

ASEAN Food Composition Database

Electronic version 1, February, 2014



JICA



Institute of Nutrition, Mahidol University
INFOODS Regional Database Centre

Institute of Nutrition, Mahidol University, THAILAND
ASEANFOODS Regional Centre and INFOODS Regional Database Centre

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Electronic version 1, February 2014

The ASEAN Food Composition Tables contain food and nutrient data which were systematically compiled from six ASEAN national food composition tables. This publication generally provides average nutrient data on food consumed in ASEAN countries. It aims to present "typical" values for use when analysing the diet of groups of people, rather than that of individuals.

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c/o Institute of Nutrition, Mahidol University
ASEANFOODS Regional Centre

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1. FOREWORD

INFOODS was established in 1983 under the auspices of the United Nations University following an organizational meeting at the Rockefeller Foundation Conference and Study Center in Bellagio, Italy. The meeting stressed the inadequacy of existing information on the nutrient composition of foods, particularly in developing countries. ASEANFOODS was one of the first of the regional INFOODS groupings to be established. This was possible because of the strong commitment and leadership of Dr. Aree Valyasevi, Founding Director of the Institute of Nutrition, Mahidol University (INMU), Thailand, and key members of his staff. It was their ability to enlist the enthusiastic cooperation and contributions from institutions and individuals in all six of the countries in the INFOODS Regional Data Centre Project that led to its success.

Asian countries are experiencing a variety of nutritional problems that are due to a combination of undernutrition in areas of poverty, and overnutrition in the growing affluent segments of the populations. Micronutrient deficiencies affect people in every socioeconomic category. The planning of nutrition information and intervention programmes to improve the status of the nutritionally vulnerable in the region requires reliable data on the micronutrient as well as the macronutrient content of foods.

The dedicated leadership of Dr.Kraisid Tontisirin, the third Director of INMU and the hard work of Dr. Prapasri Puwastien together with the effective and highly motivated assistance of collaborators in the other five countries have brought this project to fruition. The result is an outstanding ASEAN Food Composition Tables and ASEANFOODS Regional Database. Those responsible are to be congratulated for this contribution to the health and wellbeing of many millions of people in the ASEAN region and throughout the world.

Nevin S. Scrimshaw, PhD
Professor and Senior Advisor
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July 2000

2. PREFACE

Owing to the paucity of information on national food composition tables in some of the ASEANFOODS member countries, a need for development of the ASEANFOODS Food Composition Tables was strongly felt. In 1996, with technical and financial support from UNU/INFOODS and the Japanese International Co-operation Agency (JICA), a Regional Workshop on "Creation of the First ASEANFOODS Food Composition Database" was organised. During the Workshop, 20 participants from 6 countries, namely Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam along with two experts from the INFOODS secretariat put in unstinted efforts to systematically develop an ASEANFOODS archival file. This development was based on the agreed criteria for evaluation of a national food composition database and followed the agreed food composition tables format and design which were in consonance with the guidelines set by the UNU's INFOODS on the generation and compilation of a food composition database. An archival file of about 4,500 food items, categorised into 17 food groups was developed. The technical experts established the reference and user databases as post workshop activities. Due to the difficulties and complications in the evaluation and scrutiny of data in the archival file before merging and, in addition, pending work of some participating countries, the entire task took more than 4 years for completion. A partial support for the final stage of preparation was kindly provided by FAO.

Finally the first edition of the ASEAN Food Composition Tables was developed, containing data on 20 components and energy value for about 1,740 commonly consumed foods, divided into 17 food groups. It is expected that these FCTs can serve the needs of users in ASEANFOODS member countries and be used worldwide for food and nutrition research in the community and industry.

Kraisid Tontisirin, Ph.D.
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ASEANFOODS Co-ordinator
September 1999

3. ACKNOWLEDGEMENT

The ASEANFOODS technical committee is chaired by Dr Prapasri Puwastien of Thailand's Institute of Nutrition at Mahidol University. The technical committee members include Dr Tee E Siong of Malaysia's Institute for Medical Research (IMR), Dr Aida Aguinaldo of the Philippines Food and Nutrition Institute, and Dr Barbara Burlingame of the INFOODS secretariat office at the Food and Agriculture Organization of the United Nations.

The Regional Database and food composition tables compilers were from the organisations responsible for the national databases represented in the region. These people made significant contributions to this project and jointly shared in the authority of these tables. All of the following people committed many hours of effort and dedication, and are due very special thanks for the successful execution of the project. The technical committee would like to express its sincere appreciation to the following people: from Indonesia, Dr H Hermana, Dr Komari, Dr Mien Karmini; from Malaysia, Dr Mohd Ismail Noor, Ms Khatijah Idris; from the Philippines, Ms Teresita Portugal, Ms Ruby Apilado; from Singapore, Ms Tan Wei Ling, Ms Toh Hui Kheng, Ms Emily Mok; from Thailand, Dr Pongtorn Sungpuag, Dr Somkiat Kosulwat, Mr Kunchit Judprasong, Ms Sureephan Boonvisut, Ms Malee Yaowala-Ong; from Vietnam, Dr Bui Minh Duc, Mr Tran Thanh Do, Mr Tran Quang; and a computer expert from New Zealand, Dr Thomas Spriggs.

On behalf of ASEANFOODS, we gratefully acknowledge all the kind support which has contributed to the success of the ASEANFOODS Food Composition Database: a) the support from the International Network of Food Data Systems (UNU/INFOODS) as input from their experts and some resource materials for several ASEANFOODS activities over a ten-year period; b) the generous financial contribution from the Japanese International Cooperation Agency (JICA) for the workshop on the creation of the first ASEANFOODS Food Composition Database and the printing of the ASEAN FCTs; and c) the support from the Food and Agriculture Organization (FAO) for member activities on developing the national food composition programmes for completion of the ASEANFOODS database and their support for publication and distribution of the ASEAN food composition tables.

Country acknowledgement:

Malaysia

A systematic programme to compile a Malaysian Food Composition Database was initiated by the IMR in 1980. The first phase consisted of definition of the state-of-the-art of food composition studies in the country, and compilation of a preliminary table for immediate use in 1982. In the second phase, systematic chemical analysis of local foods commenced, and was carried out as a collaborative programme of four institutions, namely the Division of Human Nutrition of the Institute for Medical Research (IMR), the Food Technology Centre of the Malaysian Agricultural Research and Development Institute (MARDI), the Faculty of Food Science and Biotechnology of Universiti Putra Malaysia (UPM) and the Department of Food Science and Nutrition of the Universiti Kebangsaan Malaysia (UKM). For the first several years, the analysis programme was relatively slow, with limited available funding. The programme was given a boost when some funding was obtained under the Australian-ASEAN Economic Cooperation Programme, first through the ASEAN Sub-Committee on Protein and subsequently through the ASEAN Sub-Committee on Protein: Food Habits Research and Development. Two preliminary versions of the Tables were published in the early 1980s, culminating in the publication of a fairly comprehensive 3rd edition in 1988. The Malaysian Food Composition Database Programme was reactivated in 1996 by the government R&D programme. In 1997, the 4th edition of the Malaysian Food Composition Tables, based on the 1988 edition, with a new presentation format and more data, was published. We are thankful to our co-workers and the above mentioned collaborating institutions for their contributions over the years.

The Philippines

Food composition data generators were staff from the Food Quality and Safety Section, Food Science and Technology Division, Food and Nutrition Research Institute, Department of Science and Technology and in the year 1950's, the Institute of Nutrition, Department of Health. Few data were generated by the Department of Animal Science and Department of Agricultural Chemistry, College of Agriculture, University of the Philippines, Los Banos, Laguna.

The Food Composition Table 1997 compilers were staff from the Food and Nutrition Research Institute, Department of Science and Technology, with funding from the

Department of Science and Technology-Japan Society for the Promotion of Science for the Seminar-Workshop on the “Global Harmonization of Food Composition Tables” and from the Food and Agriculture Organization (FAO) for the FCT 1997 revision activities and printing.

Singapore

In 1996, the Department of Nutrition of the Ministry of Health initiated the establishment of a comprehensive food composition database system. The 200 foods were the first batch of 1000 food items to be chemically analysed over a six-year period. The chemical analysis was done by accredited laboratories using official methods of the Association of Official Analytical Chemists (AOAC). A pre-determined sampling protocol was followed to ensure representativeness of foods eaten by Singaporeans. The Food Technology Centre, Singapore Institute of Standards and Industrial Research (SISIR) handled the proximate analysis and the Chemical Laboratory (S) Pte Ltd analysed the remaining components.

Thailand

All data generators were from various government institutions, i.e. Institute of Nutrition, Mahidol University; Nutrition Division, Department of Health, Ministry of Public Health, Agricultural Chemistry Division, Department of Agriculture, Ministry of Agriculture and Cooperatives; Biological Science Division, Department of Science Service, Ministry of Science, Technology and Environment and Department of Radiology, Faculty of Medicine Siriraj Hospital, authors of published papers and reports (as shown in the list of data sources in Thai FCTs), and all food manufacturers, who have contributed the analytical food composition data. It is because of their contribution that makes the development of Thai FCTs possible.

The ad hoc technical committee, which was chaired by Prof. Kraisid Tontisirin and co-chaired by Asst. Prof. Prapasri Puwastien, with the technical team composed of food composition data generators: Assoc. Prof. Pongtorn Sungpuag, Asst. Prof. Somsri Chareonkiatkul, Dr Somkiat Kosulawat, and Mr Kunchit Judprasong; food composition data compilers: Asst. Prof. Prapasri Puwastien, and Miss Monthip Raroengwichit; data programmers: Asst. Prof. Nipa Rojrungvasinkul, and Miss Chayanist Vanijjakul; food

composition data users: Assoc. Prof. Thara Viriyapanich, Mrs Orapin Banjong, and Asst. Prof. Uraiporn Chitchang.

The technical support and resources provided by UNU/INFOODS throughout the programme, and the financial support from FAO for the preparation of national food composition database were greatly appreciated.

We wish to thank all the above agencies and persons for their valuable support, which enabled us to develop the Thai FCTs.

