G. Lila safarjan; H. Sev; Kan. Sebu; Kash. Tsoonth; Kh. Soh apple Jyrngam; Mal. Apple pazham; M. Sem; Mar. Safar chand; N. Shau; O. Sev; P. Seb; S. Seva; Tam. Apple pazham; Tel. Sepu/Sema regu; U. Saib.



E003. Apple, small (*Malus domestica*) A. Apel; B. Sev; G. Safarjan; H. Sev; Kan. Sebu; Kash. Tsoonth; Kh. Soh apple saw; Mal. Apple pazham; M. Sem; Mar. Safar chand; N. Shau; O. Sev; P. Seb; S. Seva; Tam. Apple pazham; Tel. Sepu/Sema regu; U. Saib.



E004. Apple, small, Kashmir (*Malus domestica*) A. Apel; B. Sev; G. Safarjan; H. Sev; Kan. Seb; Kash. Tsoonth; Kh. Soh apple saw; Mal. Apple pazham; M. Sem; Mar. Safar chand; N. Shau; O. Sev; P. Seb; S. Seva; Tam. Apple pazham; Tel. Sepu/Sema regu; U. Saib.



E005. Apricot, dried (*Prunus armeniaca*); A. Malhoi; B. Suska khubani; G. Jardaloo (Suka velu); H. Khoomani; Kan. Jaldaru Hannu; Kash. Tser; Mal. Sheema bedhaam pazham; M. Malhei; Mar. Jardaalu; N. Khattu; P. Kharamani; Tel. Seema Badam/ Jallaru Pandu; Tam. Sakkrai badhami; U. Khubaani.



E006. Apricot, processed (*Prunus armeniaca*); A. Malhoi; B. Suska khubani; G. Jardaloo; H. Khoomani; Kan. Jaldaru Hannu; Kash. Tser; Mal. Sheema bedhaam pazham; M. Malhei; Mar. Jardaalu; N. Khattu; P. Kharamani; Tam. Sakkrai badhami; Tel. Seema Badam/ Jallaru Pandu; U. Khubaani.



E007. Avocado fruit (*Persea americana*); B. Kulunashpati; H. Makhan phal; Kan. Bennephala/ Bennehannu; Kash. Goshtub tang; Mal. Aathachakka/ Venna pazham; Mar. Makhan phal; P. Makhan phal; Tam. Vennaipazham; .



E008. Bael fruit (*Aegle marmelos*); B., Bel; G. Bila; H. Bel, Kh. Soh bel; Mal. Vilwa pazham; M. Heiri Khagok; P. Bhel; Mar. Bel; Tam. Vilwa pazham; Tel. Marendu pandu.



E009. Banana, ripe, montham (*Musa x paradisiaca*) A. Poka kol; B. Kola(paka); G. Paka keda; H. Kela; Kan. Bale hannu; Kash. Kela; Kh. Kait syiem; Mal. Vazha pazham; M. Laphoi; Mar. Kele; N. Kera; O. Champa kadali; P. Kella; S. Kadalii; Tam. Vazha pazham; Tel. Arati pandu; U. Kela.



E010. Banana, ripe, poovam (*Musa x paradisiaca*) A. Poka kol; B. Kola (paka); G. Paka keda; H. Kela; Kan. Bale hannu; Kash. Kela; Kh. Kait mon/ ja; Mal. Vazha pazham; M. Laphoi; Mar. Kele; N. Kera; O. Champa kadali; P. Kella; S. Kadalii; Tam. Vazha pazham; Tel. Arati pandu; U. Kela.



E011. Banana, ripe, red (*Musa paradisiaca*) A. Poka kol; B. Kola (paka); G. Lal paka keda; H. Kela; Kan. Bale hannu; Kash. Kela; Kh. Kait saw; Mal. Vazha pazham; M. Laphoi; Mar. Kele; N. Kera; O. Champa kadali; P. Kella; S. Kadalii; Tam. Sevvazhaipazham; Tel. Arati pandu; U. Kela.



E012. Banana, ripe, robusta (*Musa x paradisiaca*) A. Poka kol; B. Kola (paka); G. keda; H. Kela; Kan. Bale hannu; Kash. Kela; Kh. Kait jaji; Mal. Vazha pazham; M. Laphoi; Mar. Kele; N. Kera; O. Champa kadali; P. Kella; S. Kadalii; Tam. Vazhaipazham; Tel. Arati pandu; U. Kela.



E013. Black berry (*Rubus* sp.); A. Kola jamu; B. Kalojam; G. Jambu; H. Kala Jamun; Kan. Neralai; Kh. Soh jam/ Soh jamun; Mal. Naval pazham; M. Jaam; Mar. Jambhool; O. Jamukoli; P. Jamun; Tam. Nagapazham; Tel. Neredupandu.



E014. Cherries, red (*Prunus cerasus*); G. Cherry; H. Gilas; Kan. Kađugempu; Kash. Gilas; Kh. Soh sherri; Mal. Cherrypazham; Mar. Cherry phal; P. Cherry; Tam. Cherry pazham; Tel. Cherri pandu.



E015. Currants, black (*Ribes nigrum*); A. kismis; G. kadi draksh; H. Munakka; Kan. Nerale hannu; Kh. Soh kismis iong; Mal. Najavalppazham; Mar. Kala pravaha; Tam. Karunthiratcha; Tel. Nalla Kishmish; U. kala kishmish.



E016. Custard apple (*Annona squamosa*); A. Sitaphal; B. Ata; G. Sitapad; H. Sharifa; Kan. Sharifa; O. Ata; Mal. Sithapazham; Mar. Sitaphal; P. Sharifa; Tam. Seethapazham; Tel. Sitaphalam.



E017. Dates, dry, pale brown (*Phoenix dactylifera*); A. Khajur; B. Kharjura; G. Kharek; H. Chuhara; Kan. Kharjoora; Kash. Khajur; Kh. Soh khajur; Mal. Eethapazham; M. Thangtup; Mar. Khajur; N. Khajura; O. Khajuri; P. Chawara; S. Kharjura; Tam. Pericham pazham; Tel. Khajoora pandu; U. Khajur.



E018. Dates, dry, dark brown (*Phoenix dactylifera*); A. Khajur; B. Kharjura; G. Chuhara; H. Khajur; Kan. Kharjoora; Kash. Khajur; Kh. Soh khajur; Mal. Eethapazham; M. Thangtup; Mar. Khajur; N. Khajura; O. Khajuri; P. Chawara; S. Kharjura; Tam. Pericham pazham; Tel. Khajoora pandu; U. Khajur.



E019. Dates, processed (*Phoenix dactylifera*); A. Khajur; B. Kharjura; G. Khajur; H. Khajur; Kan. Kharjoora; Kash. Khajur; Kh. Soh khajur im; Mal. Eethapazham; M. Thangtup; Mar. Khajur; N. Khajura; O. Khajuri; P. Khajur; S. Kharjura ; Tam. Pericham pazham; Tel. Khajoora pandu; U. Khajur.



E020. Figs (*Ficus Carica*); A. Dimoru; B. Dumura; G. Anjir; H. Anjeer; Kan. Anjurada hanñugaļu; Kash. Anjeer; Kh. Soh Dimbur; Mal. Athipazham; M. Heirit; Mar. Anjir; N. Anjir; O. Dimiri; S. Anjiira; P. Anjeer; Tam. Athipazham; Tel. Atti pandu; U. Anjeer.



E021. Gooseberry (*Emblica officinalis*); A. Amlakhi; G. Amla; H. Amla; Kan. Betta nelli; Kh. Soh mylleng; Mal. Nellikka; M. Heikru; Mar. Amla; O. Aanla; P. Olle; Tam. Nellikkai; Tel. Usirkaya.



E022. Grapes seeded, round, black (*Vitis vinifera*); A. Angoor; B. Angoor; G. Kadi Draksha; H. Angoor; Kan. Draksha; Kash. Dach; Kh. Soh grape iong; Mal. Mundiringa; M. Angoor; Mar. Draksha; N. Angoor; O. Angoor; P. Angoor; S. Draakssaa; Tam. Panneer dratchai; Tel. Draksha padu.



E023. Grapes seeded, round, green (*Vitis vinifera*); A. Angoor; B. Angoor; G. Lili Draksha; H. Angoor; Kan. Draksha; Kash. Dach; Kh. Soh grape jyrngam; Mal. Mundiringa; M. Angoor; Mar. Draksha; N. Angoor; O. Angoor; P. Angoor; S. Draakssaa; Tam. Dratchai; Tel. Draksha padu.



E024. Grapes seeded, round, red (*Vitis vinifera*); A. Angoor; B. Angoor; G. Lal Draksha; H. Angoor; Kan. Draksha; Kash. Dach; Kh. Soh grape saw; Mal. Mundiringa; M. Angoor; Mar. Draksha; N. Angoor; O. Angoor; P. Angoor; S. Draakssaa; Tam. Dratchai; Tel. Draksha padu.



E025. Grapes seedless, oval, black (*Vitis vinifera*); A. Angoor; B. Angoor; G. Draksha; H. Angoor; Kan. Draksha; Kash. Dach; Kh. Soh grape iong; Mal. Mundiringa; M. Angoor; Mar. Draksha; N. Angoor; O. Angoor; P. Angoor; S. Draakssaa; Tam. Dratchai; Tel. Draksha padu.



E026. Grapes seedless, round, green (*Vitis vinifera*); A. Angoor; B. Angoor; G. Draksha; H. Angoor; Kan. Draksha; Kash. Dach; Kh. Soh grape jyrngam; Mal. Mundiringa; M. Angoor; Mar. Draksha ; N. Angoor; O. Angoor; P. Angoor; S. Draakssaa; Tam. Dratchai; Tel. Draksha padu.



E027. Grapes seedless, round, black (*Vitis vinifera*); G. Kadi Draksha; H. Angoor; Kan. Draksha; Kash. Dach; Kh. Soh grape iong; Mal. Mundiringa; M. Angoor; Mar. Draksha; N. Angoor; O. Angoor; P. Angoor; S. Draakssaa; Tam. Dratchai; Tel. Draksha padu.



E028. Guava, white flesh (*Psidium guajava*); A. Madhurium; B. Peyara; G. Jamphad; H. Amrud; Kan. Seebe; Kash. Amrodh; Kh. Soh pyriam; Mal. Perakka (nattu); M. Pungton; Mar. Peru; N. Aamba; O. Pijuli (deshi); P. Amrud; S. Peruka; Tam. Koiyapazham; Tel. Jama pandu; U. Amrood.



E029. Guava, pink flesh (*Psidium guajava*); H. Amrud; Tel. Jama pandu; Tam. Koiyapazham; Kan. Seebe; Mal. Perakka; Mar. Peru; O. Pijuli; B. Peyara; G. Lal jamphad; P. Amrud; A. Madhurium; Kash. Amrodh; S. Peruka; N. Aamba; M. Bilaiti pungton; Kh. Soh pyriam.



E030. Jack fruit, ripe (*Artocarpus heterophyllus*); A. Kothal; B. Kanthal; G. Phanas; H. Kathal; Kan. Halasu; Kh. Soh phan; Mal. Chakka; M. Theibong; Mar. Phanas; N. Katahar; O. Panasa; P. Kathal; Kash. Bindu; S. Panasa; Tam. Palapazham; Tel. Panasa; U. Kathahal.



E031. Jambu fruit, ripe (*Syzygium samarangense*); A. Jamu; B. Jaamrool; H. Jamun; Kan. Neralai; Mal. Naval pazham; Mar. Jambhool; O. Jamukoli; P. Jamun; Tam. Nagapazham; Tel. Neredupandu.



E032. Karonda fruit (*Carissa carandas*); A. Korja tenga; B. Koromcha; G. Karamda; H. Balalak, dindimi; Kan. Karekayi; Mar. Karvand; Mal. Karakka; O. Sushena; P. Karonda; S. Karamazda; Tam. Kalakkay/ Parungala; Tel. Kalive.



E033. Lemon, juice (*Citrus limon*); H. Nimbhu; Tel. Nimapandu ; O. Kagaji limbu; B. Pati Lebu; G. Limbu; P. Nibu; U. Neembu; A. Nemu; Kash. Nyomb; S. Lehin; N. Kaagati; M. Champra Mahi; Kh. Soh jew.



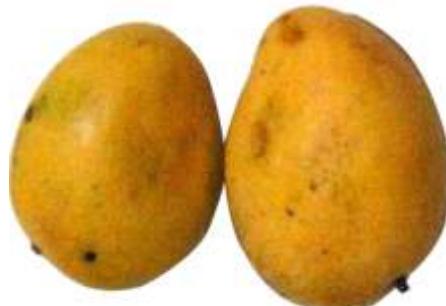
E034. Lime, sweet pulp (*Citrus limetta*); H. Mosambi; Tel. Gaja nimma pandu; Tam. Kolinchu pazham; Kan. Gaja nimbe; Mar. Limbu goda; B. Mitha lebu; G. Mosambi; A. Mosumi; Kash. Mosambi; P. Mosami; Kh. Soh balensha.



E035. Litchi (*Litchi chinensis*); A. Lichu; B. Lichu; G. Lichi; H. Lichi; Kash. Lichi; Kh. Soh manir; Mal. Lichi; M. Lichu; Mar. Lichi; N. Lichi; O. Letchu; P. Lichi; Tam. Lichi; Tel. Lichi; Kan. Lichi; U. Lichi.



E036. Mango, ripe, banganapalli (*Mangifera indica*); A. Aam; B. Aam(paka); G. Keri; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); P. Aam; S. Aamra; Tam. Mampazham; Tel. Mamidi pandu; U. Pakka aam.



E037. Mango, ripe, gulabkhas (*Mangifera indica*); A. Aam; B. Aam (paka); G. Pakeli Kedi; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); P. Aam; S. Aamra; Tam. Mampazham; Tel. Mamidi pandu; U. Pakka aam.



E038. Mango, ripe, himsagar (*Mangifera indica*); A. Aam; B. Aam (paka); G. Keri; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); P. Aam; S. Aamra; Tam. Mampazham; Tel. Mamidi pandu; U. Pakka aam.



E039. Mango, ripe, kesar (*Mangifera indica*); A. Aam; B. Aam (paka); G. Kesar kedi; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); P. Aam; S. Aamra; Tam. Mampazham; Tel. Mamidi pandu; U. Pakka aam.



E040. Mango, ripe, neelam (*Mangifera indica*); A. Aam; B. Aam (paka); G. Nilam kedi; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); P. Aam; S. Aamra; Tam. Mampazham; Tel. Mamidi pandu; U. Pakka aam.



E041. Mango, ripe, paheri (*Mangifera indica*); A. Aam; B. Aam (paka); G. Keri; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); S. Aamra; Tam. Mampazham; Tel. Mamidi pandu; U. Pakka aam.



E042. Mango, ripe, totapari (*Mangifera indica*); A. Aam; B. Aam (paka); G. Totapuri kedi; H. Aam (paka); Kan. Mavina hannu; Kash. Aamb; Kh. Soh pieng; Mal. Mam pazham; M. Heinou Amunba; Mar. Amba (piklela); N. Ampa; O. Amba (pachila); P. Aam; S. Aamra; Tel. Mamidi pandu; Tam. Mampazham; U. Pakka aam.



E043. Mangosteen (*Garcinia mangostana*); H. Mangustan; Mal. Kodam puli; Tam. Sulambali.



E044. Manila tamarind (*Pithecellobium dulce*); B. Jilapi; G. Bakhai ambli/Vilayabi ambli; H. Ganga imli/ Jangal jalebi; Kan. Seema/ dora hunase; Kh. Soh kyntoi im; M. Mange; Mar. Vilayatichinch; P. Jangal jalebi; Tam. Kodukkapuli; Tel. Seema chintakaya.



E045. Musk melon, orange flesh (*Cucumis melon*); A. Siral; B. Kharamuja; G. Kharbujo; H. Kharbooja; Kan. Kharbooja; Kash. Kherbz; Mal. Mulam pazham; Mar. Kharbooja; O. Kharbooja; P. Kharbooja; S. Kharbuuja; Tam. Mulam pazham; Tel. Kharbooja; U. Kharbz.



E046. Musk melon, yellow flesh (*Cucumis melo*); A. Siral; B. Kharamuja; G. Kharbujo (Pido); H. Kharbooja; Kan. Kharbooja; Kash. Kherbz; Mal. Mulam pazham; Mar. Kharbooja; O. Kharbooja; P. Kharbooja; S. Kharbuuja; Tam. Mulam pazham; Tel. Kharbooja; U. Kharbz.



E047. Orange, pulp (*Citrus aurantium*); A. Komola; B. Kamala lebu; G. Santra; H. Santra; Kan. Kithilai; Kash. Sangtar; Kh. Soh niamtra; Mal. Madhura naranga; M. Komla; Mar. Santre; N. Suntala; O. Kamala; P. Santra; S. Naarangga; Tam. Saathukudi; Tel. Kamala padu; U. Santra.



E048. Palm fruit, tender (*Borassus flabellifer*); H. Tar; Kan. Thati mangu; Mal. Panamnungu; O. Tala Saja; Tam. Panai nungu; Tel. Thati munjalu.



E049. Papaya, ripe (*Carica papaya*); A. Amita; B. Pepe (paka); G. Papayu; H. Papita; Kan. Pappayi Hannu; Kash. Papita; Kh. Soh Kymphor; Kon. Papayi; Mal. Omakai; M. Awathabi amunba; Mar. Popai; N. Mewa; O. Amrutbhanda (Pachila); P. Papita; Tam. Pappali; Tel. Boppayi pandu; U. Papita.



E050. Peach (*Prunus communis*) A. Ahom bogori; H. Aroo; Kash. Aer; Kh. Soh phareng; M. Chumbrei; P. Aroo.



E051. Pear (*Pyrus* sp.); A. Naspoti; B. Nashpati; G. Nashpatino; H. Nashpati; Kan. Berikai; Kash, Tang; Kh. Soh phoh; Mal. Sabarjil; M. Naspati; Mar. Nashpati; N. Naspati; O. Nashpati; P. Nashpati; Tam. Berikkai; Tel. Berikaya; U. Nashpati.



E052. Phalsa (*Grewia asiatica*); A. Pharaskol; B. Falsa; G. Falsa; H. Falsa; Kan. Phalsa hannu; Kh. Soh broi rit; Mal. Palisa; Mar. Falsa; O. Mirgichara; P. Falsa; Tam. Palisa; Tel. Falsa pandu; U. Falsa.



E053. Pineapple (*Ananas comosus*); A. Ahnaros; B. Anarasa; G. Anenas; H. Ananas; Kan. Ananas; Kash. Punchitipul; Kh. Soh trun; Kon. Anas; Mal. Kayitha chakka; M. Kihom; Mar. Ananas; O. Sapuri; P. Ananas; Tam. Annasi pazham; Tel. Anasa pandu; U. Ananas.



E054. Plum (*Prunus domestica*); B. Alubokhara H. Alubokhara; G. Aaddu; Kan. Onagida draakshi; Kash. Aeir; Kh. Soh plum dorris/ Norris; M. Heikha; P. Aloobhukhara; Tel. Alapagoda.



E055. Pomegranate, maroon seeds (*Punica granatum*); A. dalim; B. Bedana; G. Dadam; H. Anar; Kan. Dalimbari; Kash. Daan; Kh. Soh pomegranate; Kon. Dalimb; Mal. Mathalam pazham; M. Kamphoi; Mar. Dalimb; O. Dalimba; P. Anar; S. Daaddima; Tam. Madhulam pazham; Tel. Danimma pandu; U. Anaa.



E056. Pummelo (*Citrus maxima*); A. Rabab tenga; B. Batabilembu; G. Papnuse; H. Chakotra; Kan. Chakkota; Kh. Soh bah; Mal. Bombilimas; M. Nobab; Mar. Papnus; O. Batapilembu; Tam. Bombilimas; Tel. Pampara panasa.



E057. Raisins, dried, black (*Vitis vinifera*); A. kishmish; B. kishmish; G. Kadi Draksha; H. Kishmish; Kan. Drashi; Kash. kishmish; Kh. Kismis iong; Mal. Mundiringa (unakku); M. Kismis; Mar. kishmish; O. kishmish; P. Songi; Tam. Ular dhirachai; Tel. Endu draksha; U. kishmish.



E058. Raisins, dried, golden (*Vitis vinifera*); A. Kishmish; B. Kishmish; G. Pidi Draksha; H. Kishmish; Kan. Drashi; Kash. Kishmish; Kh. Kismis saw; Kon. Suke dhrakshi; Mal. Mundiringa (unakku); M. Kismis; Mar. kishmish; N. Kismis; O. Kishmish; P. Songi; Tam. Ular dhirachai; Tel. Endu draksha; U. Kishmish.



E059. Rambutan (*Nephelium lappaceum*); H. Rambutan.



E060. Sapota (*Achras sapota*); A. Chiku; H. Chiku; Kan. Sapota; Mal. Sapota; Mar. Chiku; O. Sapota; P. Chiku; Tel. Sapota; U. Sapota.



E061. Soursop (*Annona muricata*); H. Shul-ram fal; Kan. Lakshmanaphala/Mulluramphala; Mal. Mullatha; Tam. Malai seethapalam/ Paanghi pazham; Tel. Lakshamana phalamu.



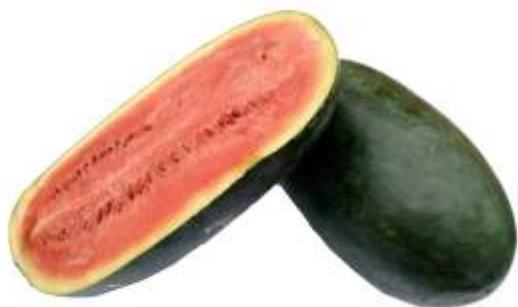
E062. Star fruit (*Averrhoa carambola*); A. Kordoi; G. Amrakh; H. Kazmal/Kamrakh; Kan. Kamaraka/ Kapazakshi hannu; Kh. Soh pyrshong; Mal. Caturappuli; M. Heinoujom; Mar. Karambal; O. Karamanga; Tam. Tamarattai; U. Kamrakh.



E063. Strawberry (*Fragaria x ananassa*); G. strawberry; Kan. Nela milli hannu; Kh. Strawberry/ soh stap; Mal. Stroberry; P. Lachi; Kash. Istaber; Tam. Strawberry.



E064. Tamarind, pulp (*Tamarindus indica*); A. Teteli; B. Tetul; G. Amlí; H. Imli; Kan. Hunise hannu; Kash. Tambari; Kh. Soh kyntoi; Mal. Puli; M. Mange; Mar. Chinch; N. Imali; O. Tentuli; P. Imli; S. Sucukrika; Tam. Puli; Tel. Chintha pandu; U. Imli.



E065. Water melon, dark green (sugar baby) (*Citrullus vulgaris*); A. Tormuj; B. Tarmuj; G. Tadbuj; H. Tarbuj; Kan. Kallangadi; Kash. Hend wend; Kh. Soh watermelon; Kon. Bacchanga; Mal. Thannir mathan; M. Tarbuj; Mar. Kalingad; N. Kharbuja; O. Tarvuja; P. Dawana; Tam. Darbusani; Tel. Puchakaya; U. Tarbuja.



E066. Water melon, pale green (*Citrullus vulgaris*); A. Tormuj; B. Tarmuj; G. Tadbuj; H. Tarbuj; Kan. Kallangadi; Kash. Hend wend; Kh. Soh watermelon; Kon. Bacchanga; Mal. Thannir mathan; M. Tarbuj; Mar. Kalingad; N. Kharbuja; O. Tarvuja; P. Dawana; Tam. Darbusani; Tel. Puchakaya; U. Tarbuja.



E067. Wood apple (*Limonia acidissima*); A. Bel; B. Koyethbel; G. Kothu; H. Kaith; Kan. Bele; Kash. Bum choont; Mal. Vilam pazham; Mar. Kavath; O. Kaitha; P. Chaktora; S. Bilvaon (Gorakamli); Tam. Vilam pazham; Tel. Velega pandu; U. Beal.



E068. Zizyphus (*Zizyphus jujuba*); A. Bogori; B. Kula; G. Ber; H. Ber; Kan. Yelachi; Kash. Brey; Kh. Soh broi heh; Kon. Bor; Mal. Elanth Pazham; M. Boroi; Mar. Bor; O. Barakoli; P. Beri; S. Badarii; Tam. Elanthai pazham; Tel. Regu pandu; U. Ber.