Vietnam

The National Institute of Nutrition would like to express thank and gratitude to the Editor and all Collaborators and others, who compiled and provided support in completing the data.

We thank all other scientific research centres from the Ministries of Agriculture, Marine-products, Light-industry, Defense, Education for their support and assistance in contacting us for reference-data.

Without their help and encouragement the Vietnamese Food Composition Tables would not likely be published.

4. BACKGROUND ON THE DEVELOPMENT OF ASEAN FOOD COMPOSITION TABLES

4.1 Development of ASEANFOODS

All food and nutrition programmes, as well as many other activities in the areas of health, education, food technology, agriculture, and the economy require information on the nutrient and non-nutrient composition of natural and processed foods. In response to this need, countries have placed particular attention on the generation and dissemination of quality food composition data. In 1983, the United Nations University established the International Network of Food Data Systems (INFOODS) to improve the quantity, quality and accessibility of food composition data. Subsequently, various regional networks have been formed to encourage these activities and to facilitate collaboration and exchange of information and knowledge between countries and regions.

Asia is the largest continent with a population of over 2 billion and consists of the three distinct regions of South Asia, Southeast Asia, and East Asia. Within these areas, great diversity exists in socioeconomic development, culture and lifestyle including the food consumption patterns, beliefs and habits associated with each region's population. As a result of this diversity, each region is now responsible for developing its own food composition data system while assuring that a flow of information is maintained between regions on important advancements, especially where commonalities exist.

To maintain closer intercountry and interregional collaborations, the ASEAN Network of Food Data Systems (ASEANFOODS) was established in 1986 with 6 member countries comprising Indonesia, Malaysia, Philippines, Singapore, Thailand and Brunei Darussalam. Vietnam joined the network in 1996. The Network's main objective, which is in line with those of ASIAFOODS and INFOODS, is to develop a mechanism for increasing the quality, quantity and accessibility of food composition data within the region, and internationally through linkages with other regional networks.

To begin attaining this objective, ASEANFOODS Workshops were organised in 1986, 1989, 1991 and 1996, in order to bring about greater awareness of intercountry activities and seek

ways to standardise information systems. As a result, various activities have been carried out at national and regional levels including:

- (1) developing guidelines for regional use in sampling;
- (2) strengthening the analytical performance of food analysis laboratories in ASEANFOODS' member countries;
- (3) developing National Food Composition Tables and a computerised system for the acquisition, processing, retrieval and dissemination of food composition data at national and regional levels, in collaboration with national focal points in each ASEAN country.

Typically, ASEAN countries (except Brunei Darussalam) have developed their national databases to bring together, evaluate, and document all available food composition data for their unique food supplies. Uniqueness relates to foods, cultivars of foods, food names, food standards affecting composition, as well as diseases related to dietary factors. Although some National Food Composition Tables have been developed in most ASEAN countries, incomplete information surrounding nutrient data for certain common food items is a persistent problem facing users. The problem generally has been overcome by borrowing the missing data from national databases outside the region or from related foods. Active food composition data generation in the analytical laboratories in each country is essential for the purpose of providing original analytical nutrient data where no such data exist. The availability of an ASEANFOODS food composition database to obtain, retrieve, compare and exchange food composition data among ASEAN countries will help fulfil the data needs of ASEANFOODS member countries and others in nearby regions where food composition data are lacking or not completely available. In addition, regional food composition databases can serve multiple purposes, including facilitation of intraregional trade, collaborations in research projects, agricultural policy development, and public health programmes and policies.

ASEANFOODS first priority became that of systematically developing a database at national and regional levels. Assistance to initiate development was provided by INFOODS. A regional workshop on the *Development of an INFOODS Regional Database Centre and Data Interchange System* was held at the Institute of Nutrition, Mahidol University (INMU) at Salaya, Thailand, in December 1991. Computer hardware and software was also donated by INFOODS. Workshop participants came from the three ASEANFOODS member

countries (Malaysia, Philippines, and Thailand) that had initiated computerised database systems. Representatives from INFOODS and OCEANIAFOODS were also present to facilitate internetwork sharing and standardisation. At the Workshop, an electronic mail system was set up. A follow up Workshop for ASEANFOODS members was endorsed for the purpose of creating ASEAN food composition tables and data files.

4.2 Creation of the first ASEAN food composition database

To establish the ASEAN food composition database, a technical committee was formed. It comprised coordinators from Malaysia (Dr Tee E Siong), Philippines (Dr Aida Aguinaldo) and Thailand (Dr Prapasri Puwastien) as well as one expert from INFOODS (Dr Barbara Burlingame). A plan for a workshop titled “Creation of the first ASEAN Food Composition Database” was submitted to, and approved by the Japanese International Cooperation Agency (JICA). This workshop was crucial since it was the first stage in developing a regional food composition database. The activities of the workshop were divided into 3 parts as follows.

A. Preworkshop activities

The existing national food composition databases from each country were modified based on members' agreement in terms of format and food group classification. Specific alphanumeric food codes were given for food items from each country and the analysed nutrients were identified by INFOODS tagnames.^(1, 2) Compilation of spreadsheet files and installation of these into a prepared database was performed in each country. There was a total of about 4,500 food items. The Workshop was then convened at the Institute of Nutrition, Mahidol University, Thailand in March 1996.

B. ASEANFOODS workshop activities

Representatives from each ASEAN country actively involved in food composition data compilation were invited. Nineteen ASEAN delegates from Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam, and two experts supported by INFOODS participated at the workshop. The policy decision making for harmonisation and standardisation of the data files took place and the group discussed and agreed upon a set of criteria for evaluation of national food composition databases for inclusion into the

ASEAN food composition database. Participants were then divided into 3 working groups, each consisting of a representative from each country. Each working group would perform the following on the assigned data files according to the agreed criteria:

- confirm identity of food items and food code in each of the country data files
- select the relevant food items from the archival files of the national food composition tables (about 4,500 food items)
- confirm identity and completeness of the data files based on the available nutrient data
- identify selected data on similar food items from different countries to form a pool of total available data to be scrutinised and possibly merged, ready for inclusion into the ASEAN user database. (Most foods consisted of 16-25 different nutrients and energy value. Percent edible portion was available in the Malaysian and Philippine food composition tables.)
- standardise all the food descriptors based on the set criteria.

C. Post workshop activities

After the workshop, the derived ASEAN reference database was then reviewed and examined by the technical experts from INFOODS and at the ASEANFOODS Regional Centre. The database of some participating countries still required scrutiny and merging following the workshop and these countries spent two to three years in completion of their databases and submission of these to the Regional Centre. The ASEAN food composition database was then again evaluated, edited, completed and finalised at the Regional Centre. A data file of about 1,740 food items* was derived. Camera-ready food composition tables (FCTs) were prepared and published in the year 2000.

*Note: The electronic food composition database (PDF) presented here contains FCD of 616 food items as aggregated ASEAN data (as agreed by the ASEANFOODS members) and individual unique data of Thai foods.

5. SYSTEMATIC DEVELOPMENT OF THE ASEAN FOOD COMPOSITION DATABASE (FCD)

A set of criteria for the evaluation of national food composition data for inclusion into the ASEAN food composition database (FCD) was prepared in 1996 at the ASEAN workshop on the creation of the first ASEAN Food Composition Database. The activities for the systematic development of the regional FCD were then carried out, step by step, following the set criteria and the UNU's International Network of Food Data Systems (INFOODS) guidelines on generation and compilation of food composition data^(3,4) as follows.

5.1 Systematic preparation of archival files

5.1.1 Selection of data from national food composition tables (FCTs)

The data files from each country (user or reference database) were sorted by food group, with an additional **Status** field being created to document the fate of each record as to its suitability for the Regional Database. The data were harmonised for units of expression and number of decimal places according to the standards given in **Table 1**. Each data set was examined to ensure the correct identity of the food items. Moisture content and descriptors were used as guidelines. English and scientific names were carefully checked according to documents from the Ministry of Agriculture and Cooperation, and other illustrated references.⁽⁵⁻¹⁹⁾ The **Status** included the following designations:

- **Unique:** this designation was used when the record remained intact. The record was classified as unique when none of the other country databases included this item, yet it was a food used in at least two countries;
- **Exclude:** this designation was used when the record was considered inappropriate for the Regional Database because: (1) the data were too incomplete; or (2) the food was so poorly described as to make its identification difficult; or (3) the original source was from outside the region; or (4) the food was infrequently consumed and specific to only one country;
- **Merge:** this designation was used for an original record when records from two or more countries were considered to be identical foods;

Table 1. Standard for the units of expression and the number of decimal places⁽²⁰⁾

	Nutrients	Unit	No. of decimal places
1	Energy	kcal	none
2	Water (Moisture)	g	1
3	Protein	g	1
4	Fat	g	1
5	Carbohydrate	g	1
6	Dietary fibre	g	1
7	Ash	g	1
8	Calcium	mg	none
9	Phosphorus	mg	none
10	Iron	mg	1
11	Sodium	mg	none
12	Potassium	mg	none
13	Copper	mg	2
14	Zinc	mg	1
15	Retinol	mcg	none
16	β-carotene	mcg	none
17	Vitamin A; retinol activity equivalent (RAE)	mcg	none
18	Vitamin B1	mg	2
19	Vitamin B2	mg	2
20	Niacin	mg	1
21	Vitamin C	mg	none

- **Combine:*** this designation was used when it was considered that two or more records of the same food item from a single country should be combined. This was necessary when a country's database was a collection of individual sample values structured as a reference database. A new food identifier was given when the individual data were combined. The fate of this record would then be considered and changed again to become **unique**, or **exclude**, or **merge**;

*This designation was used only for the databases from Philippines and Thailand. They provided the data as a reference database, which had not yet been combined at the time of the workshop, whereas the other countries provided a user database.

- **New:** this designation was used for the new record created from the records with the status **Merge**;
- **Move:** this designation was used for records that had been assigned to a food group incorrectly. The status **Move** needed always to be accompanied by a food group identifier to which the record was newly assigned.

5.1.2 Food groups

The Technical Committee examined the categorisation of foods into groups for the purpose of standardisation within the region. **Table 2** lists 18 food groups and their letter code, and gives explanatory notes where relevant. The letters I, L and O were excluded to avoid confusion with numbers. A decision was taken to delete the R group, ‘snack foods’, since there was no such group in any of the ASEAN national food composition tables. Each snack food was therefore distributed to another food group, according to its main ingredient. Often foods were deemed appropriate for two or more groups. The general principle employed for food group allocation was to give deference to food usage rather than food origin for single source foods (for example, ginger was allocated to N, ‘condiments and spices’ rather than D, ‘vegetables’), and when allocating multiple source foods deference was given to the major food component (for example, meat loaf was allocated to F, ‘meats’ rather than T, ‘mixed dishes’).

5.1.3 Food record identifiers

Food record identifiers were constructed with a two alpha character code representing the country (ISO System) or the region (IFRI System) followed by a single alpha character representing the food grouping shown in **Table 2**. The remaining numerical characters were constructed in different ways for different countries.

Table 2. Food groups, codes and explanatory notes

Food groups	Group code	Notes on food groups
Cereals and cereal products	A	Products included: bakery
Starchy roots and tubers and products	B	
Legumes, nuts and seeds and products	C	Includes dry seeds only; legume pods are placed in group D. Coconuts are not included; they are distributed to various groups, E, K and Q depending on their stage of maturity and uses.
Vegetables and products	D	
Fruits and products	E	Young coconut is included.
Meat, meat products, and other animals	F	
Finfish, shellfish, and other aquatic animals and products	G	Algae are placed in group D.
Egg and products	H	
Milk and products	J	
Fats and oils	K	Mature coconut is included.
Sugars, syrup and confectionery	M	
Condiments and spices	N	
Beverages, alcoholic	P	
Beverages, nonalcoholic	Q	Coconut juice is included.
Snack foods: commercially processed and packed	R (deleted)	Final decision was to distribute data of snack foods into specific food groups according to their main ingredient
Fast foods: franchise foods	S	
Mixed food dishes	T	Data from each ASEAN country were classified into 8 subgroups. They are Cereal dishes, Egg dishes, Fish and seafood dishes, Meat dishes, Soup dishes, Vegetable dishes, Desserts and snacks, and Other dishes
Miscellaneous	U	

Table 3 lists the country/region, the ISO/IFRI code, and the rationale for the numerical characters. The principle of authority can be interpreted as follows. Record identifiers beginning with ID, MY, PH, SG, TH and VN were original records from those countries with the authority for those data residing within the national group. The record identifiers beginning with AA were original records from the regional database, with authority for those data residing with the Regional Data Centre.

Table 3. Country/Region, ISO/IFRI code, and the rationale for the numerical characters⁽²¹⁾

Country/Region	ISO/IFRI	Numerical rationale ⁽²⁵⁻²⁸⁾
Indonesia	ID	no information available
Malaysia	MY	alphabetically arranged according to English name
Philippines	PH	alphabetically arranged according to English name
Singapore	SG	no food code available
Thailand	TH	alphabetically arranged according to Thai name (a table of English name with alpha-numeric food code is available as an index)
Vietnam	VN	no information available
ASEANFOODS	AA	alphabetically arranged according to English name

5.2 Development of the ASEAN reference database

After the ASEANFOODS Workshop in 1996 the national reference databases from Philippines and Thailand were combined to become a national user database, and then sent back to the regional centre. The ASEAN reference database was then begun from selected national user databases being aware of the status of each record. Where appropriate, data from the same food items in all countries were given the status **Merge**. All the records were then arranged together to form a pool of total available data being the ASEAN food composition reference database. Sets of the data were then ready to be scrutinised to obtain a single set of nutrient information for each food item that would become a user database. During the preparation, English and scientific names, and the validity of the same set of data were consistently rechecked using descriptors and moisture content as

guidelines. The pooled data were then alphabetically listed according to the English food names. An alphanumeric system with an assigned food group code from **Table 2** and a numeric character for each food item was applied for complete food coding..

5.3 Development of the ASEAN user database

The analytical methods to be used for acceptance nutrient values are shown in **Table 4**. Scrutiny and an assessment of extreme values for the pooled accepted data sets for each nutrient in the reference database were carried out using robust statistics.⁽²²⁾ The median and the normalised interquartile range (NIQR) for each nutrient were obtained. Extreme values were identified by the use of the z-score, based on the median and the normalised interquartile range. Data with a z-score outside the range of ± 5 were not accepted. It should be noted that for a regional FCT a wider range for accepted z-scores was applied than that usually employed at the national level. (For Thai FCTs, a z-score range of ± 3 is usually used to identify extreme values). This is done since variation in nutrient composition in foods in a region could be wider than that within a country. Values for mean and standard deviation of the accepted data set were then calculated and the mean value was used as the final value for each nutrient in the food item. (However, where this was not possible for some particular food items for some nutrients, such as dietary fibre, copper, and zinc, values may be available in one of the national FCTs). The nutrient values, after correction for the average moisture content of specific food items, were presented as representative values in the ASEAN FCTs. The carbohydrate and energy content of each food item were then calculated and presented. English and scientific names and food codes were finally examined and approved. It should be noted that, for traceability, the given food code for food items should remain unchanged in the next version of the ASEAN FCTs. All data sets for foods in the same food group were divided into raw and cooked, and food derived products. They were then alphabetically arranged according to their English names. However, for the electronic food composition database, the raw, cooked and the products are presented together. Alternate names for foods, wherever available, were listed in local languages such as Bahasa Malaysia, Filipino, Thai, Vietnamese, in an additional column next to the English names. The final user data files were then constructed. Missing values in the final file were left as ‘-’ without entry of any borrowed or computed data.

5.4 Camera-ready ASEAN food composition tables

For the final step, “The concise ASEAN food composition tables” were prepared as camera-ready FCTs. They include foods arranged into 17 food groups with values for energy and 20 nutrients for each of 1,746 food items.

Table 4. Nutrients, analytical methods and INFOODS Tagnames

	Nutrients	Analytical methods to be used for acceptance of nutrient value ⁽²⁰⁾	INFOODS Tagnames ^(1,2)
1	Moisture	All methods	WATER
2	Protein	Total N x converting factor	PROCNT
3	Fat	All methods, choose higher values based on values obtained from method with acid digestion	FAT
4	Dietary fibre	Enzymatic gravimetric method	FIBTG
5A	Carbohydrate, available, by difference	Calculated by difference: CHOAVLDF = 100 – (weight in grams [water + protein + fat + dietary fibre + ash] in 100 g food)	CHOAVLDF*
5B	Total carbohydrate, by difference	CHOCDF = 100 g – (weight in grams [water + protein + fat + ash] in 100 g food) (use this calculation when FIBTG data was not available)	(CHOCDF)
6.	Ash	All methods	ASH
7	Energy	Calculated by (4 x g protein) + (9 x g fat) + (4 x g CHOAVLDF) + (2 x g dietary fibre) (not include alcohol)	ENERC*
.		If CHOAVLDF was not available, CHOCDF was used. Value was calculated as follows and put in parenthesis: Calculated by (4 x g protein)+(9 x g fat)+(4 x g CHOCDF)	(ENERC)*
8	Calcium	All methods	CA
9	Phosphorus		P
10	Iron		FE
11	Sodium		NA
12	Potassium		K
13	Copper		CU
14	Zinc		ZN
15	Vitamin B1		THIA
16	Vitamin B2		RIBF
17	Niacin		NIA
18	Vitamin C		VITC
19	Retinol		RETOL
20	β-carotene		CARTB
21	Vitamin A; retinol activity equivalent	Calculated by mcg retinol + 1/12 mcg β-carotene	VITA_RAE*

^{*}, additional INFOODS Tagnames or different calculation procedures from those used in the printed version

6. INFORMATION TO USERS OF THE ASEAN FCTs

6.1 Sampling and sample preparation

Malaysia, Philippines, Singapore, and Thailand collected some of their samples according to the ASEANFOODS sampling guideline⁽²³⁾. This broadly requires the collection of 100-300 g dry food or 500-1000 g fresh food per stall from 10 different markets/supermarkets, which are presumed to supply foods from different parts of the country. For processed foods, whenever possible, the most common brands were collected and composite samples were prepared for duplicate analysis. More information on sampling and sample preparation can be obtained from national food composition tables as listed in the references.⁽²⁴⁻²⁹⁾

6.2 INFOODS Tagnames^(1, 2)

Following the agreement with ASEANFOODS and the ad hoc technical committee for global harmonisation, the INFOODS nutrient tagnames shown in **Table 4** are used in this edition of the ASEAN FCTs. The tagnames unambiguously indicate the nutrient and, where relevant, which method of analysis was used to produce the data. If the data were derived by calculation, i.e. CHOVLDF, (CHOCDF), ENERC, (ENERC) and VITA_RAE, the tagnames indicate which formula was used for the calculation. It is recognised that the INFOODS tagnames, if utilised worldwide, would facilitate international and regional data interchange and harmonisation⁽³⁰⁾.

6.3 Food identification (Food ID)

An alphanumeric system is applied for food identification. Each food item has a unique food ID. The first two alpha characters indicate the country/region of origin. The third alpha character indicates the major food group while the numeric character represents the record number within that food group. (For example, a food item with the food ID 'AAG1' is translated as follows: 'AA' represents the ASEAN region, 'G' is the food group code for 'Finfish, shellfish, other aquatic animal and products' and '1' is the number of that food item within the group, which in this case is 'Anchovy, dried'.) This food ID should remain fixed for the purpose of traceability when the data are used in various applications such as nutrient intake assessment, or international data exchange. In the future, new food items can be added to the same food group and the names can be rearranged without changing the food

ID number for the previous food item. Therefore, the numeric character in the food ID does not necessarily indicate the position of the food item record within the food group. Each food item, although generally derived from merged data of the same food item from different countries, has one set of nutrient data. (For example, again, for food ID 'AAG1', the original food ID is 'MYG397' and 'THG138' and this indicates that the merged data is derived from the FCTs of Malaysia and Thailand.) If some food items show several data sets for nutrients, the data for the same food item from different national FCTs were significantly different and were, therefore, presented individually with different Food ID.