F001. Beet root (*Beta vulgaris*); A. Beet; B. Beet; G. Beet; H. Chukandar; Kan. Beet; Kh. U bit; Kash. Chogander munji; Mal. Beet root; Mar. Beet root; O. Bita; P. Chukandar; S. Paalangashaakah; Tam. Beet root; Tel. Beet root; U. Chokhandar.



F002. Carrot, orange (*Daucus carota*); A. Gajor; B. Gajar; G. Gajar; H. Gajar; Kan. Gajjare; Kash. Ghahzir; Kh. U kajor; Mal. Carrot; M. Gajar; Mar. Gajar; N. Gajar; O. Gajara; P. Gajar; S. Grunjanam; Tam. Carrot; Tel. Gajjara gadda; U. Gajar.



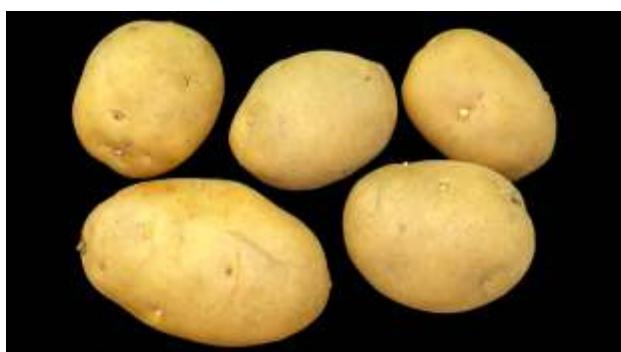
F003. Carrot, red (*Daucus carota*); A. Gajor; B. Gajar; G. Gajar; H. Gajar; Kan. Gajjare; Kash. Ghahzir; Kh. Kajor; Mal. Carrot; M. Gajar; Mar. Gajar; N. Gajar; O. Gajara; P. Gajar; S. Grunjanam; Tam. Carrot; Tel. Gajjara gadda; U. Gajar.



F004. Colocasia (*Colocasia esculenta*); A. Kosu; B. Kochu; G. Advi; H. Arwi; Kan. Samagadde; Kash. faram; Kh. Ka shriew; Mal. Chembu; M. Paan; Mar. Alu kanda; O. Saru; P. Arwi; Tam. Seppankizhangu; Tel. Chama dumpa; U. Arwi.



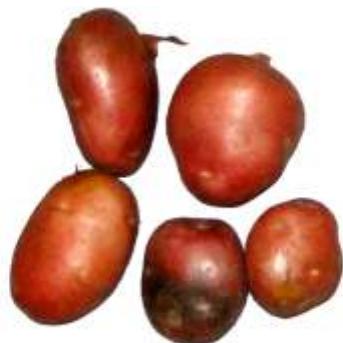
F005. Lotus root (*Nelumbium nelumbo*); A. podum thari; G. Kamad kakdiH. Kamal gatta; Kan. Tavare dantu; Kash. Nader; Kh. Thied lotus; Mal. Thamara thandu; M. Thambou; Mar. Kamalkaakdi; O. Padma nad; P. Kamal zahr; Tam. Thamaraithandu; Tel. Thamara kada; U. Kanwal kakri.



F006. Potato, brown skin, big (*Solanum tuberosum*); A. Simolu aloo; B. Gal alu; G. Bateka; H. Alu; Kan. Alugadda; Kash. Oalu; Kh. U phan; Kon., Alu; N. Alu; Mal. Urula kizhangu; M. Aloo; Mar. Batata; O. Alu; P. Alu; S. Aalukah; Tam. Urulai kizhangu; Tel. Bangala dumpa; U. Alu.



F007. Potato, brown skin, small (*Solanum tuberosum*); A. Simolu aloo; B. Gal alu; G. Bateka; H. Alu; Kan. Alugadda; Kash. Oalu; Kh. Phan rit; Kon. Alu; M. Aloo; Mar. Batata; N., O., P., U. Alu; S. Aalukah; Tam. Urulaikizhangu; Tel. Bangala dumpa.



F008. Potato, red skin (*Solanum tuberosum*); A. Aloo; B. Gal alu; G. Bateka; H. Alu; Kan. Alugadda; Kash. Oalu; Kh. Phan saw; Kon. Alu; Mal. Urula kizhangu; Mar. Batata; N. Alu; O. Alu; P. Alu; S. Aalukah; M. Aloo; Tam. Urulaikizhangu; Tel. Bangala dumpa; U. Alu.



F009. Radish, elongated, red skin (*Raphanus sativus*); A. Mula; B. Mula; G. Muda; H. Muli; Kan. Mullangi; Kh. Muli saw; Mal. Mullangi; Mar. Mula; N. Mula; O. Mula; P. Gonglu; S. Moolikaa; Tam. Mullangi; Tel. Mullangi; U. Mooli.



F010. Radish, elongated, white skin (*Raphanus sativus*); A. Mula; B. Mula; G. Muda; H. Muli; Kan. Mullangi; Kh. Muli lieh; Mal. Mullangi; Mar. Mula; N. Mula; O. Mula; P. Gonglu; S. Moolikaa; Tam. Mullangi; Tel. Mullangi; U. Mooli.



F011. Radish, round, red skin (*Raphanus sativus*); A. Mula; B. Mula; G. Muda; H. Muli; Kan. Mullangi; Kh. Muli pylon; Mal. Mullangi; Mar. Mula; N. Mula; O. Mula; P. Gonglu; S. Moolikaa; Tam. Mullangi; Tel. Mullangi; U. Mooli.



F012. Radish, round, white skin (*Raphanus sativus*); A. Mula; B. Mula; G. Muda; H. Muli; Kan. Mullangi; Kh. Muli pylon; Mal. Mullangi; Mar. Mula; N. Mula; O. Mula; P. Gonglu; S. Moolikaa; Tam. Mullangi; Tel. Mullangi; U. Mooli.



F013. Sweet potato, brown skin (*Ipomoea batatas*); A. Meetha aloo; B. Ranga alu; G. Sakkaria; H. Shakarkand; Kan. Genasu; Kh. Phankaro iong; Mal. Sakkarvalli kizhangu; M. Manghra; Mar. Ratalu; N. Sakhar Khand; O. Kandamula; P. Sakkargandi; Tam. Sakkarvalli kizhangu; Tel. Chilagada dumpa; U. Ratalu.



F014. Sweet potato, pink skin (*Ipomoea batatas*); A. Meetha aloo; B. Ranga alu; G. Sakkaria; H. Shakarkand; Kan. Genasu; Kh. Phankaro saw; Mal. Sakkarvalli kizhangu; M. Manghra; Mar. Ratalu; N. Sakhar Khand; O. Kandamula; P. Sakkargandi; Tam. Sakkarvalli kizhangu; Tel. Chilagada dumpa; U. Ratalu.



F015. Tapioca (*Manihot esculenta*); A. Sagi; B. Simla alu; G. Aararoot; H. Simla alu; Kan. Mara genasu; Kh. Phan dieng; Mal. Marachini; M. U Manghra; Mar. Simla Batata; N. Tarul; O. Kathakonda; P. Simla alu; Tam. Maravalli kizhangu; Tel. Krrapendalamu; U. Kasawa soji.



F016. Water Chestnut (*Eleocharis dulcis*); A. Pani singora; B. Pani phal; G. Shingoda; H., Mar. Shingara; Kash. Goer; Mal. Karimpolam; M. Kaothum; O. Pani singhara; P. Shingada; Tam. Singhara; Tel. Kubyakam.



F017. Yam, elephant (*Amorphophallus campanulatus*); A. Ol kachu; B. Ol; G. Suran; H. Zimikandha; Kan. Suvarna gadda; Kh. Shriew hati; Mal. Chena; M. Haa; Mar. Suran; O. Suran; P. Zimikand; Tam. Karunai kizhangu; Tel. Kandha dumpa.



F018. Yam, ordinary (*Amorphophallus sp.*); A. Kath aloo; B. Gherkochoo; G. Ratadu; H. Sooran; Kan. Suvarna gadda; Kh. Shriew jrong; Mal. Chena; M. Haa; Mar. Goradu; N. Pidaloo; O. Khamba alu; S. Aalu; Tam. Karunai kizhangu; Tel. Durdakandagadda.



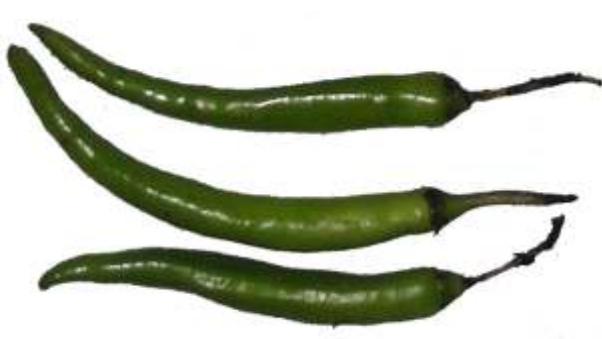
F019. Yam, wild (*Dioscorea villosa*); A. Jongoli kosu; B. Ranga alu; G. Ratadu; H. Suaralu; Kan. Hegganasu; Kh. Shriew lieh; Mal. Kattuchena; M. Haa; Mar. Suran; Tam. Kodi kizhangu; Tel. Chedu paddu dumpa.



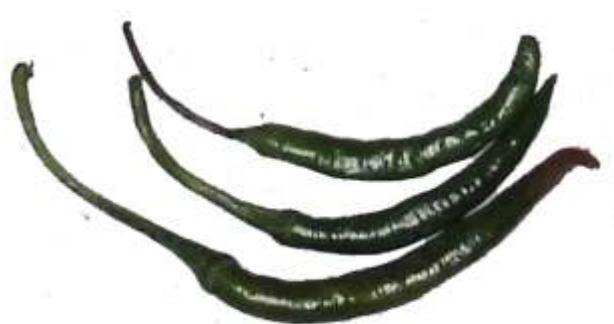
G001. Chillies, green-1 (*Capsicum annum*); A. Kesa jalakia; G. Lila marcha; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken heh; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



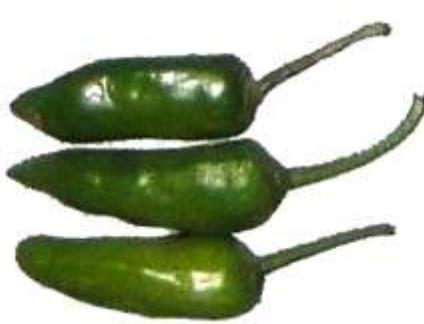
G002. Chillies, green-2 (*Capsicum annum*); A. Kesa jalakia; G. Lila marcha; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken dkhar; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



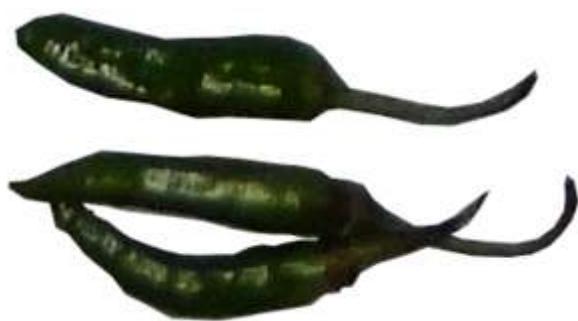
G003. Chillies, green-3 (*Capsicum annum*); A. Kesa jalakia; G. Lila marcha; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken dkhar; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



G004. Chillies, green-4 (*Capsicum annum*); A. Kesa jalakia; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken dkhar; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



G005. Chillies, green-5 (*Capsicum annum*); A. Kesa jalakia; G. Vadhvani marcha; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken dkhar; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



G006. Chillies, green-6 (*Capsicum annuum*); A. Kesa jalakia; G. Lila marcha; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken dkhar; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



G007. Chillies, green-7 (*Capsicum annuum*); A. Kesa jalakia; G. Gola marcha; H. Hara Mirchi; Kan. Hasi Menasinakayi; Kash. Marach wangun; Kh. Soh mynken beb; Mal. Mulaku; M. Morok; Mar. Mulaku; N. Hariyo khursani; O. Kancha Lanka; P. Hara mirchi; S. Marichika; Tam. Pachhai milagai; Tel. Pacchi Mirapakaya; U. Hara mirchi.



G009. Coriander, leaves (*Coriandrum sativum*); A. Dhania paat; B. Dhone pata; G. Dhana pandada; H. Hara dhania; Kan. Kothambari; Kash. Daaniwal; Kh. Dhonia dkhar; Mal. Kothamalli; M. Fadhighom Mana; Mar. Kothimbir; N. Hario Dhaniya; O. Dhania Patra; P. Hara dhaniya patta; Tam. Kothamalli; Tel. Kothimiri; U. Hara dhaniya.



G010. Curry leaves (*Murraya koenigii*); A. Narasingha paat; B. Karhi-pat; G. Kadi umdo; H. Gandhela ; Kan. Karibevu; Kash. Curry patta; Kh. Sla Kori; Mal. Kariveppilai; M. Curry Pata; Mar. Gandhela; N. Kary patta; O. Bhursanga Patra; P. Kadhi patta; S. Girinimba; Tam. Kariveppilai; Tel. Karivepaku; U. Kadi ka patta.



G011. Garlic, big cloves (*Allium sativum*); A. Nohoru; B. Rashun; G. Lasan; H. Lehsan; Kan. Bellulli; Kash. Ruhan; Kh. Rynsun heh/ Rynsun dkhar; Mal. Vellulli; M. Chanam; Mar. Lasoon; N. Lasun; O. Rasuna; P. Lasan; S. Lashoonam; Tam. Poondu; Tel. Vellulli; U. Laisan.



G012. Garlic, small cloves (*Allium sativum*); A. Nohoru; B. Rashun; G. Lasan; H. Lehsan; Kan. Bellulli; Kash. Ruhan; Kh. Rynsun rit; Mal. Vellulli; M. Chanam; Mar. Lasoon; N. Lasun; O. Rasuna; P. Lasan; S. Lashoonam; Tam. Poondu; Tel. Vellulli; U. Laisan.



G013. Garlic, single clove, Kashmir (*Allium sativum*); A. Nohoru; B. Ek koya Rashun; G. Lasan; H. Lehsan; Kan. Bellulli; Kash. Ruhan; Kh. Rynsun; Mal. Vellulli; M. Chanam; Mar. Lasoon; N. Lasun; O. Rasuna; P. Lasan; S. Lashoonam; Tam. Ottrai poondu; Tel. Vellulli; U. Laisan.



G014. Ginger fresh (*Zingiber officinale*); A. Ada kesa; B. Ada; G. Adu; H. Adrak ; Kan. Shunti; Kash. Adrak; Kh. Sying bah; Mal. Inji; M. Sing; Mar. Ale; N. Aduwa; O. Ada; P. Adrak; S. Aadrank; Tam. Inji; Tel. Allam; U. Adrak.



G015. Mango, ginger (*Curcuma amada*); A. Aam ada; B. Amada; G. Amba Hardar; H. Aam adhrak; Kan. Mavina hasi sunthi; Kash. Adrak; Kh. Sying makhir; Mal. Mangainji; Mar. Amba haldi; P. Aam adrak; Tam. Mainjhi; Tel. Mamidiallam; U. Aam adrak.



G016. Mint leaves (*Mentha spicata*); A. Podina; B. Pudina; G. Phudino; H. Pudina; Kan. Pudina; Kash. Pudinth; Kh. Pudina; Mal. Pudina; M. Nungsihidak; Mar. Pudina; N. Baabari; O. Pudina Patra; P. Pudina; Tam. Pudina; Tel. Pudina; U. Pudina.



G017. Onion, big (*Allium cepa*); A. Piyanj; B. Peyaj; G. Kando; H. Pyaz; Kan. Eerulli; Kash. Gandha; Kh. Piat; Mal. Ulli; M. Tilhou; Mar. Kanda; N. Pyaj; O. Piaja; P. Gandhe; S. Palaanduh; Tam. Vengayam; Tel. Neerulli/ Ullipaya; U. Pyaaz.



G018. Onion, small (*Allium cepa*); A. Xoru Piyanj; B. Gundhun; G. Dungri (nani); H. Pyaaz Kali; Kan. Chikk Eerulli; Kash. Praan; Kh. Piat rit; Mal. Cheriya Ulli; M. Tilhou ; Mar. Kanda; N. Pyaj; P. Gandhe; Tam. Chinna vengayam; Tel. Chinna ullipaya; U. Pyaaz.



G019. Asafoetida (*Ferula assa-foetida*); A. Hing; B. Hing; G. Hing; H. Hing ; Kan. Hingu; Kash. Yangu; Kh. U hing; Mal. Perungayam; M. Hing; Mar. Hing; N. Hing; O. Hingu; P. Hing; S. Badhika; Tam. Perugayam; Tel. Inguva; U. Hing.



G020. Cardamom, green (*Elettaria cardamomum*); A. Ilasi; B. Elach; G. Alechi; H. Elaychi; Kan. Yelakki; Kash. Aa'l budu'a aa' l; Kh. Elaishi; Mal. Elakkai; M. Elaichi; Mar. Veldoda; N. Alaichi; O. Alaichi; P. Shoti elaychi; S. Ela; Tam. Elakkai; Tel. Elakkai; U. Elaichi.



G021. Cardamom, black (*Elettaria cardamomum*); B. Boro elach; G. Moti alechi; A. Ilasi; H. Badi elaychi; Kan. Yelakki; Kash. Aa'l budu'a aa' l; Kh. Elaichi; Mal. Elathari; M. Elaichi; Mar. Veldoda; N. Alaichi; O. Alaichi; P. Baddi elaychi; S. Ela; Tam. Elakkai; Tel. Elakkai; U. Elaichi.



G022. Chillies, red (*Capsicum annum*); A. Sukan jolokia; B. Shuckhuo Lonka; G. Lal marcha (sukha); H. Mirchi; Kan. Ona Menasinakayi; Kh. Sohmynken trykhong; Mal. Mulaku; M. Morok Akangba; Mar. Mulaku; N. Rato Khursani; O. Lanka; P. Lal mircha; Tam. Varamilagai; Tel. Mirapakaya; U. Lal mirchi.



G023. Cloves (*Syzygium aromaticum*); A. Long; B. Lobong; G. Lavang; H. Lavang; Kan. Lavanga; Kash. Ruang; Kh. U long; Mal. Krambu; M. Long; Mar. Lavang; N. Luwang; O. Labang; P. Long; S. Lavanga; Tam. Krambu; Tel. Lavangu; U. Long.



G024. Coriander Seeds (*Coriandrum sativum*); A. Dhoniya; B. Dhone; G. Sukha dhana; H. Dhania; Kan. Kothambari; Kash. Daaniwal; Kh. Symbai dhania; Mal. Kothambalari; M. Fadhighom Maru; Mar. Dhane; N. Dhania; O. Dhania; P. Dhania; S. Dhanyaka; Tam. Kothamalli vidhai; Tel. Dhaniyalu; U. Dhaniya.



G025. Cumin seeds (*Cuminum cyminum*); A. Jeera; B. Jire; G. Jiru; H. Jira; Kan. Jeerage; Kash. Zyur; Kh. U jeera; Mal. Jeerakam; M. Jeera; Mar. Jira; N. Jeera; O. Jira; P. Jira; S. Jiraka; Tam. Jeerakam; Tel. Jeelakarra; U. Jira.



G026. Fenugreek seeds (*Trigonella foenum graecum*); A. Methi; B. Methi; G. Methi dana ; H. Methi; Kan. Menthe; Kash. Meeth; Kh. Symbai methi; Mal. Uluva; M. Methi; Mar. Methi; N. Methi; O. Methi; P. Methi; S. Methe; Tam. Venthayam; Tel. Menthulu; U. Methi.



G027. Mace (*Myristica fragrans*); B. Jayitri; G. Javantri; H. Avithri; Kan. Jalwatur; Kash. Jalwatur; Mal. Jathipatri; Mar. Jaypatri; O. Jayitri; P. Jaipatri; Tam. Jathipatri; Tel. Japathri; U. Javantri.



G028. Nutmeg (*Myristica fragrans*); A. Jaiphal; B. Jayphal; G. Jayaphad; H. Jaiphal; Kan. Jayikai mara; Kash. Zaaphal; Mal. Jathikai; Mar. Jayaphala; N. Jaiphal; O. Jaiphal; P. Jaiphal; S. Jatiphala; Tam. Jathikai; Tel. Jajikaya; U. Jaifal.



G029. Omum (*Trachyspermum ammi*); A. Ajwain; B. Joan; G. Ajmo; H. Ajwan; Kan. Oma; Kash. Jawind; Kh. Paspron; Mal. Ayamothakam; Mar. Onva; O. Juani; P. Ajwain; S. Ajamoda; Tam. Omum; Tel. Vamu; U. Ajwain.



G030. Pippali (*Piper longum*); B. Pipul; G. Khus khus; H. Pipli; Kan. Kandan Lippili; Kh. Sohmarit khlaw; Mal. Tippali; Mar. Pimpli; O. Sarupippali; P. Javantri; S. Pippali; Tam. Tippili; Tel. Pippallu; U. Pipul.



G031. Pepper, black (*Piper nigrum*); A. Kola jaluk; B. Golmarichi; G. Mari; H. Kalimirchi; Kan. Kari menasu; Kash. Marutus; Kh. Soh marit; Mal. Kurumlaku; Mar. Mire; N. Marich; O. Golomarcho; P. Kalimirchi; S. Marich ushna, hapusha; Tam. Milagu; Tel. Mirayalu; U. Kaali Mirch.



G032. Poppy seeds (*Papaver somniferum*); A. Afoo guti; B. Posta; G. Aphina; H. Postdana; Kan. Afim; Kash. Khaskhash; Mal. Afiam; Mar. Khaskhas; N. Khus Khus; O. Postak; P. Khas Khas; S. Khasa; Tam. Khasakhasa; Tel. Gasagasalu; U. Khash Khash.



G033. Turmeric powder (*Curcuma domestica*); A. Halodhi; B. Holud; G. Haddar; H. Haldi; Kan. Anashina; Kash. Lader; Kh. Shynrai; Mal. Manjal; M. Yaingang; Mar. Halad; N. Besar; O. Haladi; P. Haldi; S. Haladi; Tam. Manjal; Tel. Pasupu; U. Haldi.



H001. Almond (*Prunus amygdalus*); A. China badam; B. Badam; G. Badam; H. Badam; Kan. Badam; Kash. Badam; Kh. Almon; Mal. Vatam kottai; M. Badam; Mar. Badam; N. Kagi Badam; O. Badam; P. Badam; Tam. Badam paruppu; Tel. Badam Pappu; U. Badam.



H002. Areca nut, dried, brown (*Areca catechu*); A. Sufari; B. Supari; G. Sopari; H. Supari; Kan. Adike; Kash. Supari; Kh. Kwai tyrkhong; Mal. Adakka; M. Kwa Maru; Mar. Supari; N. Supari; O. Gua; P. Supari; S. Puuga; Tam. Kottai paakkku; Tel. Vakka; U. Supari.



H003. Areca nut, dried, red color (*Areca catechu*); A. Sufari; B. Supari; G. Sopari; H. Supari; Kan. Adike; Kash. Supaari; Kh. Kwai supari; Mal. Adakka; M. Kwa Maru; Mar. Supari; N. Supari; O. Gua; P. Supari; S. Puuga; Tam. Paakkku; Tel. Vakka; U. Supari.



H004. Arecanut, fresh (*Areca catechu*); A. Kesa tamul; B. Supari; G. Sopari; H. Supari; Kan. Adike; Kash. Supaari; Kh. Kwai im; Mal. Adakka; M. Kwa Maru; Mar. Supari; N. Supari; O. Gua; P. Supari; S. Puuga; Tam. Paakkku; Tel. Vakka; U. Supari.



H005. Cashew nut (*Anacardium occidentale*); A. Kaju badam; B. Hijli Badam; G. Kaju; H. Kaju; Kan. Geru beeja; Kash. Kaju; Kh. Soh kashu; Mal. Kasu andi; M. Kaju; Mar. Kaju; N. Kaju; O. Lanka ambu; P. Kaju; Tam. Mundiri paruppu; Tel. Jeedi pappu; U. Kaju.