6.4 Food descriptors

In constructing the full name of the food within its group, efforts were made to sequence the descriptors from the general to the specific. Additional descriptors, when used, are positioned to follow the sequence: part, process, grade, maturity. Selecting the most general term was often difficult, but as with the food group definitions, deference was given to food usage rather than food origin (for example, 'Milk, cows' rather than 'Cow's milk').

Within the region there are many languages, dialects and language character sets. English was chosen as the standard language for the main food descriptor which comprises the full name and food items are alphabetically listed according to this name. Nevertheless, selection of appropriate English names with standardised spelling proved problematic (for example 'itchi', 'lychee'). Local names using the ISO 646 character set⁽³¹⁾ are shown as 'Alternate names' in the concise electronic FCTs. Standardisation of food processing descriptors is also addressed (for example, 'canned' was selected over 'tinned').

Scientific names have been included in many of the food records. Several information resources were used to verify the genera and species names. Many of the scientific names were verified using national and international taxonomic databases⁽⁵⁻¹⁹⁾. Nevertheless, there are inconsistencies and some verification problems with some of the scientific names in this publication. Scientific names are provided with corresponding ASEAN Food ID, and English names in **Appendix 1**.

6.5 Food grouping

Foods are grouped into 17 categories as shown in **Table 2**. In each group, the food items are arranged alphabetically according to their English names. The major types of foods

were allocated to a food group and are summarised in **Table 5**. It should be noted that fresh herbs and spices such as garlic, holy basil, lemon grass, bird chilli and mint, are included in Group N, 'Spices and Condiments'. Group S includes only franchised fast foods, whereas national fast foods and other cooked dishes (main dishes and dessert) are presented separately in Group T, 'Mixed dishes'. Unconventional protein foods such as edible insects, and food supplements such as chicken essence and bird's nest, are presented in Group U, 'Miscellaneous'. Users should note that some foods could be listed in several groups depending on the consumed part of a food, its maturity and its use, as shown in **Table 5**. For example: 1) pumpkin seeds and jackfruit seeds are presented in Group C 'Legumes, nuts, seeds' whereas their immature and mature fruits are presented in Group D 'vegetables' and Group E 'Fruits', respectively; 2) unripe papaya is categorised in Group D 'Vegetables' as it is used for the preparation of some main dishes, such as papaya salad, tamarind hot and sour soup, whereas its ripe fruit is presented in Group E 'Fruits'; 3) mature coconut is presented in Group K 'Fats and oils' as it is used to prepare coconut milk (which is the fat source in various kinds of Thai desserts, *curries or casseroles*), whereas its young tips, eaten as a vegetable, are placed in Group D 'Vegetables' and its juice in Group Q 'Beverages, nonalcoholic (fruit juice)'.

6.6 Notes on nutrients

Energy values are expressed in kilocalories (kcal) because ASEAN countries, except Singapore, use only this unit; future editions will include energy expressed in kilojoules (kJ) and kcal. There are 20 food components, which are divided into 3 groups: proximate composition, minerals, and vitamins. **Table 4** lists these food components and their tagnames. Units of presentation and number of decimal places are shown in **Table 1**. The nutrients for each food item are presented in a fixed format. Missing data, especially for vitamins and trace minerals, are presented as '-'. It is not our intention to supply the missing nutrients in this version. Some foods contain negligible amounts of some nutrients or none. Without the analysed values, these nutrients can be presumed to be zero and are shown in the tables as '0p'. The symbol 'T' for trace indicates that the value of the nutrient is below the measurement accuracy of the method or is judged to be nutritionally insignificant ⁽⁴⁾. Trace values for each nutrient are defined in **Table 6**.

Table 5. Classification of foods according to their uses, parts, and maturity

Food items	Group A Cereals	Group B Starchy	Group C Legume....	Group D Vegetables	Group E Fruits	Group G Fishes	Group J Milk	Group K Fats...	Group M Sugars...	Group N Spice....	Group Q Beverages	Group T Mixed dishes
Corn	kernel			Corn, baby								
Glutinous rice	raw, cooked											cooked in coconut milk
Sweet potato, Cassava		head, root, flour		tip, leaf								
Mung bean, Yard-long bean, Cowpea, Winged bean, Pea			seeds	sprout, pods								
Soybean			seed, tofu, soybean paste	sprout				soybean oil		sauce		
Jackfruit			seed	young fruit	mature fruit							
Water melon			seed		mature fruit							
Pumpkin			seed	fruit								
Tamarind			seed	young pod young leaves	mature pod							
Coconut				young tip	young coconut			grated, roasted, milk	sugar coated dried coconut		juice	
Papaya				raw fruit	ripe fruit							
Garlic, Ginger, Galanga, Coriander				leaves, flowers					clove, root, seed			
Chilli				Bell pepper						bird chilli, hot pepper		
Tiny shrimp						meat				paste		
Fish						meat				Sauce, paste		
Dairy products							milk, yoghurt, cheese	butter				

Table 6. Definition of trace values for each nutrient⁽⁴⁾

Constituent	Units	Trace = amount less than
Main nutrients: water, protein, fat, carbohydrate, dietary fiber, ash	g	0.06
Inorganic constituents: calcium, phosphorus, sodium, potassium	mg	0.6
Trace elements: iron, zinc	mg	0.06
: copper	mg	0.006
Vitamins: RAE, retinol, β-carotene	mcg	0.6
: B1, B2	mg	0.006
: niacin	mg	0.06
: C	mg	0.6

6.7 Methods of nutrient analysis in ASEAN countries

Available printed analytical methods for nutrient analysis from Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam were compiled and reviewed by Dr. Tee E Siong, Technical committee member and the national coordinator for Malaysia at the Medical Research Institute. A summary of the methods used among ASEAN member countries is presented in **Appendix 2**.

At present an ASEAN Manual of Food Analysis⁽³³⁾ which includes analytical methods used in the laboratories of ASEANFOODS members is available in the ASEANFOODS website <http://www.inmu.mahidol.ac.th/aseanfoods/publication.html>.

Crude protein values were derived from the total nitrogen content, as determined by the Kjeldahl method, multiplied by a conversion factor. A factor of 6.25 is generally used for conversion of nitrogen to protein since most proteins contain 16% nitrogen. Specific conversion factors used for certain food proteins, which differ in their percentage of nitrogen, are shown in **Table 7**.

For the crude protein value of finfish, a conversion factor of 6.25 was used. Different proportions of nonprotein nitrogen, ranging from 1 to 3 g per 100 g were found in different species of fresh fish, whereas higher values, ranging from 4-7 g per 100g, were found in processed fish, such as sundried, salted and fermented products⁽³²⁾. Actual protein values for different kinds of fish were available in the Thai FCTs. However, in the ASEAN FCTs, crud crude protein is presented as it was given in all the national FCTs except that of Thailand.

Table 7. Factors for converting nitrogen to protein

Foods	Conversion factors
Milk	6.38
Barley, oats and rye	5.83
Rice	5.95
Wheat flour, refined	5.70
Wheat, whole-kernel	5.83
Almonds	5.18
Peanuts, Brazil nuts	5.46
Soybean	5.71
Nut and seeds, others	5.30

Jones DB (1941). Factors for converting percentages of N in foods and feeds into percentage of protein, U.S. Dept, Agric, Cir.183, 22 pp.

In general, the sum of proximate composition usually falls within the range of 97-103 g per 100 g of edible portion. A margin of plus or minus 3% is considered acceptable ⁽⁴⁾, particularly when many of the components are determined independently using different samples in different laboratories. In the ASEAN FCTs, the values of available or total carbohydrate (presented in brackets) are calculated by difference as shown in **Table 4**. If any value shows a minus figure within the range of up to 3 g per 100g, the value is presented as '0p' (presumed zero). Outside this range, the value is not included. Energy or total energy (presented in brackets) calculated from protein, fat and available or total carbohydrate is then calculated.

6.8 Expression of data

The nutrient content in the concise ASEAN FCTs is expressed as the amount per 100 g of edible portion, and as the amount per 100 ml for liquid food (in the Thai data (TH-) only, for example, milk, drinking yoghurt, beverages, light sauce. Density values of the foods are also provided.

6.9 Limitations of the data set in the ASEAN FCTs

The purpose of this publication, as with all food composition tables, is to present, as much as possible, a true reflection of the usual composition of foods as available and/or consumed, based on representative samples. Ideally, all users require good quality food composition data, in terms of representativeness, high analytical quality, comprehensiveness for foods and nutrients, and particularity in food description. The analytical data included in these FCTs were compiled from 6 national databases with different quality as they were derived from various sources of available information, namely, laboratory data, published and

unpublished papers, and reports. They cannot be well assessed for data quality owing to insufficient information at the country level. In addition, differences in variety/species, maturity, agricultural condition, post-harvest handling and sources of samples among different countries invariably affect the nutrient composition of foods. Systematic scrutinisation of the compiled data was, therefore, carried out before merging.

There are 20 nutrients and energy value presented in these FCTs. Data on dietary fibre, minerals and vitamins for some food items are still missing. There are several methods to estimate the missing values of nutrients; however, the data have not yet been estimated or borrowed in this version. The analysis of these particular nutrients in some particular foods should be encouraged at the national level.

In all national FCTs, there is no food group titled 'Indigenous foods'. During the process of developing the ASEAN FCTs, some data on these foods from individual FCTs, which were specific to only one country, were assigned the status **Exclude**. They are therefore not included in this publication. Since the demand for the nutritive value of indigenous foods is increasing, they should be clearly classified and included in the national and regional FCTs of the future.

An alphanumeric system for food item coding was applied only in the FCTs of Philippines and Thailand. This made the data traceability more efficient. However, for Malaysia and Vietnam, a numeric system was used; for Singapore, no food codes were given; and for Indonesia, no information was available. This has produced some limitations on the traceability of national data.

6.10 Feedback from the users

Users who require more data on nutrients, or data on food items which are not included in this publication, and those who require greater detail on percent edible portion (only available in the Malaysian and Philippine FCTs), or additional nutrients or food items, food descriptors, sample information, analytical source, and other related aspects of the data available in these FCTs, should refer to the national food composition tables or contact the authors of national FCTs at the given addresses or contact the ASEANFOODS Regional Centre.

Comments and suggestions or corrections regarding the electronic FCD will be very much appreciated.

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Signs, symbols and abbreviations

There are some symbols and abbreviations shown in the ASEAN FCTs which relate to the status of nutrients and details of food items. The symbols and abbreviations are explained as follows:

Signs, symbols and abbreviations	Explanation
Tagname <DEN>	Density. There is no information on density in the printed ASEAN FCTs 2000. It is added in this electronic FCD for some liquid foods, i.e. milk, drinking yoghurt, beverages, and light sauces.
Value with () under Tagname <FAT>	Fat content derived from direct extraction without acid digestion <FATCE>. The value belongs to the Philippine database. It was included in the ASEAN FCTs in a bracket only when there is no value of <FAT>.
Tagname <VITA_RAE> (additional INFOODS Tagname in this version)	Retinol activity equivalent (RAE) = RETOL + CARTB/12 In the printed ASEAN FCTs 2000, <VITA> Retinol Equivalent (RE) was used (VITA, RE = RETOL + CARTB/6)
0p	p, when associated with a zero indicates ' <i>presumed zero</i> '; it is used for components not analysed, but naturally assumed to contain little or none of that nutrient.
w/	With
w/o	Without
bbq	Barbeque
prep	Preparation / prepared
T	Trace, see detail in Table 6
-	Missing value, no chemical analysis

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The concise ASEAN Food Composition Tables