H006. Coconut, kernel, dry (*Cocos nucifera*); A. Dab narikol; B. Narkel; G. Kopra ni kachli; H. Nariyal; Kan. Thengini kai; Kash. Narjil; Kh. Snep kor trykhong; Mal. Thenga; M. Yubi Akangba; Mar. Narel; O. Nadia; P. Gola; Tam. Koppurai; Tel. Endu Kobbari; U. Khopra.



H007. Coconut, kernel, fresh (*Cocos nucifera*); A. Narikol; B. Narkel; G. Nariyad; H. Nariyal; Kan. Thengina kayi; Kash. Narjeel; Kh. Snep kor im; Mal. Karikku; M. Yubi; Mar. Narel; N. Naribel; O. Paida; P. Nariyal; S. Naarikela; Tam. Thenkai; Tel. Kobbari; U. Nariyel.



H008. Garden cress, seeds (*Lepidium sativum*); A. Soru manimunni ; B. Halim; G. Asadiyo; H. Halim; Kan. Allibija; Mal. Alivirai; Mar. Ahiva; P. Halim; Tam. Alivirai; Tel. Adityala.



H009. Gingely seeds, black (*Sesamum indicum*); A. Kola til; B. Til; G. Kada tal; H. Til; Kan. Acchellu; Kash. Til; Kh. Nei iong; Mal. Ellu; M. Thoiding Amuba; Mar. Til; N. Teel; O. Rasi; P. Til; S. Til; Tam. Ellu; Tel. Nuvvulu; U. Til .



H010. Gingely seeds, brown (*Sesamum indicum*); A. Matia rangar til; B. Til; G. Tal; H. Til; Kan. Acchellu; Kash. Til; Kh. Nei; Mal. Ellu; M. Thoiding; Mar. Til; N. Teel; O. Rasi; P. Til; S. Til; Tam. Ellu; Tel. Nuvvulu; U. Til.



H011. Gingely seeds, white (*Sesamum indicum*); A. Boga til; B. Til; G. Safed tal; H. Til; Kan. Acchellu; Kash. Til; Kh. Nei; Mal. Ellu; M. Thoiding Angouba; Mar. Til; N. Teel; O. Rasi; P. Til; S. Til; Tam. Ellu; Tel. Nuvvulu; U. Til.



H012. Ground nut (*Arachis hypogaea*); A. Badam; B. China badam; G. Singdana; H. Moog phali; Kan. Kadale kayi; Kash. Moong phalli; Kh. Badam; Mal. Nilakkadalai; M. Leibak Hawaii; Mar. Bhui mug; O. China badam; P. Moog phali; Tam. Verkadai; Tel. Verusenaga; U. Moog phali.



H013. Mustard, seeds (*Brassica nigra*); A. Soriyah; B. Sorse; G. Rai; H. Rai; Kan. Sasuve; Kash. Assur; Kh. Symbai syrso; Mal. Kadugu; M. Hangham Maru; Mar. Mohori; N. Rayo; O. Sorisa; P. Rai; S. Sarssapa; Tam. Kadugu; Tel. Avalu; U. Rai.



H014. Linseeds (*Linum usitatissimum*); B. Tishi; G. Adsi; H. Alsi; Kan. Agasi; Kash. Ailsh; Mal. Cheruchana vithu; Mar. Jawas; O. Pesi; P. Alsi; S. Atasii; Tam. Ali vidai; Tel. Avise ginzalu; U. Alsi.



H015. Niger seeds, black (*Guizotia abyssinica*); A. Sorguja; B. Ram til; G. Kada tal; H. Kala til; Kan. Gurellu; Kash. Bazar-Bhang; Mal. Karim jeerakam; Mar. Karale; Tam. Kattelu; Tel. Valasulu.



H016. Niger seeds, grey (*Guizotia abyssinica*); A. Sorguja; B. Ram til; G. Tal; H. Kala til; Kan. Gurellu; Kash. Bazar-Bhang; Mal. Karim jeerakam; Mar. Karale; Tam. Kattelu; Tel. Valasulu.



H017. Pine seed (*Pinus sp.*); G. Chilgoza; H. Chilgoza; Kash. Chilgoza; Kh. Symbai soh kseh; Mar. Jhurane biya; P. Rhi.



H018. Pistachio nut (*Pistacia vera*); A. Pista; B. Pesta; G. Pista; H. Pista; Kan. Pista; Kash. Pista; Kh. Pista; Mal. Pista; Mar. Pista; N. Pista; O. Pista; P. Pista; Tam. Pista; Tel. Pista; U. Pista.



H019. Safflower seeds (*Carthamus tinctorius*); B. Kusum; G. Kusumbo; H. Kardi; Kan. Kusambe; Kh. Symbai tiew sngi; Mal. Karadi; Mar. Karadi; Tam. Sendurkan vidhai; Tel. Kusuma ginzalu.



H020. Sunflower seeds (*Helianthus annuus*); A. Beli phular guti; B. Suraj mukhi; G. Suraj mukhi na bee; H. Surya mukhi; Kan. Sryakānti bijagalu; Kh. Symbai tiew sngi; Mal. Suryakanthi; M. Numitlei Maru; Mar. Surya mukhi; O. Surjya Mukhi Manji; P. Suraj mukhi; Tam. Suryakanthi vidhai; Tel. Podduthirugidi puvvu ginzalu.



H021. Walnut (*Juglans regia*); A. Akhrot; B. Akhrot; G. Akhrot; H. Akhrot; Kan. Akrodu; Kash. Dhoon; Kh. Walnut; Mal. Akrottandi; M. Heijukha; Mar. Akhrod; N. Okhar; O. Akhoot; P. Akhrot; Tam. Akhrot; Tel. Akrot kaya; U. Akhrut.



I001. Jaggery, cane (*Saccharum officinarum*); A. Gur; B. Gurh; G. God; H. Gud; Kan. Bella; Kash. Gor; Kh. Mithai Gur; Kon. Godd; Mal. Vellam; M. Chini Anganba; Mar. Gul; O. Guda; P. Gud; Tam. Mandavellam; Tel. Bellam; U. Gud.



I002. Sugar cane, juice (*Saccharum officinarum*); A. Kunhiyar; B. Akher rosh; G. Sherdino ras; H. Ganne-karas; Kan. Kabbina halu; Kash. Ganne rus; Kh. Soh Pai; Mal. Karumbin neeru; M. Chuhing; Mar. Usacha rasa; O. Aakhu Dorua; P. Ganne-da-ras; Tam. Karumbu charu; Tel. Cheruku rasam; U. Ganne-ke-ras.



J001. Button mushroom, fresh (*Agaricus* sp.); A. Mushroom; B. Banger chata; G. Biladi no top; Kan. Aanabay/Aanabe; Kash. Hadder; Kh. Tit budam; Mal. Kun koon; M. Chenghum; Mar. Bhoochhtra; O. Chatu; P. Khoomba; Tam. Kaalaan; Tel. Putta Godugu.



J002. Chicken mushroom, fresh (*Lactiporus* sp.); A. Mushroom; B. Banger chata; G. Biladi no top; Kan. Aanabay/Aanabe; Kash. Hadder; Kh. Tit tyndong; Mal. Kun koon; M. Chenghum; Mar. Bhoochhtra; O. Chatu; P. Khoomba; Tam. Kaalaan; Tel. Putta Godugu.



J003. Shiitake mushroom, fresh (*Lentinula* sp.); A. Mushroom; B. Banger chata; G. Biladi no top; Kan. Aanabay/Aanabe; Kash. Hadder; Mal. Kun koon; M. Uyen; Mar. Bhoochhtra; O. Chatu; P. Khoomba; Tam. Kaalaan; Tel. Putta Godugu.



J004. Oyster mushroom, dried (*Pleurotus* sp.); B. Banger chata; G. Biladino top; Kan. Aanabay/Aanabe; Kash. Hadder; Mal. Kun koon; M. Chenghum; Mar. Bhoochhtra; O. Chatu; P. Khoomba; Tam. Kaalaan; Tel. Putta Godugu.



K001. Toddy (*Borassus flabellifer*) ; A. Tari; B. Tari; Kan. Henda; G. Tadi; H. Tarai; Kh. Kiad lieh; Mar., O. Tadi; P. Todhi; Mal., Tam., Tel., Kallu.



K002. Coconut water (*Cocos nucifera*); A. Dab narikolor pani; B. Daberjal; G. Nariyad nu pani; H. Nariyal ka pani; Kan. Thenga neeru; Kash. Narji pooen; Kh. Um snepkor Mal. Thenga vellam; M. Yubi Mahi; Mar. Naral pani; O. Paida pani; P. Gola da pani; Tam. Ilaneer; Tel. Kobbari neeru.



L001. Milk, Buffalo; A. Mohor gakhir; B. Dudha (Mosher); G. Bhes nu dhudh; H. Bhains ka dhood; Kan. Uemma halu; Kash. Doodh; Kh. Dud muid; Mal. Kerbau paal; M. Eroi Sanghom; Mar. Doodh (Maish); O. Mainsi dudha; P. Maz da doodh; Tam. Erumaipal; Tel. Gedha/Barre palu.



L002. Milk, Cow; A. Garoor gakhir; B. Doodh (garu); G. Gai nu dhudh; H. Gai ka doodh; Kan. Hasuvina halu; Kash. Doodh; Kh. Dud masi; M. San Sanghom; Mar. Doodh(gay); O. Gai dudha; P. Gaan da doodh; S. Gow kshiram; Tam. Pasumpaal; Tel. Aavu paalu.



L003. Paneer; A. Paneer; B. Chena; G. Paneer; H. Chhena; Kan. Tali; Kash. Chaman; Kh. Paneer; Mal. Palkatti; M. Channa; O. Chhena; P. Paneer; Tam. Paladai; Tel. Paalavirugudu.



L004. Khoa; A. Khoa; B., H., Kan., Mal., P., Tel. Khoa; G. Mavo; Kash. Khoya; Kh. Malai khowa; O. Khua; P. Khoya; Tam. Thirattupal.



P001. Allathi (*Elops machnata*)
[Place of collection: Chennai]



P002. Aluva (*Parastromateus niger*)
[Place of collection: Vizag, Goa and Mumbai]



P03. Anchovy (*Stolephorus indicus*)
[Place of collection: Chennai and Kochi]



P004. Ari fish (*Aprion virescens*)
[Place of collection: Kochi]



P005. Betki (*Lates calcarifer*)
[Place of collection: Kolkata]



P006. Black snapper (*Macolor niger*)
[Place of collection: Kolkata]



P007. Bombay duck (*Harpodon nehereus*)
[Place of collection: Mumbai and Kolkata]



P008. Bommuralu (*Muraenesox cinerius*)
[Place of collection: Chennai, Goa and Vizag]



P09. Cat fish (*Tachysurus thalassinus*)
[Place of collection: Chennai]



P010. Chakla (*Rachycentron canadum*)
[Place of collection: Mumbai, Vizag, Goa, Mandapam and Chennai]



P011. Chappal (*Aluterus monoceros*)
[Place of collection: Goa]



P012. Chelu (*Elagatis bipinnulata*)
[Place of collection: Vizag and Chennai]



P013. Chembali (*Lutjanus quinquelineatus*)
[Place of collection: Kochi]



P014. Eri meen (*Pristipomoides filamentosus*)
[Place of collection: Kochi]



P015. Gobro (*Epinephelus diacanthus*)
[Place of collection: Mumbai and Goa]



P016. Guitar fish (*Rhinobatos prahli*)
[Place of collection: Chennai]



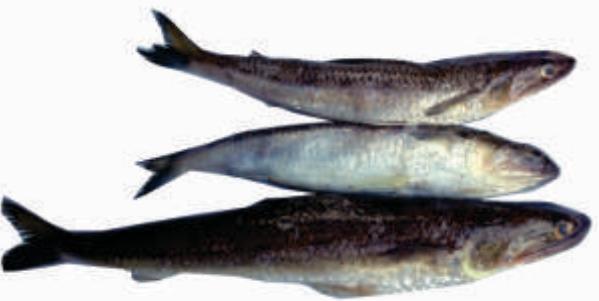
P017. Hilsa (*Tenualosa ilisha*)
[Place of collection: Kochi]



P018. Jallal (*Arius* sp.)
[Place of collection: Vizag]



P019. Jathi vela meen (*Lethrinus lentjan*)
[Place of collection: Mumbai and Mandapam]



P020. Kadal bral (*Synodus indicus*)
[Place of collection: Kochi]



P021. Kadali (*Nemipterus mesoprion*)
[Place of collection: Chennai]



P022. Kalamaara (*Leptomelanosoma indicum*)
[Place of collection: Goa and Vizag]



P023. Kalava (*Epinephelus coioides*)
[Place of collection: Mandapam]



P024. Kanamayya (*Lutjanus rivulatus*)
[Place of collection: Chennai and Vizag]



P025. Kannadi paarai (*Alectis indicus*)
[Place of collection: Mumbai, Chennai and Mandapam]



P026. Karimeen (*Etroplus suratensis*)
[Place of collection: Kochi]



P027. Karnagawala (*Anchoa hepsetus*)
[Place of collection: Vizag]



P028. Kayrai (*Thunnus albacares*)
[Place of collection: Chennai]



P029. Kiriyana (*Atule mate*)
[Place of collection: Kochi]



P030. Kite fish (*Mobula kuhlii*)
[Place of collection: Kochi]



P031. Korka (*Terapon jarbua*)
[Place of collection: Kochi]



P032. Kulam paarai (*Carangoides fulvoguttatus*)
[Place of collection: Chennai]



P033. Maagaa (*Polynemus plebeius*)
[Place of collection: Vizag]



P034. Mackerel (*Rastrelliger kanagurta*)
[Place of collection: Chennai, Mumbai and Goa]



P035. Manda clathi (*Naso reticulatus*)
[Place of collection: Mandapam]



P036. Matha (*Acanthurus mata*)
[Place of collection: Chennai and Vizag]



P037. Milk fish (*Chanos chanos*)
[Place of collection: Mandapam]



P038. Moon fish (*Mene maculata*)
[Place of collection: Mumbai]



P039. Mullet (*Mugil cephalus*)
[Place of collection: Mumbai, Kochi and Chennai]



P040. Mural (*Tylosurus crocodilus*)
[Place of collection: Mandapam]



P041. Myil meen (*Istiophorus platypterus*)
[Place of collection: Chennai and Mandapam]



P042. Nalla bontha (*Epinephelus* sp)
[Place of collection: Vizag]



P043. Narba (*Caranx sexfasciatus*)
[Place of collection: Vizag and Mumbai]



P044. Paarai (*Caranx heberi*)
[Place of collection: Chennai]



P045. Padayappa (*Canthidermis maculata*)
[Place of collection: Kochi]



P046. Pali kora (*Panna microdon*)
[Place of collection: Kochi]



P047. Pambada (*Lepturacanthus savala*)
[Place of collection: Chennai and Kochi]



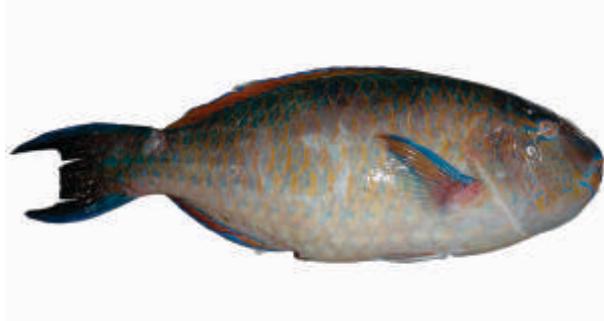
P048. Pandukopa (*Pseudosciaena manchurica*)
[Place of collection: Vizag]



P049. Parava (*Lactarius lactarius*)
[Place of collection: Kochi]



P050. Parcus (*Psettodes erumei*)
[Place of collection: Mumbai]



P051. Parrot fish (*Scarus ghobban*)
[Place of collection: Mandapam]



P052. Perinkilichai (*Pinjalo pinjalo*)
[Place of collection: Chennai]



P053. Phopat (*Coryphaena hippurus*)
[Place of collection: Chennai, Kochi, Vizag and Mumbai]



P054. Piranha (*Pygopristis* sp.)
[Place of collection: Kochi]



P055. Pomfret, black (*Parastromateus niger*)
[Place of collection: Kochi, Chennai, Mumbai, Mandapam, Vizag and Goa]



P056. Pomfret, snub nose (*Trachinotus blochii*)
[Place of collection: Mumbai]



P057. Pomfret, white (*Pampus argenteus*)
[Place of collection: Mumbai and Goa]



P058. Pranel (*Gerres* sp.)
[Place of collection: Kochi]



P059. Pulli paarai (*Gnathanodon speciosus*)
[Place of collection: Chennai]



P060. Queen fish (*Scomberoides commersonianus*)
[Place of collection: Chennai, Kochi and Goa]



P061. Raai fish (*Lobotes surinamensis*)
[Place of collection: Chennai and Vizag]



P062. Raai vanthu (*Epinephelus chlorostigma*)
[Place of collection: Vizag]



P063. Rani (*Pink perch*)
[Place of collection: Goa, Kochi, Chennai, Mumbai, Vizag and Mandapam]



P064. Ray fish, bow head, spotted (*Rhina ancylostoma*)
[Place of collection: Kochi]



P065. Red snapper (*Lutjanus argentimaculatus*)
[Place of collection: Vizag]



P066. Red snapper, small (*Priacanthus hamrur*)
[Place of collection: Goa]



P067. Sadaya (*Platax orbicularis*)
[Place of collection: Chennai]



P068. Salmon (*Salmo salar*)
[Place of collection: Goa]



P069. Sangada (*Nemipterus japonicus*)
[Place of collection: Chennai]



P070. Sankata paarai (*Caranx ignobilis*)
[Place of collection: Chennai]



P071. Sardine (*Sardinella longiceps*)
[Place of collection: Kolkata]



P072. Shark (*Carcharhinus sorrah*)
[Place of collection: Goa and Mandapam]



P073. Shark, hammer head (*Sphyraena mokarran*)
[Place of collection: Kolkata]



P074. Shark, spotted (*Stegostoma fasciatum*)
[Place of collection: Kochi]



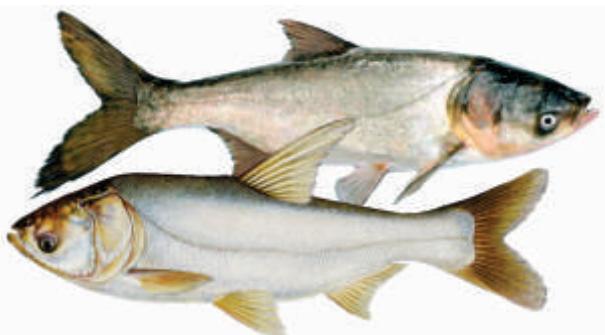
P075. Shelavu (*Sphyraena jello*)
[Place of collection: Chennai, Goa, Vizag and Kochi]



P076. Silan (*Silonia silondia*)
[Place of collection: Kolkata]



P077. Silk fish (*Beryx* sp.)
[Place of collection: Kochi]



P078. Silver carp (*Hypophthalmichthys molitrix*)
[Place of collection: Kolkata]



P079. Sole fish (*Cynoglossus arel*)
[Place of collection: Vizag]



P080. Stingray (*Dasyatis pastinaca*)
[Place of collection: Kolkata]



P081. Tarlava (*Drepane punctata*)
[Place of collection: Chennai and Vizag]



P082. Tholam (*Plectorhinchus schotaf*)
[Place of collection: Chennai and Mandapam]



P083. Tilapia (*Oreochromis niloticus*)
[Place of collection: Kolkata]



P084. Tuna (*Euthynnus affinis*)
[Place of collection: Chennai, Vizag, Goa, Mandapam and Kochi]



P085. Tuna, striped (*Katsuwonus pelamis*)
[Place of collection: Kochi]



P086. Valava (*Chirocentrus nudus*)
[Place of collection: Vizag]



P087. Vanjaram (*Scomberomorus commerson*)
[Place of collection: Chennai and Goa]



P088. Vela meen (*Aprion virescens*)
[Place of collection: Mandapam]



P089. Vora (*Siganus javus*)
[Place of collection: Chennai and Mandapam]



P090. Whale shark (*Galeocerdo cuvier*)
[Place of collection: Mandapam]



P091. Xiphinis (*Xiphias gladius*)
[Place of collection: Mandapam]



P092. Eggs, cat fish (*Ompok bimaculatus*)
[Place of collection: Kolkata]



Q001. Crab (*Menippe mercenaria*)
[Place of collection: Kolkata]



Q002. Crab, sea (*Portunus sanguinolentus*)
[Place of collection: Chennai]



Q003. Lobster, brown (*Thenus orientalis*)
[Place of collection: Chennai]



Q004. Lobster, king size (*Thenus orientalis*)
[Place of collection: Chennai, Vizag, Mumbai, Kochi, Mandapam and Goa]



Q005. Mud crab (*Scylla tranquebarica*)
[Place of collection: Goa]



Q006. Oyster (*Crassostrea* sp.)
[Place of collection: Goa]



Q007. Tiger prawns, brown (*Solenocera crassicornis*)
[Place of collection: Chennai]



Q008. Tiger Prawns, orange (*Penaeus monodon*)
[Place of collection: Kochi]



R001. Clam, green shell (*Perna viridis*)
[Place of collection: Goa]



R002. Clam, white shell, ribbed (*Meretrix meretrix*)
[Place of collection: Goa]



R003. Octopus (*Octopus vulgaris*)
[Place of collection: Mumbai]



R004. Squid, black (*Loligo sp.*)
[Place of collection: Kolkata]



R005. Squid, hard shell (*Sepia pharaonis*)
[Place of collection: Goa]



R006. Squid, red (*Loligo duvaucelii*)
[Place of collection: Chennai and Goa]



R007. Squid, white, small (*Uroteuthis duvauceli*)
[Place of collection: Mumbai]



S001. Cat fish (*Tandanus tandanus*)
[Place of collection: Kolkata]



S002. Catla (*Catla catla*)
[Place of collection: Kolkata]



S003. Fresh water Eel (*Anguilla anguilla*)
[Place of collection: Kolkata]



S004. Gold fish (*Carassius auratus*)
[Place of collection: Kolkata and Bengaluru]



S005. Pangas (*Pangasianodon hypophthalmus*)
[Place of collection: Kolkata]



S006. Rohu (*Labeo rohita*)
[Place of collection: Kolkata]



S007. Crab (*Pachygrapsus* sp.)
[Place of collection: Kolkata]



S008. Prawns, big (*Macrobrachium rosenbergii*)
[Place of collection: Bengaluru]



S009. Prawns, small (*Macrobrachium sp.*)
[Place of collection: Mumbai]



S010. Tiger prawns (*Macrobrachium sp.*)
[Place of collection: Kolkata]

INDEX



Sl. No.	Languages	Abbreviations used
1	Assamese	A.
2	Bengali	B.
3	Gujarati	G.
4	Hindi	H.
5	Kannada	Kan.
6	Kashmiri	Kash.
7	Khasi	Kh.
8	Konkani	Kon.
9	Malayalam	Mal.
10	Manipuri	M.
11	Marathi	Mar.
12	Nepali	N.
13	Oriya	O.
14	Punjabi	P.
15	Sanskrit	S.
16	Tamil	Tam.
17	Telugu	Tel.
18	Urdu	U.
19	Scientific name	Sci.
20	Common name	Common

Food name	Food Code		
Aa'l budu'a aa'L (Kash.)	G020, G021	Aamra (S.)	E036-E042
Aadad ni daad (G.)	B003	Aanabay/Aanabe (Kan.)	J001-J004
Aaddhakii (S.)	B021	Aanla (O.)	E021
Aaddu (G.)	E054	Aararoot (G.)	F015
Aadrak (S.)	G014	Aathachakka/ Vennapazham (Mal.)	E007
Aakhu Dorua (O.)	I002	Aavu paalu (Tel.)	L002
Aal (Kash.)	D001	Abelmoschus esculentus (Sci.)	D056
Aal kaniji (Kash.)	C030	Acanthurus mata (Sci.)	P036
Aalu (S.)	F018	Acchellu (Kan.)	H009, H010, H011
Aalukah (S.)	F006, F007, F008	Achras sapota (Sci.)	E060
Aam (A.)	E036-E042	Ada (B., O.)	G014
Aam (kancha) (B.)	D057	Ada kesa (A.)	G014
Aam (P.)	E036-E042	Adad (G.)	B004
Aam (paka) (B.)	E036-E042	Adakka (Mal.)	H002, H003, H004
Aam (paka) (H.)	E036-E042	Adike (Kan.)	H002, H003, H004
Aam ada (A.)	G015	Adityala (Tel.)	H008
Aam adhrak (H.)	G015	Adityala Akulu (Tel.)	C021
Aam adrak (P.,U.)	G015	Adrak (H.)	G014
Aamb (Kash.)	E036-E042	Adrak (Kash.)	G015
Aamba (N.)	E028, E029	Adrak (P., U.)	G014
Food name	Food Code		