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
A	Cereals and Products																									
AAA19	THA53	Bread, wholewheat	ขนมปังไข่สาลี(TH)	-	273	33.5	11.9	5.4	41.3	5.9	2.0	83	-	415	137	1.9	-	-	0	0	0	0.21	0.23	2.60	-	
AAA29	THA17, PHA103	Corn flakes	แม่น้ำโพดอบกรอบ(TH)	-	373	2.6	7.3	0.5	83.1	3.4	3.1	42	46	833	-	9.3	-	-	0	0	0	1.86	7.88	21.30	183	
AAA29	THA17, PHA103	Corn flakes	แม่น้ำโพดอบกรอบ(TH)	-	373	2.6	7.3	0.5	83.1	3.4	3.1	42	46	833	-	9.3	-	-	0	0	0	1.86	7.88	21.30	183	
AAA22	THA18	Corn flakes, sugar coated	แม่น้ำโพดอบกรอบ, เคลือบน้ำตาล(TH)	-	379	2.5	4.0	0.4	89.1	1.6	2.4	-	-	495	-	-	-	-	-	-	-	-	-	-	-	
AAA22	THA18	Corn flakes, sugar coated	แม่น้ำโพดอบกรอบ, เคลือบน้ำตาล(TH)	-	379	2.5	4.0	0.4	89.1	1.6	2.4	-	-	495	-	-	-	-	-	-	-	-	-	-	-	
AAA38	THA15	Corn, whole-kernel, raw	ข้าวโพด, ลูก, ตับ(TH)	(111)	73.4	3.4	1.4	(21.1)	-	0.7	10	11			1.7	-	-	0	-	-	0.10	0.18	1.10	13		
AAA37	PHA005, THA16	Corn, yellow, on the cob, boiled	Mais sa busal, dilaw, niaga(TH), ข้าวโพด, บด(TH)	-	142	66.9	3.8	4.3	19.4	5.0	0.6	11	70	-	-	2.4	-	-	0	299	25	0.09	0.08	1.20	3	
AAA42	MYA58, PHA152	Macaroni, dried	Makaron(MY)	-	344	11.9	12.1	0.6	70.0	4.9	0.5	26	125	5	41	2.2	-	-	22	0	22	0.29	0.13	2.20	0	
AAA47	MYA28, PHA136	Noodle, rice, dried	Mee-hoon(MY), Fideos(PH)	-	(353)	11.3	10.5	0.0	(77.7)	-	0.5	13	66	7	16	1.3	-	-	0	0	0	0.16	0.06	1.40	0	
AAA48	THA8	Noodle, rice, fermented, fresh	ขนมจีน(TH)	-	(106)	73.8	1.4	0.3	(24.3)	-	0.2	14	10	47	10	-	-	-	0	0	0	0.60	-	-	-	
AAA78	THA40	Noodle, rice, vermicelli, dried	เส้นเมี่ย, օบทาก, แม้ห์(TH)	-	374	6.5	6.1	0.7	85.1	1.3	0.3	9	49	13	22	2.7	-	-	0	0	0	-	-	-	-	
AAA50	THA4, MYA26	Noodle, rice, fresh, kuih-teow	Kuih-teow(MY), กวยเตี๊ยว 桂林(ไทย)	-	150	63.5	3.0	0.9	32.4	0.1	0.1	5	26	54	50	2.7	-	-	0	0	0	0.03	0.05	0.70	0	
AAA79	THA42	Noodle, wheat, dried, longevity (Mee-sua)	ฟู่ชื้า (เม็ดสาก 100%)(TH)	-	311	9.9	12.4	0.9	62.3	2.1	12.4	29	-	3067	-	1.7	-	-	-	-	-	-	-	-	-	
AAA53	THA27	Noodle, wheat, fresh	ขนมมี, ลอก(TH)	-	(299)	27.2	12.7	3.3	(54.5)	-	2.3	19	90	613	163	2.0	-	-	-	-	-	0.01	0.04	-	-	
AAA54	PHA142, THA29	Noodle, wheat, instant, w/ flavour (different flavours)	Mami, inst. may pampalasa(PH), แม้มีกลิ่นต่างๆ, พะยอม เจลลี่ปู, สดล่า(ไทย)	-	448	4.3	10.5	20.4	53.5	4.1	7.2	27	120	1975	130	0.9	-	-	0	8	1	0.22	0.07	1.50	0	
AAA61	MYA24, VNA8	Rice, flour, glutinous, white	Tepung putul(MY), Bột gạo nếp(VN)	-	360	10.9	7.6	1.3	79.1	0.6	0.5	17	60	16	32	1.1	-	-	22	0	22	0.04	0.08	2.50	0	
AAA59	MYA22, THA24	Rice, glutinous, black, polished, raw	Pulu hitam(MY), ข้าวเหนียวดำ(TH)	-	347	12.7	8.5	2.6	69.9	4.9	1.4	21	215	2	82	3.5	-	-	0	36	3	0.39	0.10	2.00	0	
AAA60	PHA012, THA22, VNA1, MYA23	Rice, glutinous, white, polished, raw	Pulu putih(MY), Bigas, malagkit(PH), ข้าวเหนียวขาว(TH), Gạo nếp cái(VN)	-	354	12.6	7.3	1.5	77.4	0.6	0.6	20	81	6	35	1.8	-	-	0	0	0	0.13	0.02	1.40	0	
AAA69	PHA017, THA19	Rice, red, undermilled, raw	Bigas, mapulap(PH), ข้าว胚米(TH)	-	356	11.2	6.8	2.7	74.2	4.0	1.1	14	134	-	-	0.8	-	-	0	0	0	0.35	0.05	3.40	0	
AAA63	PHA020, THA11, MYA14	Rice, white, polished, cooked	Nasi(MY), Bigas, maput, siainaing(PH), ข้าวเจ้า, สาร(TH)	-	129	67.3	2.2	0.2	29.4	0.6	0.3	7	27	20	47	0.4	-	-	0	0	0	0.02	0.02	0.70	0	
AAA65	PHA019, THA10, MYA17, VNA2	Rice, white, polished, raw	Beras kilang(MY), Bigas, maput(TH), Gạo lứt IR8(VN)	-	354	11.7	6.8	0.7	79.7	0.6	0.5	19	105	27	71	1.2	0.10	0.5	0	0	0	0.10	0.04	2.60	0	
AAA64	THA12	Rice, white, polished, raw, jasmine variety	ข้าวเจ้า, ผัดข้าวหอมมะลิ	-	353	11.9	6.1	0.7	80.2	0.8	0.3	5	65	34	113	0.9	0.14	0.1	0	0	0	0	0.12	0.02	1.50	0
AAA67	PHA014, THA9, MYA15	Rice, whole-grain, milled by machine, raw	Bigas, undermilled(PH), ข้าวกล้อง(TH)	-	353	11.9	7.9	2.1	74.1	2.8	1.2	32	244	33	193	2.2	0.10	0.5	0	0	0	0.33	0.08	5.50	0	
AAA62	MYA16, VNA3	Rice, parboiled, raw	Gạo đục(VN)	-	355	11.9	6.9	1.2	78.8	0.5	0.7	21	126	9	45	1.6	-	-	0	0	0	0.19	0.11	3.30	0	
AAA74	THA34, PHA201, MYA33, VNA21	Wheat, flour, all purpose	Tepung gandum(MY), Arina, trigo, all-purpose(PH), แม็งลาก(TH), Bột mỳ(VN)	-	354	12.5	11.6	1.3	73.7	0.3	0.6	68	161	4	116	2.8	-	-	0	0	0	0.15	0.10	3.60	0	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF			
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg			
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
B Starchy roots, tubers and products																										
AAB1	VNB40,PHB025	Arrowroot, flour	Starch, uraro(PH), Bột dong lọc(VN)	-	347	13.3	0.4	(0.5)	85.1	0.4	0.3	35	21	-	-	4.5	-	-	0	20	2	T	0.01	T	0	
AAB6	PHB001,VNB44, THB12,MYB72	Cassava, tuber, fresh, raw	Ubi Kayu(MY), Kamoteng kahoy/Balinghoy(PH), บันเดะปะหลัง(TH), Củ sắn(VN)	-	146	61.9	0.8	0.2	34.5	1.7	0.9	32	37	2	198	1.0	-	-	0	5	0	0.05	0.12	0.50	45	
AAB8	IDB4,MYB65	Coleus, tuber, raw	Ubi kembili(MY)	-	(96)	75.9	1.4	0.5	(21.4)	-	0.8	26	34	9	269	0.7	0.20	0.3	0	0	0	0	0.11	0.04	150	7
AAB10	PHB007,THB11, MYB66	Potato, fresh, raw	Ubi kentang(MY), Patatas(PH), บันเดะห์(TH)	-	76	79.4	2.2	0.1	15.7	1.6	1.0	24	58	30	176	1.4	-	-	0	0	0	0	0.12	0.07	1.30	30
AAB12	IDB11,MYB68	Sago, flour	Sagu(MY)	-	(349)	12.8	0.6	0.2	(86.3)	-	0.1	11	12	11	4	0.8	0.10	0.1	0	0	0	0	0.00	0.00	0.10	0
AAB14	PHB009,IDB9, THB10	Sweet potato, purple, fresh, raw	Kamote, murado(PH), บันเดะ, สีม่วง(TH)	-	(103)	73.6	0.7	0.3	(24.4)	-	1.0	26	43	1	1	0.9	T	0.2	0	24	2	0.08	0.04	0.80	23	
AAB16	PHB011,IDB8, MYB70	Sweet potato, white, fresh, raw	Ubi keledek(MY), Kamote, putih(PH)	-	106	71.9	0.6	0.5	23.5	2.4	1.1	66	31	3	5	0.7	0.10	0.2	0	13	-	0.16	0.07	0.60	36	
AAB18	IDB7,THB9	Sweet potato, yellow, fresh, raw	บันเดะเหลือง(TH)	-	94	73.9	0.6	0.3	20.3	4.0	0.9	64	43	3	1	0.4	0.10	0.2	0	756	63	0.08	0.05	0.60	27	
AAB20	PHB027,THB5, MYB73	Tapioca, flour	Tepung ubi kayu(MY), Arina, kamoteng kahoy(PH), บันเดะน้ำขี้ม้า(TH)	-	(355)	11.0	0.8	0.1	(87.6)	-	0.5	64	36	1	7	1.0	-	-	0	0	0	0.03	0.02	0.40	0	
AAB21	PHB015, MYB75, THB7,VNB43	Taro, fresh, raw	Ubi keladi Cina(MY), Gabi(PH), บีกาน(TH), Khoai mì(VN)	-	117	68.8	1.7	0.1	26.1	2.4	0.9	49	46	11	252	0.8	0.20	0.8	0	15	1	0.11	0.07	1.00	6	
AAB22	THB1	Water chestnut, Kra-jub, boiled	กรากจับ, ต้ม(TH)	-	(135)	64.8	3.6	0.1	(30.0)	-	1.5	23	89	-	-	4.6	-	-	0	-	-	0.27	0.04	0.00	9	
AAB26	PHB022,VNB42	Yam, spiny, fresh, raw	Tugi(PH), Khoai mòn(VN)	-	118	69.1	1.3	0.2	27.2	1.2	1.0	68	42	-	-	1.2	-	-	0	0	0	0.08	0.03	0.30	9	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOALDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
C	Legumes, nuts, seeds and products				-																					
AAC3	THC39	Bambara groundnut, boiled	บัมบาร่า, ต้ม(TH)	-	(160)	61.7	7.1	2.8	(26.5)	-	1.9	22	127	-	-	-	-	-	0	-	-	0.10	0.18	1.60	-	
AAC2	THC38	Bambara groundnut, fresh, raw	บัมบาร่า, ลับ(TH)	-	(180)	58.1	8.4	3.8	(28.1)	-	1.6	20	143	-	-	-	-	-	0	-	-	-	0.37	2.90	4	
AAC4	IDC15,VNC58, THC6	Bean, black, dried, raw	ถั่วดำ, แมลลิฟอร์(TH), ถั่วเด็น(VN)	-	305	12.1	21.3	1.9	40.0	21.3	3.4	66	362	7	4	9.3	0.90	3.5	0	-	-	0.55	0.19	2.10	3	
AAC6	THC26,MYC81	Bean, hyacinth, dried, raw	ถั่วไฮแอคินท์, แมลลิฟอร์(MY)	-	(345)	11.2	25.7	0.8	(58.8)	-	3.5	66	372	43	407	6.5	-	-	0	202	17	0.46	0.12	3.00	0	
AAC10	THC10	Broad bean, seed, dried, raw	ถั่วบอดี้, แมลลิฟอร์(TH)	-	(349)	11.9	22.1	1.5	(61.8)	-	2.7	90	344	-	1762	6.3	-	-	0	-	-	-	-	-	-	
AAC11	THC36	Butterfly pea, seed, dried, dehulled, raw	ถั่วหายใจ, แมลลิฟอร์, แบบเปลือก(TH)	-	(353)	10.9	26.6	2.2	(56.6)	-	3.7	-	43	-	-	6.2	-	-	0	-	-	-	1.36	4.70	-	
AAC117	THC74	Cashew nut, baked	มะม่วงหิมพานต์, แมลลิฟอร์, อบ(TH)	-	557	2.2	23.4	41.8	13.8	16.1	2.7	22	473	-	-	-	-	-	0	-	-	0.86	0.19	1.10	1	
AAC16	THC72	Cashew nut, fresh, raw	มะม่วงหิมพานต์, แมลลิฟอร์(TH)	-	299	50.5	11.6	23.0	9.2	4.5	1.2	11	223	-	-	0.1	-	-	0	-	-	0.36	0.20	0.90	1	
AAC18	PHC003, MYC112	Chestnut, roasted	Buah berangan/Kao-lak(MY), Kastanyas, binusas(PH)	-	224	40.4	4.7	3.6	36.7	12.9	1.7	28	78	5	321	1.5	-	-	0	0	-	0.20	0.09	1.30	14	
AAC19	PHC004,MYC76	Chickpea, dried, raw	Kacang kuda(MY), Garbanzos, tuyó(PH)	-	(374)	10.1	19.8	5.1	(62.1)	-	2.9	137	309	7	835	5.2	-	-	0	10	1	0.31	0.16	1.30	1	
AAC17	THC5	Cowpea, catjang, seed, dried, raw	ถั่วขาว, แมลลิฟอร์(TH)	-	(352)	10.9	22.5	2.3	(60.3)	-	4.0	306	408	-	-	7.5	-	-	0	-	-	0.66	0.11	2.40	-	
AAC27	THC12	Cowpea, seed, mixed colours, dried, raw	ถั่วพุ่ม, แมลลิฟอร์, สีต่างๆ (TH)	-	(357)	8.7	23.8	2.0	(61.0)	-	4.5	66	447	15	8	10.0	-	-	0	-	-	1.01	0.38	3.00	-	
AAC118	THC65	Jackfruit, seed, raw	เมล็ดชูบู, ตับ(TH)	-	(153)	60.7	5.5	0.2	(32.2)	-	1.4	-	105	-	-	2.9	-	-	0	-	-	1.74	-	3.10	24	
AAC47	THC76	Job's tears, seed, whole	อกุดือ, ตับ(TH)	-	359	10.6	14.6	2.6	67.6	3.6	1.0	19	148	-	-	4.8	-	-	-	-	-	0.34	0.09	2.10	17	
AAC48	PHC020,THC18	Kidney bean, red, dried, raw	Abisutuwela buto, tulip, tuyó(PH), ถั่วแดง, แมลลิฟอร์(TH)	-	299	11.6	19.6	1.9	38.8	24.3	3.8	109	388	-	-	6.7	-	-	0	T	-	0.35	0.77	2.40	0	
AAC53	THC77,PHA134	Mungbean noodle, dried, raw	Sotanghon(PH), จันเต็ม, ถั่วเขียว 100%(TH)	-	345	11.5	0.2	0.2	83.2	4.8	0.1	22	10	7	-	1.0	-	-	0	0	0	0.01	0.01	0.10	0	
AAC61	THC78	Mungbean noodle, instant, w/ seasonings, mixed flavours	ก้นผึ้นผึ้นเผาหรือร้อน, หวานน้ำตกปรุง, รสชาติ(TH)	-	353	7.3	1.8	6.9	70.1	1.5	12.4	41	-	3265	70	1.6	-	-	0	0	0	0.05	0.01	-	0	
AAC55	PHC027,THC15, MYC83,VNC71	Mungbean, seed, green, dried, raw	Kacang hijau(MY), Munggo buto, berde, tuyó(PH), ถั่วเขียว, แมลลิฟอร์(TH), ถั่วเขียว(สีเขียว)(VN)	-	301	10.6	23.2	1.9	34.7	26.1	3.5	97	349	44	863	5.9	1.47	2.7	0	165	14	0.73	0.26	2.50	2	
AAC41	MYC84,PHC029	Mungbean, seed, red, dried, raw	Kacang merah(MY), Munggo buto, pula, tuyó(PH)	-	(343)	11.9	18.7	0.7	(65.5)	-	3.2	86	317	15	739	6.6	-	-	0	8	1	0.53	0.30	2.20	0	
AAC58	THC7,PHC031	Mungbean, seed, splited, dried, dehulled, raw (Golden gram)	Munggo buto, dilaw, tuyó(PH), ถั่วเหลือง(TH)	-	329	8.7	24.5	1.2	47.9	14.2	3.5	206	328	23	279	4.3	-	-	0	98	8	0.44	0.38	1.90	0	
AAC62	THC34	Pea, seed, dried, raw	ถั่วลันเตา, แมลลิฟอร์(TH)	-	(341)	12.2	23.6	1.0	(59.4)	-	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-		
AAC63	THC37,MYC124	Peanut/Groundnut, seed, w/ skin, dried, raw	Kacang tanah tanpa kulit(VN), ถั่วสีทอง, แมลลิฟอร์(TH)	-	543	6.4	24.9	43.0	5.2	18.0	2.5	69	348	32	483	5.9	1.60	2.0	0	0	0	0	1.31	0.28	14.70	0
AAC121	THC95	Pumpkin, seed, w/o shell, roasted	เมล็ดพีกาออง, พันธุ์ค้างคาว, แมลลิฟอร์(อังกฤษ, ค้างคาว)(TH)	-	594	5.4	25.6	49.1	9.7	5.2	5.0	35	789	24	469	6.0	2.00	8.0	0	-	-	-	-	-	-	
AAC123	THC96	Pumpkin, seed, w/o shell, baked, salted	เมล็ดพีกาออง, พันธุ์ค้างคาว, แมลลิฟอร์(อังกฤษ, คากะปีโภค, ค้างคาว)(TH)	-	555	8.8	22.9	45.7	10.0	5.9	6.7	40	834	1160	389	7.0	2.00	7.0	0	-	-	-	-	-	-	
AAC122	THC67	Pumpkin, seed, w/o shell, fresh, raw	เมล็ดพีกาออง, พันธุ์ค้างคาว, แมลลิฟอร์(อังกฤษ, คากะปีโภค, สด)(TH)	-	384	37.3	16.8	32.5	2.8	6.7	3.9	24	606	16	356	5.0	2.00	5.0	0	-	-	-	-	-	-	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
C	Legumes, nuts, seeds and products (continued)				-	(345)	10.5	18.1	1.2	(65.4)	-	4.8	230	209	9	8	2.1	-	-	0	-	-	0.50	0.50	3.60	-
AAC71	THC29	Rice bean, seed, dried, raw	ถั่วเล็บมือนาง, เมล็ดแห้ง(TH)	-	(345)	10.5	18.1	1.2	(65.4)	-	4.8	230	209	9	8	2.1	-	-	0	-	-	0.50	0.50	3.60	-	
AAC72	THC16	Rice bean, seed, red, dried, raw	ถั่วแดง, เมล็ดแห้ง(TH)	-	300	9.7	22.5	2.1	33.9	27.8	4.0	68	370	16	1122	6.4	1.57	2.4	0	-	-	1.09	0.18	2.00	7	
AAC73	THC3	Sesame, seed, black, dried, raw	ถั่วดำ(TH)	-	555	4.5	19.4	46.0	6.3	19.2	4.6	913	555	69	401	15.9	2.20	3.2	0	-	-	0.57	0.61	5.30	-	
AAC74	PHC043,THC1	Sesame, seed, white, dried, raw	Linga, tuyō(PH), งาขาว (TH)	-	602	3.6	22.8	52.0	0p	21.6	4.6	952	543	48	457	9.5	2.30	4.0	0	0	0	0.67	0.75	5.30	0	
AAC90	THC58	Soybean cheese, fermented (Tau-hoo-yeo), raw	ถั่วเหลือง(TH)	-	(124)	58.0	10.6	4.4	(10.4)	-	16.6	88	137	3701	260	4.7	-	-	0	-	-	0.03	0.14	1.20	-	
AAC125	THC48	Soybean curd, white, hard	ถั่วหัวขาว, แข็ง(TH)	-	(118)	76.7	12.4	5.9	(3.7)	-	1.3	42	157	115	156	3.7	-	-	0	0	0	0.08	0.04	2.60	-	
AAC131	THC50	Soybean curd, white, soft (Tau-hoo kao)	ถั่วหัวขาว, อ่อน, หลอด(TH)	-	(60)	88.3	5.5	3.4	(1.8)	-	1.0	37	62	35	248	1.3	-	-	0	0	0	0.06	0.04	0.90	-	
AAC92	THC51	Soybean curd, white, soft, packed in pouch	ถั่วหัวขาว, อ่อน, หลอด(TH)	-	(41)	92.1	3.8	2.2	(1.4)	-	0.5	19	49	-	-	1.0	-	-	0	0	0	-	-	-	-	
AAC93	THC64	Soybean flour, defatted	ผงถั่วน้ำเงี้ยว, ชนิดสักดิ์ ไม่มีกลิ่น(TH)	-	(362)	4.5	48.9	1.1	(39.2)	-	6.3	-	-	-	-	-	-	-	0	0	0	-	-	-	-	
AAC126	THC63	Soybean flour, full-fat	ผงถั่วน้ำเงี้ยว, ชนิดไขมันเต็ม (TH)	-	449	6.5	36.2	21.4	24.9	6.0	5.0	262	571	54	-	3.9	-	-	0	0	0	-	-	-	-	
AAC127	THC44	Soybean paste, black	ถั่วเขียวดำ(TH)	-	(89)	60.8	8.2	3.4	(6.3)	-	21.3	98	81	2800	250	6.8	-	-	0	0	0	-	-	-	-	
AAC95	MYC89,THC43	Soybean paste, white	Tau-ceo(MY), เถ้าเจียวขาว (TH)	-	(134)	56.0	10.2	4.6	(13.0)	-	16.2	111	136	2171	254	4.9	-	-	0	0	0	0.12	0.16	1.10	0	
AAC85	PHC045,MYC87	Soybean, seed, black, dried, raw	Kacang soya hitam(MY), Utaw buto, itim, tuyō(PH)	-	378	9.6	34.4	13.7	21.1	16.1	5.1	223	377	37	398	6.2	-	-	0	58	5	0.51	0.23	2.70	8	
AAC87	PHC047,THC33, MYC88	Soybean, seed, yellow, dried, raw	Kacang soya putih(MY), Utaw buto, dilaw, tuyō(PH), ถั่วเหลือง, เมล็ดแห้ง(TH)	-	389	8.7	34.6	17.8	11.6	22.0	5.3	260	534	32	994	6.6	1.42	2.9	0	60	5	0.77	0.30	2.00	5	
AAC99	PHD214,THC32	Soybean, young seed, boiled	Utaw buto, nilaga(PH), ถั่ว, ต้ม(TH)	-	(152)	65.0	15.1	4.1	(13.6)	-	2.2	167	253	-	-	1.3	-	-	0	89	7	0.29	0.18	1.80	25	
AAC101	PHD213,THC31	Soybean, young seed, fresh, raw	Utaw buto, sariwa(PH), ถั่วเขียว, ลูก(TH)	-	(162)	65.0	14.0	6.9	(10.9)	-	3.2	177	217	84	286	2.6	-	-	0	95	8	0.47	0.20	1.60	27	
AAC130	THC82	Sugar pea, coated, baked	ถั่วสีเดียว, เคลือบ, อบกรอบ (TH)	-	457	1.7	17.9	18.9	49.9	7.7	3.9	41	-	435	-	4.3	-	-	0p	0	0	0.85	0.02	-	-	
AAC102	THC9	Sweet pea, dried, dehulled, raw	ถั่วงาหวาน, เมล็ดแห้ง, ปอกเปลือก(TH)	-	(352)	10.2	22.1	1.4	(62.7)	-	3.6	227	28	-	-	4.5	-	-	0	-	-	-	0.56	3.90	-	
AAC103	THC71	Tamarind, seed, roasted	เมล็ดมะขาม, ต้ม(TH)	-	(399)	9.6	14.4	7.5	(68.5)	-	-	140	289	-	-	3.7	-	-	0	-	-	0.09	0.69	0.20	-	
AAC108	THC13	Winged bean, seed, dried, raw	ถั่วพญานาค, เมล็ดแห้ง(TH)	-	(424)	9.2	34.1	15.5	(37.0)	-	4.2	564	636	-	-	9.6	-	-	0	-	-	-	-	-	-	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins						
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOACDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF		
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
D	Vegetables and products			-	59	82.4	10.5	0.5	1.3	3.9	1.4	41	171	42	438	2.5	0.06	0.5	0	1297	108	0.37	0.48	1.90	47
AAD36	THD29	Acacia pennata (Cha-om), leaf	ชะอม(TH)	-	(36)	88.5	3.3	0.3	(5.0)	-	2.9	221	77	-	-	2.4	-	-	0	-	0.02	0.27	0.90	21	
AAD152	THD80	Amaranth	สาหร่ายใบใหญ่(TH)	-	27	88.9	3.6	0.5	0.2	3.8	3.0	190	67	44	604	3.1	-	-	0	3059	255	0.03	0.27	1.10	49
AAD2	THD79	Amaranth, spineless, fresh, raw	สาหร่ายเมล็ด(TH)	-	20	93.0	1.7	0.0	2.5	1.7	1.1	18	30	380	79	0.3	-	-	0	0	0	0.05	0.06	0.40	10
AAD3	MYD130,PHD274	Asparagus, canned	Asparagus dalam tin(MY)	-	21	93.2	2.6	0.4	0.3	2.8	0.7	12	52	9	191	0.7	0.11	0.5	0	83	7	0.10	0.16	0.80	22
AAD4	THD153, MYD129	Asparagus, fresh, raw	Asparagus(MY), สาหร่ายเขียว(TH)	-	12	95.7	0.9	0.2	0.5	2.4	0.3	34	16	9	-	0.6	-	-	0	15	1	0.01	0.06	0.20	T
AAD6	THD150,PHD275	Bamboo shoot, canned, drained	Labong, de late(PH), สาหร่ายไผ่, ใบไผ่, บรรพตกระเพรา, ผักไผ่(TH)	-	23	91.2	2.0	0.4	0p	5.7	0.9	24	40	23	112	1.0	-	-	0	13	1	0.07	0.09	0.60	5
AAD8	THD156,MYD131 PHD010,VND132	Bamboo shoot, spring variety, fresh, raw	Rebung(MY), Labong(PH), สาหร่ายไผ่(TH), Măng tre(VN)	-	32	90.2	1.6	0.7	3.1	3.2	1.2	50	36	3	524	1.1	0.09	0.3	0	201	17	0.02	0.03	0.80	10
AAD10	MYD204, PHD013,VND126,T HD162	Banana, flower and bud, fresh, raw	Jantung pisang(MY), Puso, saging, butuan(PH), หัวกล้วย(TH), Hoa chuối(VN)	-	(13)	95.9	0.7	0.1	(2.4)	-	0.9	21	34	-	-	0.2	-	-	0	4	0	0.01	0.02	0.30	0
AAD13	THD160,PHD012	Banana, shoot and young stem, fresh, raw	Ubod, saging(PH), หลักกล้วย(TH)	-	35	90.6	2.1	0.2	5.9	0.5	0.7	61	45	68	113	1.0	-	-	0	698	58	0.10	0.12	0.80	19
AAD15	VND112,THD38,M YD135, PHD206	Bean, mixed variety, pod, fresh, raw	Kacang buncis(MY), Abisuwelas bunga, berde(PH), ถั่วเขียว(TH), Đậu cỏ ve(VN)	-	37	88.7	1.6	0.1	6.2	2.4	1.0	54	47	26	369	1.1	-	-	0	0	0	0.03	0.05	0.30	8
AAD16	MYD137,PHD016	Beetroot, fresh, raw	Akar bit(MY), Remolacha(PH)	-	23	93.3	1.1	0.3	3.2	1.7	0.4	9	24	13	126	1.0	0.08	0.2	0	190	16	0.07	0.04	0.50	97
AAD19	VND139,THD103 MYD196,PHD170	Bell pepper, green, capsicum, fresh, raw	Lada hijau besar(MY), Sili, sweet bell, bilog, berde(PH), พริกเขียว/พริกหวาน(TH), ớt xanh (VN)	-	26	91.2	3.4	0.1	1.4	2.9	1.0	34	57	22	261	0.9	0.04	0.5	0	283	24	0.08	0.18	1.20	107
AAD22	THD50,MYD139	Broccoli, fresh, raw	Brokoli(MY), บร็อกโคลี่(TH)	-	18	94.0	1.7	0.2	1.5	1.7	0.9	60	34	22	201	1.6	0.10	0.2	0	1463	122	0.07	0.12	0.60	33
AAD23	IDD66,MYD142, THD69,THD71, VND99,PHD160	Cabbage, Chinese, fresh, raw	Pak-coy(MY), ผักกาดขาว/ผักกาดหอมในเมือง(TH), Cải thảo/cải trắng)(VN)	-	34	86.2	1.4	0.3	5.4	2.1	4.6	59	25	1512	1455	1.6	-	-	0	0	0	0.00	0.02	0.00	10
AAD24	MYD143, VND178	Cabbage, Chinese, salted	Hum-coy(MY), Dưa cải bếp(VN)	-	16	94.7	1.7	0.4	0.6	1.7	0.9	130	24	4	290	1.5	-	-	0	829	69	0.06	0.07	0.70	36
AAD25	MYD141,PHD054	Cabbage, Chinese, wongbok, fresh, raw	Wong-nga-paak(MY), Pechay Baguio(PH)	-	(28)	93.2	1.7	0.2	(4.9)	2.1	-	-	-	-	-	-	-	0	1322	110	-	-	-	-	
AAD26	THD65	Cabbage, Chinese/ Flowering white cabbage, raw	ผักกาดขาว/ผักกาดหัว(TH)	-	20	93.3	1.9	0.2	1.5	2.1	1.0	115	37	110	227	1.3	0.04	0.5	0	2306	192	0.05	0.24	0.60	51
AAD27	IDD57,VND93, THD10,MYD144, PHD035	Cabbage, common, fresh, raw	Kobis(MY), Repolyo, berde(PH), กะหล่ำปลี(TH), Cải bắp(VN)	-	35	88.4	1.5	0.2	4.9	4.0	1.0	51	30	29	243	1.0	0.30	0.3	0	47	4	0.06	0.07	0.30	32
AAD28	VND90,THD27, MYD145,PHD039	Carrot, raw	Lobak merah(MY), แครอท(TH), Cà rốt (คุ้ด, ดอง, vàng)(VN)	-	35	92.2	1.5	0.3	3.2	1.9	0.9	80	43	98	237	0.7	0.07	0.2	0	4346	362	0.06	0.07	0.60	12