Adu (G.)	G014	Ali vidai (Tam.)	H014
Aduwa (N.)	G014	Alivirai (Mal., Tam.)	H008
Advi (G.)	F004	Alivirai cheera (Mal.)	C021
Advi na pan (G.)	C018	Alivirai keerai (Tam.)	C021
<i>Aegle marmelos</i> (Sci.)	E008	Allam (Tel.)	G014
Aeir (Kash.)	E054	Allathi (Common)	P001
Aer (Kash.)	E050	Allibija (Kan.)	H008
Afiam (Mal.)	G032	Allibija soppu (Kan.)	C021
Afim (Kan.)	G032	<i>Allium cepa</i> (Sci.)	D058, G017, G018
Afoo guti (A.)	G032	<i>Allium sativum</i> (Sci.)	G011, G012, G013
<i>Agaricus</i> sp. (Sci.)	J001	Almon (Kh.)	H001
Agase soppu (Kan.)	C001	Almond (Common)	H001
Agasi (Kan.)	H014	Aloo (A., M.)	F007, F008
Agasthi (H.)	C001	Aloo (M.)	I001
Agasthi ka sag (Mar.)	C001	Aloobhukhara (P.)	E054
Agasti (O.)	C001	Alsi (H., P.)	H014
Agathi cheera (Mal.)	C001	Alsi (P.)	H014
Agathi keerai (Tam.)	C001	Alsi (U.)	H014
Agathi leaves (Common)	C001	<i>Alternanthera sessilis</i> (Sci.)	C029
Agathio (G.)	C001	Alu (H., Kon., N., O., P., U.)	F006, F007, F008
Ahiva (Mar.)	H008	Alu kanda (Mar.)	F004
Ahiva ka patta (Mar.)	C021	Alu pan (Mar.)	C018
Ahnaros (A.)	E053	Alubokhara (B.,G,H)	E054
Ahom bogori (A.)	E050	Alu-che-dath (Mar.)	D040, D041
Ailsh (Kash.)	H014	Alugadda (Kan.)	F006, F007, F008
Ajamoda (S.)	G029	<i>Aluterus monoceros</i> (Sci.)	P011
Ajmo (G.)	G029	Aluva (Common)	P002
Ajmod (U.)	C028	Amada (B.)	G015
Ajmud (H.)	D037	Amarakka (Mal.)	D032
Ajwain (A., P., U.)	G029	Amaranth seed, black (Common)	A001
Ajwan (H.)	G029	Amaranth seed, pale brown (Common)	A002
Akher rosh (B.)	I002	<i>Amaranth spinosus</i> (Sci.)	C005, C006
Akhoot (O.)	H021	Amaranth, spined, leaves, green	C005
Akhrod (Mar.)	H021	(Common)	
Akhrot (A., B., G., H., P.)	H021	Amaranth, spined, leaves, red and green	C006
Akhrot (Tam.)	H021	(Common)	
Akhrut (U.)	H021	Amaranth leaves, green (Common)	C002
Akki (Kan.)	A015	Amaranth leaves, red (Common)	C003
Akrodu (Kan.)	H021	Amaranth leaves, red and green mix	C004
Akrot kaya (Tel.)	H021	(Common)	
Akrottandi (Mal.)	H021	<i>Amaranthus cruentus</i> (Sci.)	A001, A002
Alaichi (N., O.)	G020, G021	<i>Amaranthus gangeticus</i> (Sci.)	C002, C003, C004
Alapagoda (Tel.)	E054	Ambla (Mar.)	D057
Alasande (Kan.)	B005-B006	Ambla (pachila) (O.)	E036-E042
Ale (Mar.)	G014	Ambla (piklela) (Mar.)	E036-E042
Alechi (G.)	G020		
<i>Alectis indicus</i> (Sci.)	P025		

Ambada (sorrel) (G.)	C032	<i>Apium graveolens</i> (Sci.)	D037
Ambada ki bhaji (U.)	C022, C023	Apple pazham (Mal., Tam.)	E001-E004
Ambadi (G.)	C022, C023	Apple, big (Common)	E001
Ambadi (Mar.)	C022, C023	Apple, green (Common)	E002
AmbaHaldi (Mar.)	G015	Apple, small (Common)	E003
AmbaHardar (G.)	G015	Apple, small, Kashmir (Common)	E004
Ambo (G.)	D057	Apricot, dried (Common)	E005
Ambu (kacha) (O.)	D057	Apricot, processed (Common)	E006
Amita (A.)	E049	<i>Aprion virescens</i> (Sci.)	P004 , P088
Amla (G., H.)	E021	<i>Arachis hypogea</i> (Sci.)	H012
Amla (Mar.)	E021	Arati doota (Tel.)	D064
Amlakhi (A.)	E021	Arati kayi (Tel.)	D063
Amlavetasa (Mar., S.)	C032	Arati pandu (Tel.)	E009-E012
Amli (G.)	E064	Arati puvvu (Tel.)	D062
Amli na pan (G.)	C034	Arbi de dande (P.)	D040, D041
<i>Amorphophallus campanulatus</i> (Sci.)	F017	Arbi-di-patte (P.)	C018
Ampa (N.)	E036-E042	<i>Areca catechu</i> (Sci.)	H002, H003, H004
Amrakh (G.)	E062	Arecanut, dried, brown (Common)	H002
Amrodh (Kash.)	E028, E029	Arecanut, dried, red color (Common)	H003
Amrood (U.)	E028	Arecanut, fresh (Common)	H004
Amrud (H., P.)	E028, E029	Arhar (Kash.)	B022
Amrutabanda (O.)	D059	Arhar dal (B., H., Kash., P.)	B021
Amrutbhanda (Pachila) (O.)	E049	Arhar ki fali (H.)	D067
Anaar (U.)	E055	Arhar sabud (H.)	B022
<i>Anacardium occidentale</i> (Sci.)	H005	Arhar sabut dal (P.)	B022
Ananas (H., Kan., Mar., P., U.)	E053	Ari fish (Common)	P004
<i>Ananas comosus</i> (Sci.)	E053	Arikelu	A017
Anar (H.)	E055	Arisi (Tam.)	A013, A015
Anar (P.)	E055	<i>Arius</i> sp. (Sci.)	P018
Anarasa (B.)	E053	Aroo (H., P.)	E050
Anas (Kon.)	E053	<i>Artocarpus heterophyllus</i> (Sci.)	D051, D052, D030
Anasa pandu (Tel.)	E053	Arvi ka patta (U.)	C018
Anashina (Kan.)	G033	Arvi ka sag (H.)	C018
<i>Anchoa hepsetus</i> (Sci.)	P027	Arwi (H., P., U.)	F004
Anchovy (Common)	P003	Arwi ke kade (U.)	D040, D041
Anenas (G.)	E053	Asadio na pan (G.)	C021
Angoor (A., B., H., M., N., O., P.)	E022-E027	Asadiyo (G.)	H008
<i>Anguilla anguilla</i> (Sci.)	S003	Asafoetida (Common)	G019
Anjeer (H., Kash., P., U.)	E020	Ash gourd (Common)	D001
Anjiira (S.)	E020	Assur (Kash.)	H013
Anjir (G., Mar., N.)	E020	Ata (B.)	A019
Anjurada Hanṇugalu (Kan.)	E020	Ata (B., O)	E016
Annasi pazham (Tam.)	E053	Atasii (S.)	H014
<i>Annona muricata</i> (Sci.)	E061	Athipazham (Mal., Tam.)	E020
<i>Annona squamosa</i> (Sci.)	E016	Atta (H., P.)	A019
Apel (A.)	E001-E004		
Aphina (G.)	G032		

Atti pandu (Tel.)	E020	Bajri (G.)	A003
Atukulu (Tel.)	A011	Bak ful shak (B.)	C001
<i>Atule mate</i> (Sci.)	P029	Bakhai ambli/Vilayabi ambli (G.)	E044
Auchumooda (Kan.)	C028	Bakla (H.)	D032
AvaAkulu (Tel.)	C026	Bakulla (N.)	B012
Aval (Mal., Tam.)	A011	Balalak, dindimi (H.)	E032
Avalakki (Kan.)	A011	Bale kayi (Kan.)	D063
Avalu (Tel.)	H013	Bale motho (Kan.)	D062
Avar (Mal.)	B007-B009, D047, D048	BaleHannu (Kan.)	E009-E012
Avarai (Tam.)	D032	Bamboo shoot, tender (Common)	D002
Avare (Kan.)	B007-B009, D047, D048	<i>Bambusa vulgaris</i> (Sci.)	D002
<i>Averrhoa carambola</i> (Sci.)	E062	Banana, ripe, montham (Common)	E009
Avise akulu (Tel.)	C001	Banana, ripe, poovam (Common)	E010
Avise ginzalu (Tel.)	H014	Banana, ripe, red (Common)	E011
Avithri (H.)	G027	Banana, ripe, robusta (Common)	E012
Avocado fruit (Common)	E007	Banda kovi (N.)	C015, C016
Awathabi Amunba (M.)	G016	Bandh (Kash.)	C013, C014, C015
Baabari (N.)	G016	bandh_gobi (H.,Kash.)	C016
Baajra (A.)	A003	Bandha kobi (O.)	C015
Baajra (Kash.)	A003	Bandha kopee (O.)	C016
Baans (H., P.)	D002	Bangala dumpa (Tel.)	F006, F007, F008
Baarli Arisi (Tam.)	A004	Banger chata (B.)	J001-J004
Bacchanga (Kon.)	E065	Bansber ankur (B.)	D002
Bacchanga (Kon.)	E066	Bantala kadali (O.)	D063
Bachhali (Tel.)	C007	Baragudi (O.)	B007-B009, D047, D048
Badam (A.,B.,G.,H.,Kan., Kash.,Kh.,M.,Mar.,O.,P.,U.)	H012	Barakoli (O.)	E068
Badam Pappu (Tel.)	H001	Barbati (B.)	B005, B006
Badam paruppu (Tam.)	H001	Barbati beej (B.)	B018-B020
Badane (Kan.)	D010-D030	Barigalu (Tel.)	B018-B020
Badarii (S.)	E068	Barley (Common, B., Kan., Mal.,Tel.,A.)	A004
Baddi elaychi (P.)	G021	Basala cheera (Mal.)	C033
Badha kopi (B.)	C015, C016	Basale soppu (Kan.)	C007
Badhika (S.)	G019	<i>Basella alba</i> (Sci.)	C007
Badi elaychi (H.)	G021	Basella, leaves (Common)	C007
Bael fruit (Common)	E008	Batabilembu (B.)	E056
Bafela Chokha (G.)	A014	Batani (Kan.,Tel.)	B017, D061
Bahgaj (A.)	D002	Batapilembu (O.)	E056
Baigan (O.)	D010-D030	Batata (Mar.)	F006-F008
Baigan (P.)	D010-D030	Bateka (G.)	F006-F008
Baigan (U.)	D010-D030	Bathu sag (P.)	C008
Baimbale, Kanile (Kan.)	D002	Bathua leaves (Common)	C008
Baimbale, Kanile (Kan.)	D002	Bathua sag (H.)	C008
Baingan (H.)	D010-D030	Bathua sagu (O.)	C008
Bajara (N.)	A003	Baunir (U.)	B005, B006
Bajra (Common,B., H., Mar., O., P., U.)	A003	Bavato (G.)	A010

Bazar-Bhang (Kash.)	H015, H016	Betki (Common)	P005
Beal (U.)	E067	Beto sak (B.)	C008
Bean scarlet, tender (Common)	D003	Betta nelli (Kan.)	E021
Beans (Mal.,O.,U.)	D049, D050	Bhains ka dhood (H.)	L001
Bedana (B.)	E055	Bakri (Mar.)	A010
Beef (Common)	O025-O035	Bhantaa (N.)	D010-D030
Beera kaya (Tel.)	D068, D069	Bhatmas (H.,N.)	B024, B025
Beet (A.,B.,G.,Kan.)	F001	Bhel (P.)	E008
Beet greens (Common)	C009	Bhendi (A.,Mar.,O.,U.)	D056
Beet ni bhaji (G.)	C009	Bhes nu dhudh (G.)	L001
Beet patta (U.)	C009	Bhet kiLakdi (O.,U.)	D002
Beet root (Common,Mal., Mar., Tam.,Tel.)	F001	Bhinda (G.)	D056
Beet root (Tel.)	C009	Bhindi (H.,P.)	D056
Beet root cheera (Mal.)	C009	Bhindikaa (S.)	D056
Beet root ka sag (Mar.)	C009	Bhol (A.)	D069
Beet root keerai (Tam.)	C009	Bhoochhtra (Mar.)	J001-J004
Beet root soppu (Kan.)	C009	Bhooni sevian (P.)	A024
Beetar sak (A.)	C009	Bhoore rajmah (P.)	B019
Begun (B.)	D010-D030	Bhopla chipan (Mar.)	C030
Bel (A.)	E067	Bhoplimirchi (Mar.)	D033, D034, D035
Belandri (M.)	D056	Bhui mug (Mar.)	H012
Bele (Kan.)	E067	Bhuler marcha (G.)	D033, D034, D035
Bele Dindu (Kan.)	D064	Bhura choul (P.)	A013
Beli phular guti (A.)	H020	Bhursanga Patra (O.)	G010
Bella (Kan.)	I001	Bhuru kodu (G.)	D001
Bellam (Tel.)	I001	Bhutta (B.)	A006, A007, A008
Bellulli (Kan.)	G011, G012, G013	BigaHua chawal (P.)	A014
Bendakaya (Tel.)	D056	Bila (B.,H., Mar.)	E008
Bende (Kan.)	D056	Biladi no top (G.)	J001-J004
Bengal gram, dal (Common)	B001	Bilaiti punton (M.)	E029
Bengal gram, whole (Common)	B002	BilatiBaigan (O.)	D074, D075, D076
Bengali Palungo ko Saag (N.)	C009	Biliti Bandhakopi (B.)	C012
Bengena (A.)	D010-D030	Bilvaon (Gorakamli) (S.)	E067
<i>Benincasa hispida</i> (Sci.)	D001	Bindi (Kash.,Kh.)	D056
Bennephala/Bennehannu (Kan.)	E007	Bindu (Kash.)	D051, D052, E030
Ber (G.,H.,U.)	E068	Birri (O.)	B004
Beri (P.)	E068	Birri dali (O.)	B003
Berikai (Kan.)	E051	Biskot (Kh.)	D038
Berikaya (Tel.)	E051	Bita (O.)	F001
Berikkai (Tam.)	E051	Bitter gourd, jagged, smooth ridges, elongate (Common)	D006
<i>Berycidae beryx</i> (Sci.)	P077	Bitter gourd, jagged, teeth ridges, elongate (Common)	D004
Besar (N.)	G033	Bitter gourd, jagged, teeth ridges, short (Common)	D005
<i>Beta vulgaris</i> (Sci.)	C009, F001		
Betel, leaves, big, Kolkata (Common)	C010		
Betel, leaves, small (Common)	C011		
Bethe ko saag (N.)	C008		

Biulir dal (B.)	B003	Bulgur (Tel.)	A021
Biyyam (Tel.)	A015	Bulgur gahu (Mar.)	A021
Black berry (Common)	E013	Bulgur ghaum (G.)	A021
Black gram, dal (Common)	B003	Bulgur godhi (Kan.)	A021
Black gram, whole (Common)	B004	Bum choont (Kash.)	E067
Black snapper (Common)	P006	Bun palung (B.)	C032
Bobbarlu (Tel.)	B005, B006	Bungo (N.)	D063
Bodi (N.)	B005, B006	Buta (O.)	B002
Boga til (A.)	H011	Button mushroom, fresh (Common)	J001
Bogori (A.)	E068	Cabbage, Chinese (Common)	C013
Bok phular paat (A.)	C001	Cabbage, collard greens (Common)	C014
Bombay duck (Common)	P007	Cabbage, green (Common)	C015
Bombilimas (Mal., Tam.)	E056	Cabbage, violet (Common)	C016
Bommuralu (Common)	P008	<i>Cajanus cajan</i> (Sci.)	B021, B022, D067
Bondhakobi (A.)	C015, C016	Cal (Common)	O036-O044
Boodida gummadi (Tel.)	D001	<i>Canthidermis maculata</i> (Sci.)	P045
Boot (A.)	B002	<i>Capsicum annum</i> (Sci.)	G001-G007, G022, D033-
Boot dail (A.)	B001	Capsicum, green (Common)	D035
Boppayi kaya (Tel.)	D059	Capsicum, red (Common)	D033
Boppayi pandu (Tel.)	E049	Capsicum, yellow (Common)	D034
Bor (Kon., Mar.)	E068	<i>Carangoides fulvoguttatus</i> (Sci.)	D035
Bor manimuni (A.)	C021	<i>Caranx heberi</i> (Sci.)	P032
<i>Borassus flabellifer</i> (Sci.)	E048	<i>Caranx ignobilis</i> (Sci.)	P044
Boro elach (B.)	G021	<i>Caranx sexfasciatus</i> (Sci.)	P070
Bottle gourd, elongate, dark green (Common)	D009	<i>Carassius auratus</i> (Sci.)	P043
Bottle gourd, elongate, pale green (Common)	D007	<i>Carcharhinus sorrah</i> (Sci.)	S004
Bottle gourd, round, pale green (Common)	D008	Cardamom, black (Common)	P072
<i>Brassica juncea</i> (Sci.)	C026	Cardamom, green (Common)	G021
<i>Brassica nigra</i> (Sci.)	H013	<i>Carissa carandas</i> (Sci.)	G020
<i>Brassica oleracea</i> var. <i>gongyhodes</i> (Sci.)	C024	<i>Carica papaya</i> (Sci.)	E032
<i>Brassica oleracea</i> (Sci.)	D053	Carrot (Mal., Tam.)	E049, D059
<i>Brassica oleracea</i> var. <i>botrytis</i> (Sci.)	C017, D036	Carrot, orange (Common)	F002, F003
<i>Brassica oleracea</i> var. <i>capitata f alba</i> (Sci.)	C015	Carrot, red (Common)	F003
<i>Brassica oleracea</i> var. <i>capitata f rubra</i> (Sci.)	C016	<i>Carthamus tinctorius</i> (Sci.)	H019
<i>Brassica oleracea</i> var. <i>gemmifera</i> (Sci.)	C012	Cashew nut (Common)	H005
<i>Brassica oleracea</i> var. <i>viridis</i> (Sci.)	C014	Cat fish (Common)	P009
<i>Brassica rapa</i> var. <i>chinensis</i> (Sci.)	C027	Cat fish (Common)	S001
<i>Brassica rupa</i> (Sci.)	C013	Catla (Common)	S002
Brey (Kash.)	E068	<i>Catla catla</i> (Sci.)	S002
Brinjal (Common)	D010-D030	Caturappuli (Mal.)	E062
Broad beans (Common)	D032	Cauliflower (Common, Mal.)	D036
Brussels sprouts (Common)	C012	Cauliflower ila (Mal.)	C017
Budagumbala (Kan.)	D001	Cauliflower leaves (Common)	C017
		Cavali biya (Mar.)	A001, A002

Celery daandi (G.)	D037	Cheera (Mal.)	C002, C003,
Celery stalk (Common)	D037	Cheera vithu (Mal.)	C004
Chachinda (H.,O.)	D070, D071, D072	Chelu (Common)	A001, A002
Chakavath (Mar.)	C008	Chembali (Common)	P012
Chakka (Mal.)	D051, E030	Chembin thandu (Mal.)	P013
Chakka kuru (Mal.)	D052	Chembu (Mal.)	D040, D041
Chakkota (Kan.)	E056	Chembu ilagal (Mal.)	F004
Chakla (Common)	P010	Chena (B.)	C018
Chaktra (H.)	E056	Chena (Mal.)	L003
Chaktora (P.)	E067	Cheng (M.)	F017, F018
Chakwai (M.)	B023	Chenghum (M.)	A013, A014,
Chalkumra (B.)	D001	Chengkruk (M.)	A015
Chama (Mal.)	A016	Chengkruk Maru (M.)	J001, J002, J004
Chama akulu (Tel.)	C018	Chengpaak (M.)	C002-C006
Chama dumba (Tel.)	F004	<i>Chenopodium album</i> (Sci.)	A001, A002
Chama kada (Tel.)	D040, D041	<i>Chenopodium quinoa</i> (Sci.)	A009
Chaman (Kash.)	L003	Cheranga (Mal.)	D007, D008,
Champa kadali (O.)	E009-E012	Cheriya Ulli (Mal.)	D009
Champra Mahi (M.)	E033	Cherri pandu (Tel.)	G018
Chamsoor ko Saag (N.)	C021	Cherries, red (Common)	E014
Chana (G.,H.,U.)	B002	Cherry (G.,P.)	E014
Chana ko Dal (N.)	B001	Cherry phal (Mar.)	E014
Chana Mapum (M.)	B002	Cherrypazham (Tam.,Mal.)	E014
Chana Tangkhai (M.)	B001	Cheru Pararu (Mal.)	B011
Chanak (S.)	B002	Cheru payar parippu (Mal.)	B010
Chanam (M.)	G011, G012, G013	Cheruchana vithu (Mal.)	H014
Chana-ni-daad (G.)	B001	Cheruku rasam (Tel.)	I002
Chane ki dal (U.)	B001	Chevri (Kash.)	A011
Chan-ki-dal (H.)	B001	Chhali (P.)	A006, A007,
Channa (M.)	L003	Chhayapi ko Saag (N.)	A008
Channa dali (Buta dali) (O.)	B001	Chhena (H.,O)	L003
<i>Chanos chanos</i> (Sci.)	P037	Chhilke wali urad dal (H.)	B004
Chanu (Kash.)	B002	Chichinda (U.)	D070, D071,
Chanu dal (Kash.)	B001	Chichindo (N.)	D072
Chappal (Common)	P011	Chichinga (B.)	D070, D071,
Chatu (O.)	J001-J004	Chicken mushroom, fresh (Common)	D072
Chaul (P.)	A015	Chicken, poultry (Common)	J002
Chaula (O.)	A015	Chide (B.)	N001-N006
Chaulai (H.)	C002, C003, C004	Chikk Eerulli (Kan.)	A011
Chaulai sag (P.)	C002, C004	Chikkudu ginjalu (Tel.)	G018
Chaulai beej (P.)	A001, A002	Chiku (A.,H.,Mar.,P.)	B007-B009,
Chavli (Mar.)	B005, B006	Chilagada dumpa (Tel.)	D047, D048
Chawal (H.)	A013, A015		E060
Chawara (P.)	E017, E018		F013, F014
Chedu paddu dumba (Tel.)	F019		

Chilgoza (G.,H.,Kash.)	H017	Chukandhar sag (H.)	C009
Chillies, green (Common)	G001-G007	Chukki soppu (Kan.)	C032
Chillies, red (Common)	G022	Chumbrei (M.)	E050
Chilni bhaji (G.)	C008	<i>Cicer arietinum</i> (Sci.)	B001, B002
China badam (A.)	H001	Cicinnanda (S.)	D070, D071, D072
China badam (B.,O.)	H012	<i>Citrullus vulgaris</i> (Sci.)	E065, E066
ChinaLai (A.)	C013	<i>Citrus aurantium</i> (Sci.)	E047
Chinch (Mar.)	E064	<i>Citrus limetta</i> (Sci.)	E034
Chinchecha pala (Mar.)	C034	<i>Citrus limon</i> (Sci.)	E033
Chinese kobi (G.)	C013	<i>Citrus maxima</i> (Sci.)	E056
Chinna cabbage (Tel.)	C012	Clam, green shell (Common)	R001
Chinna ullipaya (Tel.)	G018	Clam, white shell, ribbed (Common)	R002
Chinna vengayam (Tam.)	G018	Cloves (Common)	G023
Chinta chiguru (Tel.)	C034	Cluster beans (Common)	D039
Chintha pandu (Tel.)	E064	<i>Coccinia cordifolia</i> (Sci.)	D054, D055
Chira (A.)	A011	Coconut water (Common)	K002
Chirmure (Mar.)	A012	Coconut, kernel, dry (Common)	H006
<i>Chirocentrus nudus</i> (Sci.)	P086	Coconut, kernel, fresh (Common)	H007
Chirwre (P.)	A011	<i>Cocos nucifera</i> (Sci.)	H006, H007
Chkaooradavare (Kan.)	D032	Colocasia (Common)	F004
ChoCho sara (Mar.)	D038	<i>Colocasia esculenta</i> (Sci.)	C018, D040, D041, F004
Cho-cho-marrows (Common)	D038	Colocasia stem, green (Common)	D041
Cho-cho-marrow (H.,Kan.,Mal.)	D038	Colocasia, leaves, green (Common)	C018
Chodi (G.)	D003	Colocasia, stem, black (Common)	D040
Chogander Munji (Kash.)	C009, F001	Coriander seeds (Common)	G024
Choka (G.)	A015	Coriander, leaves (Common)	G009
Chokhandar (U.)	F001	<i>Coriandrum sativum</i> (Sci.)	G009, G024
Chola (B.)	B002	Corn, baby (Common)	D042
Cholai (U.)	C002, C003,	<i>Coryphaena hippurus</i> (Sci.)	P053
Cholam (Tam.)	C004	Country hen (Common)	N007-N010
Cholar dal (B.)	A005	Cowpea, brown (Common)	B005
Choote gobi (H.)	B001	Cowpea, white (Common)	B006
Chooti band gobi (P.)	C012	Crab (Common)	Q001
Chorap (G.)	C012	Crab (Common)	S007
Chota bandha (O.)	B005, B006	Crab, sea (Common)	Q002
Chotee gobi (Mar.)	C012	<i>Crassostrea</i> sp. (Sci.)	Q006
Choti bund gobh (U.)	C012	Cucumber green, elongated (Common)	D043
Chow-chow (Tam.)	D038	Cucumber green, short (Common)	D044
Chowl (B.)	A015	Cucumber orange, round (Common)	D045
ChuChu Rangmei (M.)	C001	<i>Cucumis melo</i> (Sci.)	E046
Chudaa (O.)	A011	<i>Cucumis melon</i> (Sci.)	E045
Chuhara (A.)	E017, E018	<i>Cucumis sativus</i> (Sci.)	D043, D044, D045
Chuhing (M.)	I002	<i>Cucurbit maxima</i> (Sci.)	C030
Chujaak (M.)	A006, A007, A008, D042	<i>Cucurbita maxima</i> (Sci.)	D065, D066
Chukandar (H.,P.)	F001	<i>Cucurbita pepo</i> (Sci.)	D077, D078
Chukandhar da sag (P.)	C009		

Cumin seeds (Common)	G025	Dherosh (B.)	D056
<i>Cuminum cyminum</i> (Sci.)	G025	Dherua (A.)	C031
<i>Curcuma amada</i> (Sci.)	G015	Dhone (B.)	G024
<i>Curcuma domestica</i> (Sci.)	G033	Dhone pata (B.)	G009
Currants, black (Common)	E015	Dhonia dkhar (Kh.)	G009
Curry leaves (Common)	G010	Dhoniya (A.)	G024
Curry Pata (M.,Kash.)	G010	Dhooli masari dal (P.)	B013
Custard apple (Common)	E016	Dhoon (Kash.)	H021
<i>Cyamopsis tetragonobola</i> (Sci.)	D039	Dhua mogu dail (A.)	B010
<i>Cynoglossus arel</i> (Sci.)	P079	Dhudul (B.)	D077, D078
Daaddima (S.)	E055	Dhunduli (A.)	D070, D071, D072
Daan (Kash.)	E055	Dieng sajana (Kh.)	D046
Daaniwal (Kash.)	G009, G024	Dieng seleri (Kh.)	D037
Dab narikol (A.)	H006	Dilpasand (Kan.)	D077, D078
Dab narikolor pani (A.)	K002	Dimiri (O.)	E020
Daberjal (B.)	K002	Dimoru (A.)	E020
Dach (Kash.)	E022-E027	<i>Dioscorea</i> sp. (Sci.)	F018
<i>Dacus carota</i> (Sci.)	F002, F003	<i>Dioscorea villosa</i> (Sci.)	F019
Dadam (G.)	E055	Dodka (Mar.)	D068, D069
Dai iong (Kh.)	B004	<i>Dolicus biflorus</i> (Sci.)	B012
Dai shana (Kh.)	B001, B021	Donda kaya (Tel.)	D054, D055
Dalia (A.,B.,H.,O.,P.,U)	A021	Donnmena- sinakayi (Kan.)	D033, D034, D035
Dalim (A.)	E055	Doodh (Kash.)	L001, L002
Dalimb (Kon.,Mar.)	E055	Doodh (Maish) (Mar.)	L001
Dalimba (O.)	E055	Doodh(garu) (B.)	L002
Dalimbari (Kan.)	E055	Doodh(gay) (Mar.)	L002
Dampudu biyyam (Tel.)	A013	Dosa kaya (Tel.)	D043, D044, D045
Danimma pandu (Tel.)	E055	Draakssaa (S.)	E022-E027
Danthu (Kan.)	C002, C003, C004	Draksha (Mar.)	E026
Danthu beeja (Kan.)	A001, A002	Draksha (G.)	E025, E026
Darbusani (Tam.)	E065, E066	Draksha (Kan.,Mar.)	E022-E027
Dasakusa (M.)	D038	Draksha padu (Tel.)	E022-E027
<i>Dasyatis pastinaca</i> (Sci.)	P080	Drashi (Kan.)	E057, E058
Dates, dry, dark brown (Common)	E018	Dratchai (Tam.)	E023-E027
Dates, dry, pale brown (Common)	E017	<i>Drepane punctata</i> (Sci.)	P081
Dates, processed (Common)	E019	Drumstick (Common)	D046
Dawana (P.)	E065, E066	Drumstick, leaves (Common)	C019
Dhana pandada (G.)	G009	Duck (Common)	N011
Dhane (Mar.)	G024	Dud masi (Kh.)	L002
Dhania (H.,N.,O.,P.)	G024	Dud muid (Kh.)	L001
Dhania paat (A.)	G009	Dudde (Kon.)	D059
Dhania Patra (O.)	G009	Dudha (Mosher) (B.)	L001
Dhaniya (U.)	G024	Dudhi (G.)	D007, D008, D009
Dhaniyalu (Tel.)	G024	Dumura (B.)	E020
Dhanyaka (S.)	G024	Dunglina dakkadi (Onion dakkadi) (G.)	D058
Dhemase (Mar.)	D073		

Dungri (nani) (G.)	G018	Faram (Kash.)	F004
Durdakandagadda (Tel.)	F018	Farsi (N.)	D065, D066
Eerulli (Kan.)	G017	Fenugreek leaves (Common)	C020
Eethapazham (Mal.)	E017, E018, E019 M008, M009, M010	Fenugreek seeds (Common)	G026
Egg, country hen (Common)	M011, M012, M013	<i>Ferula assa-foetida</i> (Sci.)	G019
Egg, duck (Common)	M001-M007	<i>Ficus carica</i> (Sci.)	E020
Egg, poultry (Common)	M014, M015	Field bean, black (Common)	B007
Egg, quail (Common)	P092	Field bean, brown (Common)	B008
Eggs, Cat fish (Common)	G013	Field bean, white (Common)	B009
Ek koya Rashun (B.)	G020, G021	Field beans, tender, broad (Common)	D047
Ela (S.)	G020	Field beans, tender, Lean (Common)	D048
Elach (B.)	P012	Figs (Common)	E020
<i>Elagatis bipinnulata</i> (Sci.)	G020, G021	<i>Fragaria ananassa</i> (Sci.)	E063
Elaichi (Kh.,M.,U.)	G020	Fras bean (H.,P.)	D049, D050
Elaishi (Kh.)	G020	French bean (A.)	D049, D050
Elakkai (Mal., Tam.,Tel.)	G020, G021	French beans, country (Common)	D049
Elanth pazham (Mal.)	E068	French beans, hybrid (Common)	D050
Elanthai pazham (Tam.)	E068	Freshwater Eel (Common)	S003
Elathari (Mal.)	G021	Fulawar (G.)	D036
Elaychi (H.)	G020	Fulawar na pan (G.)	C017
<i>Eleocharis dulcis</i> (Sci.)	F016	Gaan da doodh (P.)	L002
<i>Elettaria cardamomum</i> (Sci.)	G020, G021	Gahama (O.)	A020
<i>Eleusine coracana</i> (Sci.)	A010	Gahama atta (O.)	A019
Ellu (Mal.,Tam.)	H009, H010, H011	Gahu rava (Mar.)	A022
<i>Elops machnata</i> (Sci.)	P001	Gai dudha (O.)	L002
<i>Embllica officinalis</i> (Sci.)	E021	Gai ka doodh (H.)	L002
Emu (Common)	N012	Gai nu dhudh (G.)	L002
Endu draksha (Tel.)	E057, E058	Gaja nimbe (Kan.)	E034
Endu Kobbari (Tel.)	H006	Gaja nimma pandu (Tel.)	E034
<i>Epinephelus chlorostigma</i> (Sci.)	P062	Gajar (B.,G.,H.,M.,Mar.,N.,P.,U.)	F002, F003
<i>Epinephelus coioides</i> (Sci.)	P023	<i>Galeocerdo cuvier</i> (Sci.)	P090
<i>Epinephelus diacanthus</i> (Sci.)	P015	Gandha (Kash.)	G017
<i>Epinephelus</i> sp. (Sci.)	P042	Gandhe (P.)	G017, G018
Eri meen (Common)	P014	Gandhela (H.,Mar.)	G010
Eroi Sanghom (M.)	L001	Ganga imli (H.)	E044
Erulli soppu (Kan.)	D058	Ganne rus (Kash.)	I002
Erumaipal (Tam.)	L001	Ganne-da-ras (P.)	I002
<i>Etroplus suratensis</i> (Sci.)	P026	Ganne-ka-ras (H.)	I002
<i>Euthynnus affinis</i> (Sci.)	P084	Ganne-ke-ras (U.)	I002
Fadhighom Mana (M.)	G009	Ganth gobi (P.)	D053
Fadhighom Maru (M.)	G024	Ganth gobi ka sag (H.)	C024
Fafda papdi (G.)	D032	Ganth gobi sag (P.)	C024
Falsa (B.,G.,H.,Mar.,P.,U.)	E052	Ganuhaar (Kash.)	A016
Falsa pandu (Tel.)	E052	<i>Garcinia mangostana</i> (Sci.)	E043
Fansi (G.)	D049, D050	Garden cress (Common)	C021
		Garden cress, seeds (Common)	H008
		Garikalai (B.)	B024, B025

Garlic, big cloves (Common)	G011	Godhi (Kan.)	A020
Garlic, single clove, Kashmir (Common)	G013	Godhi rave (Kan.)	A022
Garlic, small cloves (Common)	G012	Godhum (S.)	A020
Garoor gakhir (A.)	L002	Godhumara (Tel.)	A022
Gasagasalu (Tel.)	G032	Godhumal (Tel.)	A020
Gath kobi na pan (G.)	C024	Godhumbu (Mal.)	A020
Gau (N.)	A020	Godumai (Tam.)	A020
Gau ko pitho (N.)	A021	Godumai ravai (Tam.)	A021, A022
Gaur-ki-phalli (H.)	D039	Goer (Kash.)	F016
Gauva, pink flesh (Common)	E029	Gogu leaves, green stem (Common)	C022
Gavar ki palli (U.)	D039	Gogu leaves, red stem (Common)	C023
Gedde kosu (Kan.)	C024	Gojihvaa (S.)	C017, D036
Gedha/Barre palu (Tel.)	L001	Gola (P.)	H006
Gehu (Mar.)	A020	Gola marcha (G.)	G007
Gehun (H.,U.)	A020	Gold fish (Common)	S004
Gehun suji (H.)	A022	Golmarichi (B.)	G031
Genasu (Kan.)	F013, F014	Golomarcho (O.)	G031
<i>Gerres</i> sp. (Sci.)	P058	Golu phubi kakuri (O.)	D077, D078
Geru (Kan.)	H005	Gom (B.)	A020
Ghahzir (Kash.)	F002, F003	Gom sewai (A.)	A024
Ghaum soji (G.)	A022	Gonglu (P.)	F009-F012
Ghaun (G.)	A020	Gongura (Tel.)	C022, C023
Ghaun ni sev (G.)	A023	Gool aal (Kash.)	D008
Ghaun ni Shekeli sev (G.)	A024	GooreHannu (Kan.)	D074, D075, D076
Ghehu (A.,M.)	A020	Gooseberry (Common)	E021
Gherkochoo (B.)	F018	Gor (Kash.)	I001
Ghewda (Mar.)	D032	Goradu (Mar.)	F018
Ghiu Simi (N.)	D049, D050	Gori koyi (Kan.)	D039
Ghole gluru (G.)	D054, D055	Goruchikkudu (Tel.)	D039
Gholobheda (N.)	D075, D076	Gos koora (Tel.)	C015, C016
Gilas (H.,Kash.)	E014	Goshtub tang (Kash.)	E007
Gingely seeds, black (Common)	H009	Gota masur mah (A.)	B014
Gingely seeds, brown (Common)	H010	Gota mati mah (A.)	B004
Gingely seeds, white (Common)	H011	Gota mogu mah (A.)	B011
Ginger fresh (Common)	G014	Gota motor (A.)	B017
Girinimba (S.)	G010	Gota rohor (A.)	B022
<i>Glycine max</i> (Sci.)	B024, B025	Govar (G.)	D039
<i>Gnathanodon speciosus</i> (Sci.)	P059	Govari (Mar.)	D039
Go puvvu (Tel.)	C017, D036	Gow kshiram (S.)	L002
Goat (Common)	O001-O013	Grapes seeded, round, black (Common)	E022
Gobhi (U.)	C015, C016	Grapes seeded, round, green (Common)	E023
Gobro (Common)	P015	Grapes seeded, round, red (Common)	E024
God (G.)	I001	Grapes seedless, oval, black (Common)	E025
Godd (Kon.)	I001	Grapes seedless, round, black (Common)	E027
Godhambu mavu (Mal.)	A019	Grapes seedless, round, green (Common)	E026
Godhambu Ravu (Mal.)	A021		

Green gram, dal (Common)	B010	Kaccha kela (U.)	D063
Green gram, whole (Common)	B011	Kaccha tamatar (U.)	D074
<i>Grewia asiatica</i> (Sci.)	E052	Kaccha tamator (P.)	D074
Ground nut (Common)	H012	Kach Aamb (Kash.)	D057
Grunjanam (S.)	F002, F003	Kacha Tomato (B.)	D074
Gua (O.)	H002, H003,	Kada tal (G.)	H009, H015
	H004	Kadal bral (Common)	P020
Guanra chhuin (O.)	D039	Kadala (Mal.)	B002
Guarae-di-faliya (P.)	D039	Kadala parippu (Mal.)	B001
Guava, white flesh (Common)	E028	Kadalaiparuppu (Tam.)	B001
Gud (H.,P.,U.,O.)	I001	Kadale (Kan.)	B002
Guinea fowl (Common)	N013	Kadale bele (Kan.)	B001
Guitar fish (Common)	P016	Kadale kayi (Kan.)	H012
<i>Guizotia abyssinica</i> (Sci.)	H015, H016	Kadale soppu (Kan.)	C010, C011
Gul (Mar.)	I001	Kadali (Common)	P021
Gummad kaya (Tel.)	D065	Kadali bhanda (O.)	D062
Gummadi (Tel.)	D066	Kadali manja (O.)	D064
Gummadi akulu (Tel.)	C030	Kadalii (S.)	E009-E012
Gundhun (B.)	G018	Kaddu (H.,P.,U.)	D065, D066
Gur (A.)	I001	Kaddu ka patta (U.)	C030
Gurdudde (Kon.)	D068, D069	Kadhi patta (P.)	G010
Gurellu (Kan.)	H015, H016	Kadi draksh (G.)	E015
Gurh (B.)	I001	Kadi draksha (G.)	E022, E027, E057
Gyathkopi ko sag (N.)	D053	Kadi ka patta (U.)	G010
Hara pyaz (H.)	D058	Kadi umdo (G.)	G010
Harka (Kan.)	A017	Kadu (P.)	D007,D009
Hare (Common)	O058, O059,	Kadugempu (Kan.)	E014
	O060	Kadugu ila (Mal.)	C026
<i>Harpodon nehereus</i> (Sci.)	P007	Kadugu (Mal.,Tam.)	H013
Hilsa (Common)	P017	Kadugu ilai (Tam.)	C026
<i>Hypophthalmichthys molitrix</i> (Sci.)	P078	KagajiLimbu (O.)	E033
<i>Istiophorus platypterus</i> (Sci.)	P041	Kagji Badam (N.)	H001
Jallal (Common)	P018	Kaha (Kash.)	B003, B004
Jangal jalebi (H., P.)	E044	Kaippakka (Mal.)	D004, D005, D006
Jathi vela meen (Common)	P019		
Ka shriew (Kh.)	F004	Kait im (Kh.)	D063
Ka wang jyrngam (Kh.)	D041	Kait jaji (Kh.)	E012
Kaagati (N.)	E033	Kait mon/ ja (Kh.)	E010
Kaalaan (Tam.)	J001-J004	Kait saw (Kh.)	E011
Kaali Mirch (U.)	G031	Kait syiem (Kh.)	E009
Kaarabellam (S.)	D007, J008,	Kaith (H.)	E067
	J009	Kaitha (O.)	E067
Kaashiral (Kash.)	D077	Kajor (Kh.)	F003
Kaashiral (Kash.)	D078	Kaju (G.)	H005
KabbinaHalu (Kan.)	I002	Kaju (H.)	H005
Kabok Mur (M.)	A012	Kaju badam (A.)	H005
Kabuli Chana (N.)	B002	Kakadi (H.,Mar.)	D043,
Kaccha aam (P.,U.)	D057		

Kakarakaya (Tel.)	D044, D045	Kandamula (O.)	F013, F014
Kakdi (G.)	D004, D005, D006 D043, D044, D045	Kandan lippili (Kan.) Kandha dumpa (Tel.) Kandi pappu (Tel.)	G030 F017 B021
Kakharu (O.)	D065, D066	Kando (G.)	G017
Kakharu Saga (O.)	C021	Kandulu (Tel.)	B022
Kakro (N.)	D043, D044, D045	Kaneek (Mar.)	A019
Kakudi (O.)	D043, D044, D045	Kannadi paarai (Common)	P025
Kala Jamun (H.)	E013	Kanta neutia sag (O.)	C006
Kala kishmish (U.)	E015	Kanta notay shak (O.)	C005
Kala pravaha (Mar.)	E015	Kanta vado tandaljo (G.)	C005, C006
Kala til (H.)	H015, H016	Kanta-notya (B.)	C005
Kalaikose (Tam.)	C012	Kanta-notya shaak (B.)	C006
Kalakkay/ Parungala (Tam.)	E032	Kantemanth (Mar.)	C005, C006
Kalakose (Mal.)	C012	Kantewali chaulai (P.)	C005, C006
Kalamaara (Common)	P022	Kantewali-notya (H.)	C005, C006
Kalara (O.)	D004, D005, D006	Kanthal (B.)	D051, D052, E052
Kalava (Common)	P023	Kanwal kakri (U.)	F005
Kale rajmah (P.)	B018	Kaouthum (M.)	F016
Kalimirchi (H.,P.)	G031	Karadi (Mal.,Mar.)	H019
Kalingad (Mar.)	E065, E066	Karakka (Mal.)	E032
Kalive (Tel.)	E032	Karale (Mar.)	H015, H016
Kalkipan (Mar.)	D002	Karamanga (O.)	E062
Kallangadi (Kan.)	E065, E066	Karamani (Tam.)	B005, B006
Kalle Puri (Kan.)	A012	Karamani Payir (Tam.)	B018, B019, B020
Kallu (Tam., Tel., Mal.,)	K001	Karamazda (S.)	E032
Kalojam (B.)	E013	Karambal (Mar.)	E062
Kalung siej (Kh.)	D002	Karamda (G.)	E032
Kamad kakdi (G.)	F005	Kardi (H.)	H019
Kamal zahr (P.)	F005	Karekayi (Kan.)	E032
Kamala (O.)	E047	Karela (G.,H., Kash.,P.,U.)	D004, D005, D006
Kamala padu (Tel.)	E047	Karhi-pat (B.)	G010
KamalaLebu (B.)	E047	Kari menasu (Kan.)	G031
Kamalgatta (H.)	F005	Karibevu (Kan.)	G010
Kamalkaakdi (Mar.)	F005	Karik (Mar.)	A017
Kamaraka/ Kapazakshi Hannu (Kan.)	E062	Karikku (Mal.)	H007
Kambam (Mal.)	A003	Karim jeerakam (Mal.)	H015, H016
Kambu (Tam.)	A003	Karimeen (Common)	P026
Kamphoi (M.)	E049	Karimpolam (Mal.)	F016
Kamphoi (M.)	E055	Karivepaku (Tel.)	G010
Kamrakh (U.)	E062	Kariveppilai (Mal., Tam.)	G010
Kanak (P.)	A020	Karkalo (N.)	C018
Kanamayya (Common)	P024	Karle (Mar.)	D004, D005, D006
KanchaLanka (O.)	G001-G007	Karnagawala (Common)	P027
Kanda (Mar.)	G017, G018	Karon Akhabi (M.)	D004, D005

Karon Akhabi (M.)	D006	Keerai vidai (Tam.)	A001
Karonda (P.)	E032	Keerai vidai (Tam.)	A002
Karonda fruit (Common)	E032	Kel phool (G.)	D062
Karumbin neeru (Mal.)	I002	Kel phool (Mar.)	D062
Karumbu charu (Tam.)	I002	Kel(hara) (Mar.)	D063
Karunai kizhangu (Tam.)	F017,F018	Kela (G.,H.,P.,Kash.,U.)	D063, E009-
Karunthiratcha (Tam.)	E015	Kela ka phool (U.)	E012
Karvand (Mar.)	E032	Kela(kanch) (B.)	D062
Kary patta (N.)	G010	Kelanu thed (G.)	D063
Kasawa soji (U.)	F015	Kele (Mar.)	E009-E012
Kash bandh gobi (H.)	C015	Kele da tana (P.)	D064
Kashi bhopla (Mar.)	D077	Kele-da-phool (P.,H.)	D062
Kashi bhopla (Mar.)	D078	Kele-ka-tana (H.)	D064
Kashmiri jalakia (A.)	D033, D034, D035	Kelicha khunt (Mar.)	D064
Kaskol/Purakol (A.)	D063	Kella (P.)	E009-E012
Kasori Methi (Kash.)	C020	Kelvaragu (Tam.)	A010
Kasu sak (A.)	C018	Kera (N.)	E009
Katahar (N.)	D051, D052	Kera (N.)	E010
Katahar (N.)	E030	Kera (N.)	E011, E012
Katcha Aam (H.)	D057	Kerbau paal (Mal.)	L001
Katcha pepita (H.,P.)	D059	Kerela (A.,Kh.)	D004, D005,
Kath aloo (A.)	F018	Kerela rit (Kh.)	D006
Kathahal (U.)	D051, D052, E030	KerelaHeh (Kh.)	D005
Kathai chokha (G.)	A013	Keri (G.)	E036
Kathakonda (O.)	F015	Keri (G.)	E038, E041
Kathal (P.)	D051	Kesa bilahi (A.)	D074
Kathal ki beej (H.,P)	D052	Kesa jalakia (A.)	G001-G007
Kathirikkai (Tam.)	D010	Kesa omita (A.)	D059
Kathirikkai (Tam.)	D011-D030	Kesa tamul (A.)	H004
<i>Katsuwonus pelamis</i> (Sci.)	P085	Kesar kedi (G.)	E039
Kattelu (Tam.)	H015	Kesu danthu (Kan.)	D040, D041
Kattelu (Tam.)	H016	Kew (Kh.)	A021
Kattuchena (Mal.)	F019	Khajoora pandu (Tel.)	E017, E018,
Kattuzhunnu (Mal.)	B023		E019
Kauli (N.)	C017	Khajur (A.,G.,H., Kash., Mar.,P.,U.)	E017, E018,
Kauli (N.)	D036		E019
Kavath (Mar.)	E067	Khajura (N.)	E017, E018,
Kavu akulu (Tel.)	C025	Khajuri (O.)	E019
Kawang iong (Kh.)	D040	Khajuri (O.)	E018
Kayitha chakka (Mal.)	E053	Khajuri (O.)	E019
Kayrai (Common)	P028	Khakaru saga (O.)	C030
Kaza (Kash.)	B017, D061	Kham kael (Kash.)	D063
Kazmal/Kamrakh (H.)	E062	Khamba alu (O.)	F018
Kadu (P.)	D008	Khamen ashinba (M.)	D074, D075,
Keasa aam (A.)	D057	Khanchari (B.)	D076
Keda (G.)	E012		C029

Kharamani (P.)	E005	Kismisaag (U.)	C025
Kharamani (P.)	E006	Kismisiong (Kh.)	E057
Kharamuja (B.)	E045, E046	Kite fish (Common)	P030
Kharbooja (H.)	E045	Kithilai (Kan.)	E047
Kharbooja (H.,Kan., Mar., O.,P.,Tel.)	E045, E046	Klong jrong (Kh.)	D009
Kharbuja (N.)	E065, E066	Knol - Khol (Common)	D053
Kharbujo (G.)	E045	Knol-khol akulu (Tel.)	C024
Kharbujo (Pidu) (G.)	E046	Knol-khol cheera (Mal.)	C024
Kharbuuja (S.)	E045, E046	Knol-Khol keerai (Tam.)	C024
Kharbz (U.)	E045, E046	Knol-Khol, leaves (Common)	C024
Kharek (G.)	E017, E018	Knoolkol (Tam.)	D053
Kharjoora (Kan.)	E017, E018, E019	Kobbari (Tel.)	H007
Kharjura (S.)	E019	Kobbari neeru (Tel.)	K002
Kharjura (B.)	E017	Kobi (Mar.)	C015, C016
Kharjura (B.,S.)	E017, E018, E019	Kobi mana (M.)	C015
Khas Khas (P.)	G032	Kobi maru kabi (M.)	C024, D053
Khasa (S.)	G032	Kobi na pan (G.)	C014
Khasa khasa (Tam.)	G032	Kobithamchetmai (M.)	D036
Khash Khash (U.)	G032	Kobithamchetmai mana (M.)	C017
Khaskhas (Mar.)	G032	Kochu (B.)	F004
Khaskhash (Kash.)	G032	Kochu pata (B.)	C018
Khattu (N.)	E005, E006	Kochur loti (B.)	D040, D041
Khaw boil (Kh.)	A014, A015	Koda milagai (Tam.)	D033, D034, D035
Khaw saw (Kh.)	A013	Koden (H.)	A017
kheera (H.,U.)	D043, D044, D045	Kodi kizhangu (Tam.)	F019
Kherbz (Kash.)	E045	Kodippasali (Tam.)	C007
Kherbz (Kash.)	E046	Kodo (N.)	A010
Kheri (B.)	B016	Kodoadhan (B.)	A017
Khesari paruppu (Tam.)	B013	Kodra (G.,P.)	A017
Khira (P.)	D043, D044	Kodukkapuli (Tam.)	E044
Khliang syiar (Kh.)	C021	Kodus (O.)	A017
Khongdrum (M.)	D007, D008, D009	Kohala (Mar.)	D001
Khoomani (H.)	E005, E006	Kohl-rabi (H.)	D053
Khoomba (P.)	J001-J004	Kohlu (G.)	D065, D066
Khopra (U.)	H006	Koiyapazham (Tam.)	E028, E029
Khubaani (U.)	E005, E006	Kola (paka) (B.)	E010,E009, E011, E012
Khus khus (G.)	G030, G032	Kola jaluk (A.)	G031
KiadLieh (Kh.)	K001	Kola jamu (A.)	E013
Kihom (M.)	E053	Kola til (A.)	H009
Kinek (Kash.)	A020, A021	Kolam na pan (G.)	C030
Kiriyan (Common)	P029	Kolatha (O.)	B012
Kishmish (A.,B.,H., Kash.,Mar.,O.,U.)	E057, E058	Koldil (A.)	D062
Kismis (A.,M.,N.)	E015,E057,D068	Kolinchi pazham (Tam.)	E034
Kismis (M.)	E058	Kollu (Tam.)	B012
Kismis saw (Kh.)	E058	Komla (M.)	E047
		Kommu potla (Tel.)	D060

Komola (A.)	E047	Kulthi (H.,U.)	B012
Kondaikadalai (Tam.)	B002	Kulunashpati (B.)	E007
Konduri (H.)	D054, D055	Kumbala kash (Kan.)	D065, D066
Konidhan (A.)	A017	Kumbalanga (Mal.)	D001
Koovaragu (Mal.)	A017	Kumbale soppu (Kan.)	C030
Kopparai (Tam.)	H006	Kumhra sag (H.)	C030
Kopra ni kachli (G.)	H006	Kummaandah (S.)	D065, D066
Kordoi (A.)	E062	Kumra shak (B.)	C030
Korja tenga (A.)	E032	Kumro (B.)	D065, D066
Korka (Common)	P031	Kumura (A.)	D001
Korola (B.)	D004, D006	Kun koon (Mal.)	J001-J004
Koromcha (B.)	E032	Kunduli (A.)	D054
Kosala sag maji Kale (O.)	A002	Kunduli (A.)	D055
Kosala sag manji Dhala (O.)	A001	Kunduru (O.)	D054, D055
Kosu (A.,Kan.)	C015, C016, F004 C016	Kunhiyar (A.)	I002
Kosu (Kan.)	D040, D041	Kunte ki bhaji (U.)	C029
Kosu thari (A.)	D051, E030	Kurath (Kash.)	B012
Kothal (A.)	D052	Kuri (G.)	A016
Kothal guti (A.)	G009	Kurumlaku (Mal.)	G031
Kothamalli (Mal.,Tam.)	G024	Kusambe (Kan.)	H019
Kothamalli vidhai (Tam.)	G009,G024	Kusubalakki (Kan.)	A014
Kothambalari (Kan.,Mal.)	D039	Kusum (B.)	H019
Kothavara (Mal.)	D039	Kusuma ginzalu (Tel.)	H019
Kothavaranga (Tam.)	G009	Kusumbo (G.)	H019
Kothimbir (Mar.)	C028	Kuthari (Mal.)	A013
Kothimbir/dhane (Mar.)	G009	Kwa Mana (M.)	C010, C011
Kothimiri (Tel.)	E067	Kwa Maru (M.)	H003, H004
Kothu (G.)	H002	Kwai im (Kh.)	H004
Kottai paakku (Tam.)	D054, D055	Kwai supari (Kh.)	H003
Kova kai (Mal.,Tam.)	D054	Kwai tyrkhang (Kh.)	H002
Kovai, big (Common)	D055	KwaMaru (M.)	H002
Kovai, small (Common)	D060	Laar (Kash.)	D043, D044,
kovakkai (Mal.)	E067	Labang (O.)	D045
Koyethbel (B.)	A003, A004, A005	Labeo rohita (Sci.)	G023
Krai (Kh.)	G023	Lachi (P.)	S006
Krambu (Mal.,Tam.)	F015	Lactarius lactarius (Sci.)	E063
Krapendalamu (Tel.)	D001	Lactiporus sp. (Sci.)	P049
Kubhindo (N.)	C015	Lactuca sativa (Sci.)	J002
Kubi (Kh.)	C016	Lader (Kash.)	C025
Kubi saw (Kh.)	F016	Ladies finger (Common)	G033
Kubyakam (Tel.)	E068	Lafu (M.)	D056
Kula (B.)	P032	Lafu Tharo (M.)	D064
Kulam paarai (Common)	B012	Lagenaria vulgaris (Sci.)	D062
Kulattha (S.)	B012	Laisan (U.)	D007, D008,
Kuleeth (G.,Mar.)	B012	Laki Bele (Kan.)	D009
Kulottokalai (B.)	B012		G011, G012,
			G013
			B013

Lakshamana phalamu (Tel.)	E061	Lentil whole, yellowish (Common)	B015
Lakshmanaphala/ Mulluramphala (Kan.)	E061	Lentil, dal (Common)	B013
Lal bhopla (Mar.)	D065, D066	<i>Lentinula</i> sp. (Sci.)	J003
Lal chaulai sag (P.)	C003	<i>Lepidium sativum</i> (Sci.)	C021, H008
Lal Draksha (G.)	E024	<i>Leptomelanosoma indicum</i> (Sci.)	P022
Lal jamphad (G.)	E029	<i>Lepturacanthus savala</i> (Sci.)	P047
Lal kobi (G.)	C016	Lesera mah (A.)	D003
Lal marcha (sukha) (G.)	G022	Lesera mahor guti (A.)	B005, B006
Lal mircha (P.)	G022	Letchu (O.)	E035
Lal mirchi (U.)	G022	<i>Lethrinus lentjan</i> (Sci.)	P019
Lal paka keda (G.)	E011	Lettuce (Common)	C025
Lal rajmah (P.)	B020	Lettuce cheera (Mal.)	C025
Lal Shaakh (B.)	C003	Lettuce ka patta (Mar.)	C025
Lal tandaljo (G.)	C003	Lettuce na pan (G.)	C025
Lam Khamen (M.)	D010-D030	Lettuce soppu (Kan.)	C025
Lank dal (Mar.)	B013	Lichi (G.,H.,Kan.,Kash., Mal., Mar.,N.,P.,Tam.,Tel.,U.)	E035
Lanka (bilathi) (B.)	D033, D034,	Lichu (A.,B.,M.)	E035
Lanka (O.)	D035	Lila marcha (G.)	G001-G003, G006
Lanka pappu (Tel.)	G022	Lila safarjan (G.)	E002
Laphoi (M.)	B013	Lili Draksha (G.)	E023
Laphoi Ashangba (M.)	E009-E012	Lili kobi (G.)	C015
Lasan (G.,P.)	D063	Lili makai (G.)	A007, A008
Lashoonam (S.)	G011, G012,	Lilo vans (G.)	D002
Lasoon (Mar.)	G013	Limbu (G.)	E033
Lasun (N.)	G011, G012,	Limbu gođa (Mar)	E034
	G013	Lime, sweet pulp (Common)	E034
	G005	<i>Limonia acidissima</i> (Sci.)	E067
<i>Lates calcarifer</i> (Sci.)	C002, C003,	Linseeds (Common)	H014
Latte to saag (N.)	C004	<i>Linum usitatissimum</i> (Sci.)	H014
Lau (B.,O.)	D007, D008,	Litchi (Common)	E035
	D009	<i>Litchi chinensis</i> (Sci.)	E035
Lauka (N.)	D007, D008,	Lobia (H.,P.)	B005, B006
	D009	Lobong (B.)	G023
Lavang (G.)	G023	<i>Lobotes surinamensis</i> (Sci.)	P061
Lavang (H.)	G023	Lobster, brown (Common)	Q003
Lavang (Mar.)	G023	Lobster, king size (Common)	Q004
Lavanga (Kan.,S.)	G023	<i>Loligo duvaucelii</i> (Sci.)	R006
Lavangu (Tel.)	G023	<i>Loligo</i> sp. (Sci.)	R004
Leela dhana (G.)	C028	Long (A.,M.,P.,U.)	G023
Lehin (S.)	E033	Lotus root (Common)	F005
Lehsan (H.)	G011, G012,	Lowki (H., U.)	D007, D008, D009
	G013	<i>Luffa acutangula</i> (Sci.)	D068, D069
LeibakHawai (M.)	H012	<i>Lutjanus argentimaculatus</i> (Sci.)	P065
Lemon, juice (Common)	E033	<i>Lutjanus quinquefasciatus</i> (Sci.)	P013
<i>Lens culinaris</i> (Sci.)	B013, B014	<i>Lutjanus rivulatus</i> (Sci.)	P024
Lentil whole, brown (Common)	B014		

Luwang (N.)	G023	Malhoi (A.)	E005, E006
Maa ki daal (P.)	B003	<i>Malus domestica</i> (Sci.)	E001-E004
Maagaa (Common)	P033	Mam pazham (Mal.)	E036-E042
Maarissa (S.)	C002, C003, C004	Mamidi pandu (Tel.)	E036-E042
Maas ko dal (N.)	B003	Mamidiallam (Tel.)	G015
Maassa (S.)	B003	Mamidikaya (Tel.)	D057
Mace (Common)	G027	Mampazham (Tam.)	E036-E042
Mackerel (Common)	P034	Mamra (G.)	A012
<i>Macolor niger</i> (Sci.)	P006	Manda clathi (Common)	P035
<i>Macrobrachium rosenbergii</i> (Sci.)	S008	Mandal (P.)	A010
<i>Macrobrachium</i> sp. (Sci.)	S009, S010	Mandavellam (Tam.)	I001
Madarangh (O.)	C029	Mandia (O.)	A010
Madhulam pazham (Tam.)	E055	Mandwa (U.)	A010
Madhulika (S.)	A010	Manga (Mal.)	D057
Madhura naranga (Mal.)	E047	Mangai (Tam.)	D057
Madhurium (A.)	E028, E029	Mangainji (Mal.)	G015
Mah (A.)	D039	Mange (M.)	E044, E064
Maida (B.,H.,Kan., Mar., N.,O.,P.,U.)	A018	Mange Mana (M.)	C034
Maida mavu (Mal., Tam.)	A018	Manghra (M.)	F013-F014
Maida pindi (Tel.)	A018	<i>Mangifera indica</i> (Sci.)	D057, E036- E042
Maido (G.)	A018	Mango, ginger (Common)	G015
Mainji (Tam.)	G015	Mango, green, raw (Common)	D057
Mainsi dudha (O.)	L001	Mango, ripe, banganapalli (Common)	E036
Mairen (M.)	D065, D066	Mango, ripe, gulabkhas (Common)	E037
Mairen mana (M.)	C030	Mango, ripe, himsagar (Common)	E038
Mairongbi (M.)	B021, B022	Mango, ripe, kesar (Common)	E039
Maize (Mal.)	A006, A007, A008	Mango, ripe, neelam (Common)	E040
Maize, dry (Common)	A006	Mango, ripe, paheri (Common)	E041
Maize, tender, local (Common)	A007	Mango, ripe, totapari (Common)	E042
Maize, tender, sweet (Common)	A008	Mangosteen (Common)	E043
Maka (Mar., O.)	A006, A007, A008	Mangustan (H.)	E043
Makai (G., Kash., N., U.)	A006, A007, A008, D042	<i>Manihot esculenta</i> (Sci.)	F015
Makhan phal (P.)	E007	Manila tamarind (Common)	E044
Makhanphal (H., Mar.)	E007	Manjal (Mal., Tam.)	G033
Makhon shim (B.)	D032	Manthan elakai (Mal.)	C030
Makka (H.)	A006, A007, A008	Mara kosu (Kan.)	C012
Makka Cholam (Tam.)	A006, A007, A008	Mara Thonde (Kan.)	D060
Makoi (A.)	A006, A007, A008	Marach wangun (Kash.)	G001-G007
Makussttaka (S.)	B018, B019, B020	Maramaralu (Tel.)	A012
Malai seethapalam/ Paanghi pazham (Tam.)	E061	Maravalli kizhangu (Tam.)	F015
Malhei (M.)	E005, E006	Marela (G.)	D005
		Marendu pandu (Tel.)	E008
		Mari (G.)	G031
		Marich (N.)	G031
		Marich ushna, Hapusha (S.)	G031
		Marichika (S.)	G001-G007

Marutus (Kash.)	G031	Mestapat (B.)	C022, C023
Mash ki dal (U.)	B003	Meth (H.)	B023
Mashkolail (B.)	B004	Methe (S.)	G026
Masoor (Kash.)	B013,B014, B015	Methi (A.,B.,H., M.,N.,O.,P.,U.)	G026, C020
Masoor (Kathai) (G.)	B014	Methi dana (G.)	G026
Masoor dal (H.)	B013	Methi di patte (P.)	C020
Masoor ni daad (G.)	B013	Methi man (M.)	C020
Masoor rakhoda (G.)	B015	Methi paat (A.)	C020
Masur bele (Kan.)	B014, B015	Methi pandada (G.)	C020
Masur dail (A.)	B013	Methi pata (N.)	C020
Masur dal (H.,Mar.,U.)	B014, B015	Methi sag (H.,Mar.,O.)	C020
Masur parippu (Mal.)	B014, B015	Methi shak (B.)	C020
Masura (O.,S.)	B014, B015	Mewa (N.)	E049
Masura dali (O.)	B013	Milagu (Tam.)	G031
Masura Musuroo (S.)	B015	Milat khunda chaul (A.)	A015
Matar (B.,H.)	B017, D061	Milk fish (Common)	P037
Matar mah (A.)	D061	Milk, Buffalo (Common)	L001
Matara (O.)	B017, D061	Milk, Cow (Common)	L002
Math (G.,Mar.)	B016, C002, C003, C004	Minapapappu (Tel.)	B003
Matha (Common)	P036	Mint leaves (Common)	G016
Mathalam pazham (Mal.)	E055	Minumulu (Tel.)	B004
Mathan (Mal.)	D065, D066	Mirapakaya (Tel.)	G022
Matia rangar chaul (A.)	A013	Mirayalu (Tel.)	G031
Matia rangar til (A.)	H010	Mirchi (H.)	G022
Matikaduri (A.)	C029	Mire (Mar.)	G031
Matir dail phola (A.)	B003	Mirgichara (O.)	E052
Matki (Mar.)	B016	Misur pappu (Tel.)	B014, B015
Matki Kal (Kan.)	B016	Mitha lebu (B.)	E034
Mator (Kh.)	D061	Mithai Gur (Kh.)	I001
Mavina hasi sunthi (Kan.)	G015	Mithun (Common)	O045, O046, O047
Mavinakayi (Kan.)	D057	Moang (Kash.)	B007,B008, B009
Mawal (Kash.)	A001, A002, C002-C006	<i>Mobula kuhlii</i> (Sci.)	P030
Mayalu (Mar.)	C007	Mocha (B.)	D062
Maz da doodh (P.)	L001	Mochai (Tam.)	B007, B008, B009
Meeth (Kash.)	G026	Mochari-chi pan (Mar.)	C026
Meetha aloo (A.)	F013, F014	Mohor gakhir (A.)	L001
Mekke jola (Kan.)	A006, A007, A008	Mohori (Mar.)	H013
<i>Mene maculata</i> (Sci.)	P038	Moida (A.,Kh.,M.)	A018
<i>Menippe mercenaria</i> (Sci.)	Q001	Mokkajonna (Tel.)	A006, A007, A008
<i>Mentha spicata</i> (Sci.)	G016	<i>Momordica charantia</i> (Sci.)	D004, D005, D006
Menthe (Kan.)	G026	Monjh haak (Kash.)	D053
Menthikoora (Tel.)	C020	Monsaobi (M.)	C008
Menthulu (Tel.)	G026	Moog (B.)	B011
Menthya soppu (Kan.)	C020	Moog phali (H.,P.,U.)	H012
<i>Meretrix meretrix</i> (Sci.)	R002		

Mooji hakh (Kash.)	C031	Mulaga akulu (Tel.)	C019
Moolaa ko saag (N.)	C031	Mulaikerei (Tam.)	C005
Mooli (U.)	F009-F012	Mulakaada (Tel.)	D046
Moolikaa (S.)	F009-F012	Mulakeerai (Tam.)	C006
Moon fish (Common)	P038	Mulaku (Mal.,Mar.)	G001-
Moong (N.,U.)	B011	Mulam pazham (Mal.,Tam.)	G007,G022
Moong dal (U.)	B010	Mulankoombu (Mal.)	E045,E046
Moong ko khoste (N.)	B010	Muli (H.)	D002
Moong phalli (Kash.)	H012	Muli di patte (P.)	F009-F012
Moongil kuruthu (Tam.)	D002	Muli ka patta (U.)	C031
Moricha (A.)	C003, C004	Muli ka sag (H.)	C031
Moricha guti (A.)	A001, A002	Muli lieh (Kh.)	F010
Moricha sak (A.)	C002, C005	Muli pylon (Kh.)	F011,F012
<i>Moringa oleifera</i> (Sci.)	C019, D046	Muli saw (Kh.)	F009
Morok (M.)	G001-G007	Mulla danthu (Kan.)	C005,C006
Morok Akangba (M.)	G022	Mulla thotakura (Tel.)	C005,C006
Mosambi (G.,H.,Kash.)	E034	Mullancheru- cheera (Mal.)	C005,C006
Mosami (P.)	E034	Mullangi (Kan., Mal.,Tam.,Tel.)	F009-F012
Mosumi (A.)	E034	Mullangi akulu (Tel.)	C031
Mosur (B.)	B014, B015	Mullangi ilai (Tam.)	C031
Mosur (Dail) (A.)	B015	Mullangi ilaigal (Mal.)	C031
Mosur dal (B.)	B013	Mullangi soppu (Kan.)	C031
Moth bean (Common)	B016	Mullatha (Mal.)	E061
Moth dal (P.)	B016	Mullet (Common)	P039
Motha (H.)	B016	Mulo shak (B.)	C031
Moti alechi (G.)	G021	Mulu Godumai maavu (Tam.)	A019
Motor shuti (B.)	D061	Mun (Mar.)	B011
Mara genasu (Kan.)	F015	Munakka (H.)	E015
Marachini (Mal.)	F015	Mundiringa (Mal.)	E022-E027
Muang (Kash.)	B011	Mundiringa (unakkku) (Mal.)	E057, E058
Muang dal (Kash.)	B010	Mung (H.)	B011
<i>Musa paradisiaca</i> (Sci.)	E011	Mung dal (B.)	B010
<i>Musa x paradisiaca</i> (Sci.)	E009, E010, E012	Mung hawai (M.)	B010, B011
Mud crab (Common)	Q005	Mungi-di-dal (P.)	B010
Muda (G.)	F009-F012	<i>Muraenesox cinerius</i> (Sci.)	P008
Muda na pan (G.)	C031	Murai (N.)	A012
Mudhi (O.)	A012	Mural (Common)	P040
Mudra (S.)	B011	Muramure (H.)	A012
Mug (G.)	B011	Muri (A.,B.,Kh.)	A012
Mug dal (H.,Mar.)	B010	Muringela (Mal.)	C019
Mug ni daad (G.)	B010	Muringakkai (Mal.)	D046
Muga (O.)	B011	Murmure (U.)	A012
Muga Dali (O.)	B010	<i>Murraya koenigii</i> (Sci.)	G010
<i>Mugil cephalus</i> (Sci.)	P039	Murungai keerai (Tam.)	C019
Mula (A.,B.,Mar.,N.,O)	F009-F012	Murungakkai (Tam.)	D046
Mula ka sag (Mar.,O.)	C031	<i>Musa x paradisiaca</i> (Sci.)	D062, D063, D064

Mushroom (A.)	J001, J002, J003	Naspati (M.,N.)	E051
Musk melon, orange flesh (Common)	E045	Naspoti (A.)	E051
Musk melon, yellow flesh (Common)	E046	Naval pazham (Mal.)	E013, E031
Mustard, leaves (Common)	C026	Neembu (U.)	E033
Mustard, seeds (Common)	H013	Neerulli/Ullipaya (Tel.)	G017
Musuroo (N.)	B014, B015	Nei (Kh.)	H010, H011
Musuroo ko dal (N.)	B013	Nei iong (Kh.)	H009
Muth (Kash.)	B024, B025	Nela milli hannu (Kan.)	E063
Muthira (Mal.)	B012	Nellikka (Mal.)	E021
Muttaikose (Tam.)	C015, C016	Nellikkai (Tam.)	E021
Muttu gose (Mal.)	C015, C016	<i>Nelumbium nelumbo</i> (Sci.)	F005
Mavina Hannu (Kan.)	E037-E042	<i>Nemipterus japonicus</i> (Sci.)	P069
Myil meen (Common)	P041	<i>Nemipterus mesoprion</i> (Sci.)	P021
<i>Myristica fragrans</i> (Sci.)	G027, G028	Nemu (A.)	E033
Mysore paruppu (Tam.)	B014, B015	<i>Nephelium lappaceum</i> (Sci.)	E059
Naarangga (S.)	E047	Neralai (Kan.)	E013, E031
Naarikela (S.)	H007	NeraleHannu (Kan.)	E015
Nader (Kash.)	F005	Neredupandu (Tel.)	E013, E031
Nadia (O.)	H006	Neutia sag (O.)	C002 , C003, C004
Nagapazham (Tam.)	E013, E031	Nibu (P.)	E033
Nagarvelna pan (G.)	C010, C011	Niger seeds, black (Common)	H015
Najavalppazham (Mal.)	E015	Niger seeds, grey (Common)	H016
Nalite saga (O.)	C022, C023	Nilakkadalai (Mal.)	H012
Nalla bontha (Common)	P042	Nilam kedi (G.)	E040
Nalla Kishmish (Tel.)	E015	Nimapandu (Tel.)	E033
Nani kobi (G.)	C012	Nimbhu (H.)	E033
Naral pani (Mar.)	K002	Nobab (M.)	E056
Narasingha paat (A.)	G010	Nohoru (A.)	G011, G012, G013
Narba (Common)	P043	Nol khol ka patta (Mar.)	C024
Narel (Mar.)	H006, H007	Nol-kol (G.,Mar.)	D053
Naribel (N.)	H007	Noolkol (Tel.,Kan.,Mal.)	D053
Narikol (A.)	H007	Notya Shaakh (B.)	C002, C004
Narippayir (Tam.)	B016	Nud kait (Kh.)	D064
Nariyad (G.)	H007	Nugga kayi (Kan.)	D046
Nariyad nu pani (G.)	K002	Nuggeyele (Kan.)	C019
Nariyal (H.)	H007	Numitlei Maru (M.)	H020
Nariyal (H.,P.)	H006, H007	Nunghawai (M.)	B024, B025
Nariyal da pani (P.)	K002	Nungsihidak (M.)	K002
Nariyal ka pani (H.)	K002	Nutmeg (Common)	G028
Nariyel (U.)	H007	Nuvvulu (Tel.)	H009, H010, H011
Narjeel (Kash.)	H007	Nyomb (Kash.)	E033
Narji pooen (Kash.)	K002	Oalu (Kash.)	F006, F007, F008
Narjil (Kash.)	H006	Oat (Kash.)	A018
Narkel (B.)	H006, H007	Oat unno lota ghaun no lot (Kash.)	A019
Nashpati (B.,H., Mar.,O.,P.,U.)	E051	Octopus (Common)	R003
Nashpatino (G.)	E051		
<i>Naso reticulatus</i> (Sci.)	P035		

<i>Octopus vulgaris</i> (Sci.)	R003	Padwal (Mar.)	D070, D071,
Okhar (N.)	H021	Paida (O.)	D072
OI (B.)	F017	Paida Pani (O.)	H007
OI kachu (A.)	F017	Pak Choi leaves (Common)	K002
Olkopi (B.)	D053	Pak choi na pan (G.)	C027
Olkopi sag (B.)	C024	Paka keda (G.)	C027
Olle (P.)	E021	Pakeli Kedi (G.)	E009, E010
Oma (Kan.)	G029	Pakka aam (U.)	E037
Omakai (Mal.)	E049	Pakka tamatar (U.)	E036-E042
Omakaya (Mal.)	D059	Pakke tamator (P.)	D075, D076
<i>Ompok bimaculatus</i> (Sci.)	P092	Palaanduh (S.)	D075, D076
Omum (Common,Tam.)	G029	Paladai (Tam.)	G017
Ona Menasinakayi (Kan.)	G022	Palak (Kash., M., Mar.,U.)	L003
Onagida draakshi (Kan.)	E054	Palak ni bhaji (G.)	C007, C033
Onion, big (Common)	G017	Palakkottai (Tam.)	C033
Onion, small (Common)	G018	Palakoora (Tel.)	D052
Onion, stalk (Common)	D058	Palang sag (O.)	C033
Onva (Mar.)	G029	Palapazham (Tam.)	C033
Ool kobi (A.)	C024	Paleng (A.)	D051, E030
Oolkobi (A.)	D053	Pali kora (Common)	C033
Orange, pulp (Common)	E047	Palisa (Mal.,Tam.)	P046
<i>Oreochromis niloticus</i> (Sci.)	P083	Palkatti (Mal.)	E052
<i>Oryza sativa</i> (Sci.)	A011-A015	Palm fruit, tender (Common)	L003
Ottrai poondu (Tam.)	G013	Palong heh (Kh.)	E048
Oyster (Common)	Q006	Palong shak (B.)	C033
Oyster mushroom, dried (Common)	J004	Pambada (Common)	C033
Paakku (Tam.)	H003, H004	Pampara Panasa (Tel.)	P047
Paalak (P.)	C007	<i>Pampus argenteus</i> (Sci.)	E056
Paalavirugudu (Tel.)	L003	Pan (B.)	P057
Paalungo ko Saag (N.)	C033	Pan ka patha (H.)	C010, C011
Paan (A.,M.)	C010, C011, F004	Pana (O.)	C010, C011
Paan ka patta (U.)	C010, C011	Panai nungu (Tam.)	E048
Paan Makhok (M.)	D040, D041	Panamnungu (Mal.)	E048
Paan mana (M.)	C018	Panasa (O.,S.,Tel.)	D051, D052,
Paarai (Common)	P044	Pan-da-patta (P.)	E030
Paarimal (Kash.)	D065, D066	Pandhara (Mar.)	C010, C011
Paavakkai (Tam.)	D004, D005, D006	Pandola (G.)	D009
Pacchi Kandulu (Tel.)	D067	Pandukopa (Common)	D070, D071,
Pacchi Mirapakaya (Tel.)	G001-G007	Paneer (A.,G.,Kh.,P.)	D072
Pachhai milagai (Tam.)	G001-G007	Pangas (Common)	P048
<i>Pachygrapsus</i> sp. (Sci.)	S007	<i>Pangasianodon hypophthalmus</i> (Sci.)	L003
Padavalanga (Mal.)	D070, D071, D072	Pani phal (B.)	S005
Padayappa (Common)	P045	Pani singhara (O.)	F016
Padma nad (O.)	F005	Pani singora (A.)	F016
Padval (G.)	D060	<i>Panicum miliare</i> (Sci.)	A016

Panikakharu (O.)	D001	Patol rit (Kh.)	D060
Panjapulle (Mal.)	A010	Patolah (S.)	D043, D044, D045
Pan-ka-Patta (Mar.)	C010, C011	Patta gobhi (P.)	C015, C016
<i>Panna microdon</i> (Sci.)	P046	Pattani (Mal.,Tam.)	B017, D061
Panneer dratchai (Tam.)	E022	Paunva (G.)	A011
Panner (Common)	L003	Payatham paruppu (Tam.)	B010
<i>Papaver somniferum</i> (Sci.)	G032	Peach (Common)	E050
Papaya (Mar.U.)	D059	Pear (Common)	E051
Papaya, raw (Common)	D059	Peas, dry (Common)	B017
Papaya, ripe (Common)	E049	Peas, fresh (Common)	D061
Papayi (G.,Kon.)	D059, E049	Pedda chikkudu (Tel.)	D032
Papayu (G.)	E049	Peechinga (Mal.)	D068, D069
Papita (H.)	E049	Peerkankai (Tam.)	D068, D069
Papita (Kash.,P.,U.)	D059, E049	Pempe (Kacha) (B.)	D059
Papnus (Mar.)	E056	<i>Penaeus monodon</i> (Sci.)	Q008
Papnuse (G.)	E056	<i>Pennisetum typhoideum</i> (Sci.)	A003
Pappali (Tam.)	E049	Pepe(paka) (B.)	E049
Pappalikkai (Tam.)	D059	Pepper, black (Common)	G031
Pappayi hannu (Kan.)	E049	Perakka (Mal.)	E029
Pappukura (Tel.)	C008	Perakka(nattu) (Mal.)	E028
Papta (Mar.)	B007, B008, B009, D047, D048	Pericham pazham (Tam.)	E017, E018, E019
Parangi (Kan.)	D059	Perinkilichai (Common)	P052
Parangi ilai (Tam.)	C030	<i>Perna viridis</i> (Sci.)	R001
Parangikkai (Tam.)	D065, D066	<i>Persea americana</i> (Sci.)	E007
<i>Parastromateus niger</i> (Sci.)	P002	Peru (Mar.)	E028, E029
<i>Parastromateus niger</i> (Sci.)	P055	Perugayam (Tam.)	G019
Parava (Common)	P049	Peruka (S.)	E028, E029
Parcus (Common)	P050	Perungayam (Mal.)	G019
Parippuchira (Mal.)	C008	Pesalu (Tel.)	B011
Parrot fish (Common)	P051	PesaraPappu (Tel.)	B010
Parsley (Common,P.)	C028	Pesi (O.)	H014
Paruppukeerai (Tam.)	C008	Pesta (B.)	H018
Parwal (H.,P.,U.)	D060	Peta (U.)	D001
Parwar (Common,Mar.)	D060	Petha (H.,P.)	D001
Pasalai keerai (Tam.)	C033	Petha de pate (P.)	C030
Pashor kait (Kh.)	D062	<i>Petroselinum crispum</i> (Sci.)	C028
Pasipayir (Tam.)	B011	Peyaj (B.)	G017
Paspron (Kh.)	G029	Peyara (B.)	E028, E029
Pasumpaal (Tam.)	L002	Phakchet (M.)	C029
Pasupu (Tel.)	G033	Phalsa (Common)	E052
Pathaw (Kh.)	D065	Phalsa hannu (Kan.)	E052
Pathaw iiwbih (Kh.)	D001	Phan dieng (Kh.)	F015
Pathaw saw (Kh.)	D066	Phan Kubi (Kh.)	C024, D053
Pati (Mar.)	D058	Phan rit (Kh.)	F007
PatiLebu (B.)	E033	Phan saw (Kh.)	F008
		Phanas (G.,Mar.)	D051, D052,

	E030	<i>Piper longum</i> (Sci.)	G030
Phankaro iong (Kh.)	F013	<i>Piper nigrum</i> (Sci.)	G031
Phankaro saw (Kh.)	F014	Pipli (H.)	G030
Phansi (Gulabi) (G.)	B019	Pippali (Common)	G030
Phansi (Kadi) (G.)	B018	Pipul (B.)	G030
Phansi (lal) (G.)	B020	Piranha (Common)	P054
Pharasebee (Mar.)	D049, D050	Pista (A.,G.,H.,Kh., Mal.,Mar., N.,O.,P.,Tam.,Tel.,U.)	H018
Pharaskol (A.)	E052	Pistachio nut (Common)	H018
<i>Phaseolus coccineus</i> (Sci.)	D003	<i>Pistacia vera</i> (Sci.)	H018
<i>Phaseolus mungo</i> (Sci.)	B003, B004	<i>Pisum sativum</i> (Sci.)	B017, D061
<i>Phaseolus vulgaris</i> (Sci.)	B007, B008, B009, B018, B019, B020, D049, D050	<i>Pithecellobium dulce</i> (Sci.)	E044
<i>Phoenix dactylifera</i> (Sci.)	E017, E018, E019	Pitwa (H.)	C022, C023
Phool gobi di patte (P.)	C017	Pitwa sag (P.)	C022, C023
Phoolgobi (Kash.)	D036	Piyaj paat (A.)	D058
Phoolgobi panwathir (Kash.)	C017	Piyanj (A.)	G017
Phopat (Common)	P053	Piyaz kali (B.)	D058
Phudino (G.)	G016	Plantain, flower (Common)	D062
Phul gobi (H.,Mar.,P.,U.)	D036, C017	Plantain, green (Common)	D063
Phul gobi patta (H.)	C017	Plantain, stem (Common)	D064
Phul gopi pata (B.)	C017	<i>Platax orbicularis</i> (Sci.)	P067
Phul kobi (A.,O.)	D036	<i>Plectorrhinchus schotaf</i> (Sci.)	P082
Phul kobir pat (A.)	C017	<i>Pleurotus</i> sp. (Sci.)	J004
Phul kopi (B.)	D036	Plum (Common)	E054
Phul kubi (Kh.)	D036	Podavala (Kan.)	D070, D071, D072
Phula Kobi patra (O.)	C017	Podduthirugidi Puvvu ginzalu (Tel.)	H020
Phulian (P.)	A012	Podina (A.)	G016
Phuti kakudi (O.)	D038	Podum thari (A.)	F005
Piaja (O.)	G017	Poha (H.)	A011
Piaja sandha (O.)	D058	Pohe (Mar.)	A011
Piat (Kh.)	G017	Poi (H., P.)	C007
Piat rit (Kh.)	G018	Poi ni bhaji (G.)	C007
Pichiganda (Kash.)	D058	Poi saaga (O.)	C007
Pidaloo (N.)	F018	Poka bilahi (A.)	D075, D076
Pidi Draksha (G.)	E058	Poka kol (A.)	E009-E012
Pigeon (Common)	N014	<i>Polynemus plebeius</i> (Sci.)	P033
Pijuli (O.)	E029	Pomegranate, maroon seeds (Common)	E055
Pijuli (deshi) (O.)	E028	Pomfret, black (Common)	P055
Pineapple (Common)	E053	Pomfret, snub nose (Common)	P056
Pine seed (Common)	H017	Pomfret, white (Common)	P057
Pingu (Kash.)	A005	PongHawai (M.)	B005, B006
<i>Pinjalo pinjalo</i> (Sci.)	P052	Ponnaganni (Common)	C029
<i>Pink perch</i> (Sci.)	P063	Ponnaganni cheera (Mal.)	C029
<i>Pinus</i> sp. (Sci.)	H017	Ponnaganni keerai (Tam.)	C029
<i>Piper betle</i> (Sci.)	C010, C011	Ponnaganti koora (Tel.)	C029
		Pookosu (Tam.)	D036
		Pookosu keerai (Tam.)	C017

Poondu (Tam.)	G011, G012	Pumpkin green, cylindrical (Common)	D065
Popai (Mar.)	E049	Pumpkin leaves, tender (Common)	C030
Poppy seeds (Common)	G032	Pumpkin orange, round (Common)	D066
Pori (Mal., Tam.)	A012	Punchitipul (Kash.)	E053
Pork (Common)	O048-O057	Pundi (Kan.)	C022, C023
<i>Portunus sanguinolentus</i> (Sci.)	Q002	Pungton (M.)	E028
Posola (A.)	D064	<i>Punica granatum</i> (Sci.)	E055
Posta (B.)	G032	Puroi sak (A.)	C007
Postak (O.)	G032	Putta Godugu (Tel.)	J001-J004
Postdana (H.)	G032	Puuga (S.)	H002, H003, H004
Potala (O.)	D060	Puzhungal ari (Mal.)	A014
Potato, brown skin, big (Common)	F006	Puzhungal arisi (Tam.)	A014
Potato, brown skin, small (Common)	F007	Pyaaz (U.)	G017, G018
Potato, red skin (Common)	F008	Pyaaz Kali (H.)	G018
Potla kaya (Tel.)	D070, D071, D072	Pyaj (N.)	G017, G018
Potol (A., B.)	D060	Pyaz (H.)	G017
Praan (Kash.)	G018	<i>Pygopritis</i> sp. (Sci.)	P054
<i>Praecitrullus fistulosus</i> (Sci.)	D073	Quail (Common)	N015
Pranel (Common)	P058	Queen fish (Common)	P060
Prawns, big (Common)	S008	Quinoa (Common)	A009
Prawns, small (Common)	S009	Raai fish (Common)	P061
Presbin (Kh.)	D050	Raai vanthu (Common)	P062
Presbin phyrngop (Kh.)	D049	Raajamaassa (S.)	B005, B006
<i>Priacanthus hamrur</i> (Sci.)	P066	Raayo ko Saag (N.)	C026
<i>Pristipomoides filamentosus</i> (Sci.)	P014	Rabab tenga (A.)	E056
<i>Prunus amygdalus</i> (Sci.)	H001	Rabbit (Common)	O061, O062, O063
<i>Prunus avium</i> (Sci.)	E014	<i>Rachycentron canadum</i> (Sci.)	P010
<i>Prunus communis</i> (Sci.)	E050	Radish leaves (Common)	C031
<i>Prunus persica</i> (Sci.)	E051	Radish, elongated, red skin (Common)	F009
<i>Prunus</i> sp. (Sci.)	E005, E006, E054	Radish, elongated, white skin (Common)	F010
Psettodes erumei (Sci.)	P050	Radish, round, red skin (Common)	F011
Pseudosciaena manchurica (Sci.)	P048	Radish, round, white skin (Common)	F012
<i>Psidium guajava</i> (Sci.)	E028, E029	Ragi (Common, A., B., H., Kan., Tel.)	A010
Puchakaya (Tel.)	E065, E066	Rahar ko dal (N.)	B021
Pudalangai (Tam.)	D070, D071, D072	Rai (G., H., P., U.)	H013
Pudina (B., H., Kan., Kh., Mal., Mar., P., Tam., Tel., U.)	G016	Raisins, dried, black (Common)	E057
Pudina Patra (O.)	G016	Raisins, dried, golden (Common)	E058
Pudinth (Kash.)	G016	Rajagar (G.)	A002
Pui shaak (B.)	C007	Rajma (N., U.)	B018, B019, B020
Puli (Mal., Tam.)	E064	Rajma heh (Kh.)	B018
Puliam ilaigal (Mal., Tam.)	C034	Rajma lieh (Kh.)	B019
Pulichai cheera (Mal.)	C022, C023	Rajma rit (Kh.)	B020
Pulichhai keerai (Tam.)	C022, C023	Rajmah (A., H., M., Mal.)	B018, B019, B020
Pulli paarai (Common)	P059	Rajmah, black (Common)	B018
Pummelo (Common)	E056		

Rajmah, brown (Common)	B019	Riewhadem Lung (Kh.)	D042
Rajmah, red (Common)	B020	Riewhadem Stem (Kh.)	A007
Rakta phalam (S.)	D075, D076	Ringna (G.)	D010-D030
Ram til (B.)	H015, H016	Rohor dail (A.)	B021
Ramamulagakaya (Tel.)	D074, D075, D076	Rohu (Common)	S006
Rambhaa (S.)	D063	Rongalao (A.)	D065, D066
Rambutan (Common,H.)	E059	Rongalao paat (A.)	C030
Ramdana (H.)	A001, A002	Rowagun (Kash.)	D074
Ramtoriya (N.)	D056	Rowangun (Kash.)	D075, D076
Randhuni (B.)	D037	Ruang (Kash.)	G023
Ranga alu (B.)	F013, F014, F019	Rubus sp. (Sci.)	E013
Rani (Common)	P063	Ruhan (Kash.)	G011, G012, G013
<i>Raphanus sativus</i> (Sci.)	C031, F009- F012	Rumex leaves (Common)	C032
Rashun (B.)	G011, G012	<i>Rumex patientia</i> (Sci.)	C032
Rasi (O.)	H009, H010, H011	Rymbai (Kh.)	B005, B016
<i>Rastrelliger kanagurta</i> (Sci.)	P034	Rymbai ja (Kh.)	B022, B023
Rasuna (O.)	G011, G012, G013	Rymbai lieh (Kh.)	B006
Ratadu (G.)	F018, F019	Rynsun (Kh.)	G013
Ratalu (Mar.,U.)	F013, F014	Rynsun rit (Kh.)	G012
Rato Khursani (N.)	G022	RynsunHeh/ Rynsun dkhar (Kh.)	G011
Ray fish, bow head, spotted (Common)	P064	Saalad ko paat (N.)	C025
Rayo (N.)	H013	Saathukudi (Tam.)	E047
Razma (Kash.)	B018, B019, B020	Sabarjil (Mal.)	E051
Red gram, dal (Common)	B021	Sabed kaddu (H.)	D077, D078
Red gram, tender, fresh (Common)	D067	Saboot masari dal (P.)	B014, B015
Red gram, whole (Common)	B022	Sabut maa ki daal (P.)	B004
Red snapper (Common)	P065	Sabut moong dal (P.)	B011
Red snapper, small (Common)	P066	<i>Saccharum officinarum</i> (Sci.)	I001, I002
Regu pandu (Tel.)	E068	Sadaya (Common)	P067
Rhi (P.)	H017	Safar chand (Mar.)	E001-E004
<i>Rhina aenyllostoma</i> (Sci.)	P064	Safarjan (G.)	E001, E003, E004
<i>Rhinobatus prahli</i> (Sci.)	P016	Safed tal (G.)	H011
Ri majai (Kh.)	D032, D047, D048	Safflower seeds (Common)	H019
<i>Ribes nigrum</i> (Sci.)	E015	Sagi (A.)	F015
Rice Bean (Common)	B023	SagolHawai (M.)	D051
Rice, flakes (Common)	A011	SagolHawai Tangkhai (M.)	B003
Rice, par boiled, milled (Common)	A014	Saib (U.)	E001-E004
Rice, puffed (Common)	A012	Saijan patta (H.)	C019
Rice, raw, brown (Common)	A013	Saijan-ki-phalli (H.)	D046
Rice, raw, milled (Common)	A015	Sajana (M.)	D046
Ridge gourd (Common)	D068	Sajana chhuin (O.)	D046
Ridge gourd, smooth skin (Common)	D069	Sajana mana (M.)	C019
Riewhadem Lieh (Kh.)	A008	Sajina (A.)	D046
		Sajina paat (A.)	C019
		Sajjalu (Tel.)	A003
		Sajje (Kan.)	A003

Sajna danta (B.)	D046	Sarunada (O.)	D040, D041
Sajna pata (B.)	C019	Sasuve (Kan.)	H013
Sajna sag (O.)	C019	Sasuve yele (Kan.)	C026
Sakhar Khand (N.)	F013, F014	Sath (Mar.)	A004
Sakkrai badhami (Tam.)	E005, E006	Sava (Mar.)	A016
Sakkargandi (P.)	F013, F014	<i>Scarus ghobban</i> (Sci.)	P051
Sakkaria (G.)	F013, F014	<i>Scomberoides commersonianus</i> (Sci.)	P060
Sakkarvalli kizhangu (Mal. Tam.)	F013, F014	<i>Scomberomorus commerson</i> (Sci.)	P087
Sakothina soppu (Kan.)	C008	<i>Scylla tranquebarica</i> (Sci.)	Q005
Salad ka patta (H.)	C025	Seb (Kan.)	E004
Salad paat (A.)	C025	Seb (P.)	E001-E004
Salad da sag (P.)	C025	Sebot (M.)	D069
Salat chaina (Kh.)	C013	Sebu (Kan.)	E001-E003
Salat dkhar (Kh.)	C025	<i>Sechium edule</i> (Sci.)	D038
<i>Salmo salar</i> (Sci.)	P068	Seebe (Kan.)	E028, E029
Salmon (Common)	P068	Seema Badam/ Jallaru Pandu (Tel.)	E005, E006
Sama (B.,Kan.,Tel.)	A016	Seema chintakaya (Tel.)	E044
Samagadde (Kan.)	F004	Seema malli (Mal.)	C028
Samagra gha (G.)	A019	Seema/ dora hunase (Kan.)	E044
Samai (Common, Tam.)	A016	Seemai parattai keerai (Tam.)	C014
Sampurna godhi hittu (Kan.)	A019	Seemai suraikayi (Tam.)	D077, D078
Sampurna godhuma pindi (Tel.)	A019	Seethapazham (Mal.,Tam.)	E016
San sanghom (M.)	L002	Sem (H.)	B007-B009,
Sanaga papu (Tel.)	B001		D003, D047,
Sanagalu (Tel.)	B002		D048, E001-
Sangada (Common)	P069		E004
Sangtar (Kash.)	E047		
Sankata paarai (Common)	P070	Sem dal (P.)	B007, B008,
Sannachikkudu (Tel.)	D049, D050	Sem fali (P.)	B009
Santra (G.,h.,p.,u.)	E047	Sem ki palli (U.)	D003
Santre (Mar.)	E047	Semai (B.)	D047, D048
Sapota (Common,Kan., Mal.,O.,Tel.,U.)	E060	Semiya (Mal. Tam., Tel., U.)	A023, A024
Sapuri (O.)	E053	Sendurkan vidhai (Tam.)	A023, A024
Saragavo (G.)	D046	<i>Sepia pharaonis</i> (Sci.)	H019
Saragwa na pan (G.)	C019, C029	Seppam ilaigal (Tam.)	R005
Saranthi sag (H.,Mar)	C029	Seppankizhangu (Tam.)	C018
Sarasava pandada (G.)	C026	Seppanthandu (Tam.)	F004
Sardine (Common)	P071		D040, D041
<i>Sardinella longiceps</i> (Sci.)	P071	Sepu/Sema regu (Tel.)	E001-E004
Saro da sag (P.)	C026	<i>Sesamum indicum</i> (Sci.)	H009, H010,
Sarson ka sag (H.)	C026	<i>Sesbania grandiflora</i> (Sci.)	H011
Sarson ka saga (O.)	C026	Sev (B.,H.,O.)	C001
Sarson ki patta (U.)	C026	Seva (S.)	E001-E004
Sarssapa (S.)	H013	Sevian (P.)	E001-E004
Saru (O.)	F004	Sevvazhaipazham (Tam.)	A023
Saru saga (O.)	C018	Sewai (A.)	E011

Sewai lieh (Kh.)	A023	Shul-ram fal (H.)	E061
Sewai saw (Kh.)	A024	Shunti (Kan.)	G014
Sewian (Kash.)	A023, A024	Shyieng soh phan (Kh.)	D052
Shaakaprabhedah (S.)	C015, C016	Shynrai (Kh.)	G033
Shakarkand (H.)	F013, F014	Siddha chowl (B.)	A014
Shamangadda yele (Kan.)	C018	<i>Siganus javus</i> (Sci.)	P089
Shana kulai (Kh.)	B002	Silan (Common)	P076
Shana mator (Kh.)	B017	Silk fish (Common)	P077
Sharifa (H., P.)	E016	<i>Silonia silondia</i> (Sci.)	P076
Shark (Common)	P072	Silver carp (Common)	P078
Shark, hammer head (Common)	P073	Simai (O.)	A023, A024
Shark, spotted (Common)	P074	Simba (O.)	D032
Shau (N.)	E001-E004	Simla alu (B., H., P.)	F015
Shavan (H.)	A016	Simla Batata (Mar.)	F015
Sheema bedhaam pazham (Mal.)	E005, E006	Simolu aloo (A.)	F006, F007
Sheep (Common)	O014-O024	Sing (M.)	G014
Shelavu (Common)	P075	Singdana (G.)	H012
Sherdino ras (G.)	I002	Singhara (Tam.)	F016
Shevaga pan (Mar.)	C019	Siral (A.)	E046
Shevanga sheng (Mar.)	D046	Sitapad (G.)	E016
Shevige (Kan.)	A023, A024	Sitaphal (A.)	E016
Shiitake mushroom, fresh (Common)	J003	Sitaphal (Mar.)	E016
Shiltong (N.)	B023	Sitaphalam (Kan., Tel)	E016
Shim (B.)	B007-B009, D047, D048	Sitapazham (Mal.)	E016
Shimla lanka (O.)	D033, D034, D035	Sivarikkeerai (Tam.)	D037
Shimla marchwangan (Kash.)	D033, D034, D035	Siwain (H.)	A023, A024
Shimla mirch (H.)	D033, D034, D035	Siwain (Mar.)	A023, A024
Shimla mirchi (Tel., U.)	D033, D034, D035	Sla bit (Kh.)	C009
Shimle-di-mirchi (P.)	D033, D034, D035	Sla jada (Kh.)	C008
Shingada (P.)	F016	Sla jajew jyngam (Kh.)	C022
Shingara (H., Mar.)	F016	Sla jajew saw (Kh.)	C023
Shingoda (G.)	F016	Sla Kori (Kh.)	G010
Shira (Kh.)	A011	Sla kubi (Kh.)	C014
Snol (Kash.)	A017	Sla longmar (Kh.)	C006
Shole (P.)	B002	Sla methi (Kh.)	C020
Sholedi dal (P.)	B001	Sla muli (Kh.)	C031
Shoti elaychi (P.)	G020	Sla palong dkhar (Kh.)	C007
Shoti shalli (P.)	D042	Sla pathaw (Kh.)	C030
Shravangheveda (Mar.)	B018, B019, B020	Sla phul (Kh.)	C017
Shriew hati (Kh.)	F017	Sla piat (Kh.)	D058
Shriew jrong (Kh.)	F018	Sla sohkyntoi (Kh)	C034
Shriew lieh (Kh.)	F019	Sla wang (Kh.)	C018
Shuckhuo lonka (B.)	G022	Snake gourd, long, dark green (Common)	D071
		Snake gourd, long, pale green (Common)	D070
		Snake gourd, short (Common)	D072
		Snep kor im (Kh.)	H007

Snep kor trykhong (Kh.)	H006	Sohkhia (Kh.)	D043, D044
Soanjhna da patta (P.)	C019	Sohkhia pylon (Kh.)	D045
Soh apple Jyrngam (Kh.)	E002	Sohmarit khlaw (Kh.)	G030
Soh apple saw (Kh.)	E001, E003,	Sohmynken jhur jyrngam (Kh.)	D033, D034
	E004	Sohmynken jhur stem (Kh.)	D035
Soh bah (Kh.)	E056	Sohmynken trykhong (Kh.)	G022
Soh balensha (Kh.)	E034	SohmynkenHeh (Kh.)	G001
Soh bel (Kh.)	E008	Soidon (M.)	D002
Soh broi heh (Kh.)	E068	<i>Solanum lycopersicum</i> (Sci.)	D074, D075, D076
Soh broi rit (Kh.)	E052	<i>Solanum melongena</i> (Sci.)	D010-D030
Soh dimbur (Kh.)	E020	<i>Solanum tuberosum</i> (Sci.)	F006, F007, F008
Soh grape iong (Kh.)	E022, E025, E027	Sole fish (Common)	P079
Soh grape jyrngam (Kh.)	E023, E026	<i>Solenocera crassicornis</i> (Sci.)	Q007
Soh grape saw (Kh.)	E024	Songi (P.)	E057, E058
Soh jam/Soh jamun (Kh.)	E013	Sooj (Kash.)	A022
Soh jew (Kh.)	E033	Sooran (H.)	F018
Soh khajur (Kh.)	E017, E018	Sopari (G.)	H002, H003, H004
Soh khajur im (Kh.)	E019	Sorekai (Kan.)	D007, D008, D009
Soh kismis iong (Kh.)	E015	<i>Sorghum vulgare</i> (Sci.)	A005
Soh Kymphor (Kh.)	E049	Sorguja (A.)	H015, H016
Soh Kymphor im (Kh.)	D059	Sorisa (O.)	H013
Soh kyntoi (Kh.)	E064	Sorisa sag (B.)	C026
Soh kyntoi im (Kh.)	E044	Soriyah (A.)	H013
Soh manir (Kh.)	E035	Sorrakaya (Tel.)	D007, D008, D009
Soh marit (Kh.)	G031	Sorse (B.)	H013
Soh mylleng (Kh.)	E021	Soru manimunni (A.)	H008
Soh mynken beb (Kh.)	G007	Sosha (B.)	D043, D044, D045
Soh mynken dkhar (Kh.)	G002-G006	Sougri mana (M.)	C022, C023
Soh niamtra (Kh.)	E047	Soursop (Common)	E061
Soh Pai (Kh.)	I002	Southe kayi (Kan.)	D043, D044, D045
Soh phan (Kh.)	D051, E030	Soya (U.)	B024, B025
Soh phareng (Kh.)	E050	Soybean (A.,G.,Kan., Mal., Mar.,O.,Tam.,Tel.)	B024, B025
Soh phoh (Kh.)	E051	Soybean dal (P.)	B024, B025
Soh pieng (Kh.)	E036	Soybean, brown (Common)	B024
Soh pieng (Kh.)	E037-E042	Soybean, white (Common)	B025
Soh pieng im (Kh.)	D057	<i>Sphyraena jello</i> (Sci.)	P075
Soh plum dorris/ Norris (Kh.)	E054	<i>Sphyraena mokarran</i> (Sci.)	P073
Soh pomegranate (Kh.)	E055	Spinach (Common)	C033
Soh pyriam (Kh.)	E028, E029	<i>Spinacia oleracea</i> (Sci.)	C033
Soh pyrshong (Kh.)	E062	Spinak soppu (Kan.)	C033
Soh saw dkhar (Kh.)	D075	Squash (A.)	D038
Soh saw jyrngam (Kh.)	D074	Squid, black (Common)	R004
Soh saw khasii (Kh.)	D076		
Soh sherri (Kh.)	E014		
Soh trun (Kh.)	E053		
Soh watermelon (Kh.)	E065, E066		
Sohbaingon jyrngam (Kh.)	D010-D030		

Squid, hard shell (Common)	R005	Swank (P.)	A016
Squid, red (Common)	R006	Sweet potato, brown skin (Common)	F013
Squid, white, small (Common)	R007	Sweet potato, pink skin (Common)	F014
Sryakānti bijagalu (Kan.)	H020	Syng bah (Kh.)	G014
Star fruit (Common)	E062	Syng makhir (Kh.)	G015
<i>Stegostoma fasciatum</i> (Sci.)	P074	Symbai dhania (Kh.)	G024
Stingray (Common)	P080	Symbai methi (Kh.)	G026
<i>Stolephorus indicus</i> (Sci.)	P003	Symbai ri iong (Kh.)	B007
Strawberry (Common)	E063	Symbai ri saw (Kh.)	B008
Strawberry (G.,Tam.)	E063	Symbai riewhadem stem (Kh.)	A006
Strawberry/ soh stap (Kh.)	E063	Symbai riLieh (Kh.)	B009
Stroberry (Mal.)	E063	Symbai soh kseh (Kh.)	H017
Suan (O.)	A016	Symbai syrso (Kh.)	H013
Suaralu (H.)	F019	Symbai tiew sngi (Kh.)	H019
Sucukrika (S.)	E064	Symbai tiew sngi (Kh.)	H020
Sufari (A.)	H002, H003	<i>Synodus indicus</i> (Sci.)	P020
Sugandhi lota (A.)	C028	<i>Syzygium aromaticum</i> (Sci.)	G023
Sugar cane, juice (Common)	I002	<i>Syzygium samarangense</i> (Sci.)	E031
Suhanjana di phalliya (P.)	D046	<i>Tachysurus thalassinus</i> (Sci.)	P009
Suji (A.,b.,Kh.,M., N.,O.,P.)	A022	Tadabuch (G.)	D073
Sujine ki palli (U.)	C019	Tadbuj (G.)	E065, E066
Sujne ki palli (U.)	D046	Tadi (Mar.,O.,G.)	K001
Suka sak (A.)	C032	Takkali (Mal.)	D074
Sukan jolokia (A.)	G022	Takkali pazham (Mal.,Tam.)	D075, D076
Suke dhrakshi (Kon.)	E058	Tal (G.)	H010, H016
Sukha dhana (G.)	G024	Tala Saja (O.)	E048
Sukha makai (N.)	A006	Taldalja ni bhaaji (G.)	C002
Sukha vatana (G.)	B017	Tali (Kan.)	L003
Sukhe hare matar dal (P.)	B017	Tamarattai (Tam.)	E062
Sukhi matar (H.)	B017	Tamarind leaves, tender (Common)	C034
Sulambali (Tam.)	E043	Tamarind, pulp (Common)	E064
Sunflower seeds (Common)	H020	<i>Tamarindus indica</i> (Sci.)	C034, E064
Suntala (N.)	E047	Tamator (H.)	D074, D075, D076
Supari (B.,H.,Kash., Mar.,N.,P.,U.)	H002, H003, H004	Tambari (Kash.)	E064
Suraikkai (Tam.)	D007, D008, D009	Tameta (G.)	D075, D076
Suraj mukhi (B.,P.)	H020	Tandaljo (G.)	C004
Suraj mukhi na bee (G.)	H020	<i>Tandanus tandanus</i> (Sci.)	S001
Suran (G.,O.)	F017	Tang (Kash.)	E051
Suran (Mar.)	F017, F019	Tapioca (Common)	F015
Surya Mukhi Manji (O.)	H020	Tar (H.)	E048
Surya mukhi (H.,Mar.)	H020	Tarai (H.)	K001
Suryakanthi (Mal.)	H020	Tarbuji (H.,M.,U.)	E065, E066
Suryakanthi vidhai (Tam.)	H020	Tarbuji (M.)	E065
Sushena (O.)	E032	Tari (A.,B.)	K001
Suska khubani (B.)	E005, E006	Tarlava (Common)	P081
Suvarna gadda (Kan.)	F017, F018	Tarmuj (B.)	E065, E066

Tarul (N.)	F015	Thugare bele (Kan.)	B018-B021
Tarvuja (O.)	E065, E066	<i>Thunnus albacores</i> (Sci.)	P028
Tavaredantu (Kan.)	F005	Thuvarai (Tam.)	D067
Teel (N.)	H009, H010, H011	Tiger prawns (Common)	S010
Telakucha (B.)	D054, D055	Tiger prawns, brown (Common)	Q007
Tengamora (A.)	C022, C023	Tiger Prawns, orange (Common)	Q008
Tentuli (O.)	C034, E064	Til (B.,H.,Kash., Mar.,P.,S.,U.)	H009, H010, H011
<i>Tenualosa ilisha</i> (Sci.)	P017	Tilapia (Common)	P083
<i>Terapon jarbua</i> (Sci.)	P031	Tilhou (M.)	G017, G018
Teteli (A.)	E064	Tilhou Mana (M.)	D058
Teteli paat (A.)	C034	Tillikaa (S.)	D004, D005, D006
Tetul (B.)	E064	Tinda (H.,Kash., N.,P.)	D073
Tetul pata (B.)	C034	Tinda, tender (Common)	D073
Thabi (M.)	D043, D044	Tinde (U.)	D073
Thakkalikkaai (Tam.)	D074	Tindli (U.)	D054, D055
Thamala paku (Tel.)	C010, C011	Tishi (B.)	H014
Thamara kada (Tel.)	F005	Tit budam (Kh.)	J001
Thamaraitandu (Tam.)	F005	Tit tyndong (Kh.)	J002
Thamarathandu (Mal.)	F005	Tite karela (N.)	D004, D005, D006
Thambou (M.)	F005	Tiyoh (A.)	D043, D044, D045
Thandu keerai (Tam.)	C002, C003, C004	Toddy (Common)	K001
Thangtup (M.)	E017, E018, E019	Todhi (P.)	K001
Thannir mathan (Mal.)	E065, E066	Toh rymbai (Kh.)	B024, B025
Thati mangu (Kan.)	E048	Tomato (B.)	D075, D076
Thati munjalu (Tel.)	E048	Tomato, green (Common)	D074
Theibong (M.)	E030	Tomato, ripe, hybrid (Common)	D075
Theibong Maru (M.)	D052	Tomato, ripe, local (Common)	D076
Thenga (Mal.)	H006	Tomul (Kash.)	A012-A015
Thenga neeru (Kan.)	K002	Tondale (Mar.)	D054, D055
Thengavellam (Mal.)	K002	Tondekayi (Kan.)	D054, D055
Thengina kayi (Kan.)	H007	Tondool (Mar.)	A015
Thengini kai (Kan.)	H006	Torai (H.)	D068, D069
Thenkai (Tam.)	H007	Torbot (M.)	D001
<i>Thenus orientalis</i> (Sci.)	Q003	Tori (P.)	D068, D069
<i>Thenus orientalis</i> (Sci.)	Q004	Tormuj (A.)	E065, E066
Thiedlotus (Kh.)	F005	Totapuri kedi (G.)	E042
Thoiding (M.)	H010	<i>Trachinotus blochii</i> (Sci.)	P056
Thoiding Amuba (M.)	H009	<i>Trachyspermum ammi</i> (Sci.)	G029
Thoiding angouba (M.)	H011	<i>Trichosanthes anguina</i> (Sci.)	D070, D071, D072
Tholam (Common)	P082	<i>Trichosanthes dioica</i> (Sci.)	D060
Thondekai (Kan.)	D073	<i>Trigonella foenum graecum</i> (Sci.)	G026, C020
Thoolhaymbe (Kash.)	D032	Triputta (S.)	B013
Thor (B.)	D064	<i>Triticum aestivum</i> (Sci.)	A018-A024
Thotakoora (Tel.)	C002, C003, C004	Tser (Kash.)	E005, E006
Thotakoora ginjalu (Tel.)	A001, A002	Tsoonth (Kash.)	E001-E004

TukhmHumnaz (U.)	C032	Ulli kadalu (Tel.)	D058
Tuna (Common)	P084	Ulli thandu (Mal.)	D058
Tuna, striped (Common)	P085	Ulundhu (Tam.)	B004
Turai (U.)	D068, D069	Ulutham paruppu (Tam.)	B003
Turdal (Mar.)	B021, B022	Uluva (Mal.)	G026
Turia (G.)	D068, D069	Uluva ila (Mal.)	C020
Turkey (Common)	N016-N019	Um snepkor (Kh.)	K002
Turmeric powder (Common)	G033	Undamulagu (Mal.)	D033, D034, D035
Turrel (Kash.)	D068, D069	Unnipindi (Mal.)	D064
Tuvar (U.)	B022	Uppudu biyyam (Tel.)	A014
Tuvar ki dal (U.)	B021	Uppumavu (Mal.)	A022
Tuvarai (Tam.)	B022	Urahi (A.)	D032
Tuvaramparuppu (Tam.)	B021	Urd dal (H.)	B003
Tuvaru parippu (Mal.)	B021, B022	Urohi (A.)	D047, D048
Tuver (G.)	B022	Urohi guti (A.)	B007, B008, B009
Tuver ni daad (G.)	B021	<i>Uroteuthis duvauceli</i> (Sci.)	R007
<i>Tylosurus crocodilus crocodilus</i> (Sci.)	P040	Urula kizhangu (Mal.)	F006, F007, F008
Tympew (Kh.)	C011	Urulaikizhangu (Tam.)	F006, F007, F008
Tympew Dkhar (Kh.)	C010	Usacha rasa (Mar.)	I002
Tyrso (Kh.)	C026	Ushtahak (Kash.)	C008
U bit (Kh.)	F001	Usirkaya (Tel.)	E021
U buri (Kh.)	D003	Usna chawal (H.)	A014
U dai jyrngam (Kh.)	B011	Usuna chaula (O.)	A014
U dai saw (Kh.)	B013, B014, B015	Uyen (M.)	J003
U dai stem (Kh.)	B010	Uzhunnu parippu (Mal.)	B003
U hing (Kh.)	G019	Uzhunnu (Mal.)	B004
U jeera (Kh.)	G025	Vadhvani marcha (G.)	G005
U kajor (Kh.)	F002	Vakka (Tel.)	H002, H003, H004
U klong (Kh.)	D007	Valasulu (Tel.)	H015, H016
U klong heh (Kh.)	D008	Valava (Common)	P086
U long (Kh.)	G023	Vallicheera (Mal.)	C007
U manghra (M.)	F015	Valpapdi (G.)	B007, B008, B009, D047, D048
U phan (Kh.)	F006	Vamu (Tel.)	G029
Uchhe (B.)	D005	Vange (Mar.)	D010-D030
Uddachi dal (Mar.)	B003, B004	Vanjaram (Common)	P087
Uddhina bele (Kan.)	B003, B004	Vaṅkaya (Tel.)	D010-D030
Uemma halu (Kan.)	L001	Varagu (Common, T.)	A017
Ukadla tandoor (Mar.)	A014	Varamilagai (Tam.)	G022
Ukew (Kh.)	A020	Vatam kottai (Mal.)	H001
Ukhua chaul (A.)	A014	Vatana (G., Mar.)	D061
Ukrai (Kh.)	A010	Vattu parippu (Mal.)	B013
Ular dhirachai (Tam.)	E057, E058	Vazha pazham (Mal., Tam.)	E009, E010, E011, E012
Ulavalu (Tel.)	B012		
Ulgobi saga (O.)	C024		
Ulkobi (O.)	D053		
Ulli (Mal.)	G017		

Vazhai thandu (Tam.)	D064	Whale shark (Common)	P090
Vazhaipazham (Tam.)	E012	Wheat flour, atta (Common)	A019
Vazhakkaai (Tam.,Mal.)	D063	Wheat, bulgar (Common)	A021
Vazhapoo (Mal.,Tam.)	D062	Wheat, flour, refined (Common)	A018
Vazhuthiniga (Mal.)	D010-D030	Wheat, semolina (Common)	A022
Veduru chiguru (Tel.)	D002	Wheat, vermicelli (Common)	A023
Vela meen (Common)	P088	Wheat, vermicelli, roasted (Common)	A024
Veldoda (Mar.)	G020-G021	Wheat, whole (Common)	A020
Velega pandu (Tel.)	E067	Wood apple (Common)	E067
Vella payaru (Mal.)	B005-B006	Wushke (Kash.)	A004
Vellam (Mal.)	I001	<i>Xiphias gladius</i> (Sci.)	P091
Vellarikka (Mal.,Tam.)	D043, D044, D045	Xiphinis (Common)	P091
Vellulli (Mal.,Tel.)	G011, G012, G013	Xoru Piyanj (A.)	G018
Velvangi (Mar.)	D075, D076	Yaavanaala (S.)	A006
Vendaikkai (Tam., Mal.)	D056	Yaingang (M.)	G033
Vendhaiya keerai (Tam.)	C020	Yam, elephant (Common)	F017
Vengaya thaal (Tam.)	D058	Yam, ordinary (Common)	F018
Vengayam (Tam.)	G017	Yam, wild (Common)	F019
Vennaipazham (Tam.)	E007	Yangu (Kash.)	G019
Venpoosani (Tam.)	D001	Yava (S.)	A004
Venthayam (Tam.)	G026	Yelachi (Kan.)	E068
Verkalalai (Tam.)	H012	Yelakki (Kan.)	G020, G021
Verkosu (Tam.)	C028	Yubi (M.)	H007
Verusenaga (Tel.)	H012	Yubi Akangba (M.)	H006
Vetrilai (Tam.)	C010, C011	Yubi Mahi (M.)	B004
Vettiai (Mal.)	C010, C011	Zaaphal (Kash.)	G028
<i>Vicia faba</i> (Sci.)	D032,D040, D041	<i>Zea mays</i> (Sci.)	A006, A007, A008, D042
Vidaivarai (Tam.)	D047-D050	Zeeth aal (Kash.)	D007
<i>Vigna aconitifolia</i> (Sci.)	B016	Zeth aal (Kash.)	D009
<i>Vigna catjang</i> (Sci.)	B005, B006	Zimikand (P.)	F017
<i>Vigna radiata</i> (Sci.)	B010, B011	Zimikandha (H.)	F017
<i>Vigna umbellata</i> (Sci.)	B023	<i>Zinziber officinale</i> (Sci.)	G014
Vilam pazham (Mal.,Tam.)	E067	Zizyphus (Common)	E068
Vilayatichinch (Mar.)	E044	<i>Zizyphus jujuba</i> (Sci.)	E068
Vilwa pazham (Mal., Tam)	E008	Zucchini green (Common)	D077
VinaHannu (Kan.)	E036	Zucchini, yellow (Common)	D078
<i>Vitis vinifera</i> (Sci.)	E022-E027, E057, E058	Zyur (Kash.)	G025
Vora (Common)	P089		
Vruntaakam (S.)	D010-D030		
Wagun (Kash.)	D010-D030		
Walnut (Common,Kh.)	H021		
Water chestnut (Common)	F016		
Water melon, dark green, sugar baby (Common)	E065		
Water melon, pale green (Common)	E066		



NATIONAL INSTITUTE OF NUTRITION (ICMR)

Jamai Osmania P.O., Hyderabad- 500 007, Telangana State, INDIA

Website: www.ninindia.org; Email: nin@ap.nic.in

Ph: +91 40 27197200; Tele fax: +91 40 27019074