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg		
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
D	Vegetables and products (continued)			-	(48)	87.4	3.1	0.2	(8.5)	-	0.8	56	36	8	384	2.4	-	-	0	2568	214	0.01	0.64	0.60	72	
AAD29	MYD146,PHD042	Cashew nut, leaf and top, raw	Pucuk janggus/gajus(MY), Kasuy dahon, nilaga(PH)	-	(48)	87.4	3.1	0.2	(8.5)	-	0.8	56	36	8	384	2.4	-	-	0	2568	214	0.01	0.64	0.60	72	
AAD30	VND202,THD137 MYD224,PHD043	Cassava, young leaf and top, raw	Pucuk ubi kayu(MY), Kamoteng kahoy/Balinghoi dahon(PH), มัน ผึ้ง(TH), La sán tưởi(VN)	-	65	81.1	6.3	0.7	6.1	4.6	1.2	158	51	20	28	1.6	-	-	0	3882	324	0.19	0.45	1.90	211	
AAD31	THD20	Cassia, flower, raw	บัวลี๊ฟ, คลอก(TH)	-	(102)	73.9	4.2	0.5	(20.1)	-	1.3	19	25	-	-	1.5	-	-	0	-	-	-	0.11	0.54	1.80	441
AAD32	THD21	Cassia, leaf, raw	บัวลี๊ฟ, ใบ(TH)	-	104	70.2	6.3	0.7	15.1	5.8	1.9	125	129	39	521	2.4	-	-	0	240	20	0.42	0.63	3.20	56	
AAD33	THD22	Cassia, tender tip, raw	บัวลี๊ฟ, ยอด(TH)	-	(65)	83.9	4.5	0.9	(9.7)	-	1.0	51	79	45	386	0.5	-	-	0	-	-	-	-	0.36	2.60	2
AAD34	MYD147,THD9,VN D167,PHD045	Cauliflower, inflorescence, raw	Bunga kobis(MY), ผักหัวข้าว(TH), Súp lót(VN)	-	30	90.9	2.6	0.1	3.9	1.7	0.8	28	48	51	205	0.8	-	-	0	26	2	0.10	0.10	0.70	68	
AAD35	VND101,THD86,M YD149,PHD047	Celery, leaf and petiole, raw	Daun seladeri(MY), Baguio celery dahon at tangkay(PH), ผักตีนปูย(TH), Cần tây(VN)	-	25	91.1	1.3	0.2	3.2	2.6	1.6	164	35	82	329	2.5	0.10	0.5	0	80	7	0.03	0.09	0.50	21	
AAD37	VND168,PHD050	Chayote, fruit, raw	Sayote bunga(PH), Su su(VN)	-	(21)	94.4	0.6	(0.1)	(4.5)	-	0.4	24	10	-	-	0.4	-	-	0	35	3	0.02	0.02	0.40	10	
AAD35	THD75	Chinese radish, leaf, sweet pickled	พืชผักก่อ, ดอง, หวาน(TH)	-	(55)	72.5	1.3	0.2	(12)	-	14.0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	
AAD40	VND96,THD33, MYD156,PHD066	Chrysanthemum, leaf, raw	Tong-ho(MY), Tango dahon(PH), ผักกาด, ใบ(TH), Cải cúc(VN)	-	18	93.8	2.2	0.4	0.3	2.0	1.3	76	33	63	452	2.1	0.10	0.5	0	2915	243	0.06	0.16	0.50	20	
AAD41	VND153, MYD157,PHD060 THD87	Coriander, leaf, raw	Daun ketumbar / Yuen-sai(MY), Unsuy dahon(PH), ผักเบ蒂(TH), Rau mùi(VN)	-	27	90.3	2.5	0.2	2.2	3.0	1.8	127	46	23	544	2.6	0.10	0.2	0	2587	216	0.10	0.39	1.00	127	
AAD42	THD16	Corn, baby	ข้าวโพดอ่อน(TH)	-	27	91.7	1.9	0.2	3.6	1.5	1.1	9	49	279	182	0.4	0.08	0.6	0	-	-	-	0.09	0.13	0.70	24
AAD43	THD17	Corn, baby, in brine, canned, drained	ข้าวโพดอ่อน, ใบนาเกลือ, บรรจุกระป๋อง, น้ำเค็ม(TH)	-	24	92.2	1.6	0.4	2.4	2.4	1.0	7	-	254	-	-	-	-	0	-	-	-	-	-	-	
AAD44	VND113,THD45, PHD063	Cowpea, mixed variety, pod, fresh, raw	Paayap bunga(PH), ถั่วหมี่ ภักดี(TH), Đậu đũa(VN)	-	45	86.1	4.1	0.2	4.8	4.0	0.8	69	40	28	93	1.2	-	-	0	346	29	0.18	0.16	1.60	29	
AAD46	THD37,VND110,VN D111, MYD158,PHD069	Cucumber, long	Tamun(MY), Pipino(PH), ผักชูน(VN), Dưa chuột/ผัก gang(VN)	-	16	95.4	0.6	0.1	2.8	0.7	0.4	18	22	14	118	0.4	-	-	0	27	2	0.03	0.04	0.20	8	
AAD45	THD34	Cucumber, small	ผัก瓜(TH)	-	21	93.9	0.8	0.1	3.7	1.0	0.5	20	28	5	166	0.4	0.05	0.2	0	52	4	0.04	0.05	0.30	12	
AAD52	THD123,VND92,M YD162,PHD073	Egg plant, purple, raw	Terung(MY), Talong(PH), มะเขือเทศ(TH), Cà tím(VN)	-	(32)	91.6	1.3	0.1	(6.4)	-	0.6	20	29	9	55	0.6	-	-	0	85	7	0.08	0.06	0.70	18	
AAD50	THD124	Eggplant/aubergine, green, long, raw	มะเขือยาว(TH)	-	22	92.9	1.0	0.1	3.2	2.3	0.5	15	37	5	155	0.4	0.10	0.2	0	-	-	-	0.06	0.09	0.50	4
AAD51	THD121	Eggplant/brinjal, pickled	มะเขือปลา党的建设, ดอง(TH)	-	(27)	90.6	1.1	0.2	(5.1)	-	3.0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	
AAD54	THD120	Eggplant/brinjal, raw	มะเขือปลา党的建设(TH)	-	31	90.2	1.5	0.2	4.5	2.8	0.8	22	37	12	251	0.9	0.13	0.2	0	62	5	0.07	0.04	0.70	8	
AAD54	THD88	Fennel	ฟันฝ่า(TH)	-	(42)	88.3	2.5	0.4	(7.2)	-	1.6	79	48	70	439	2.3	-	-	0	5203	434	-	0.22	1.20	23	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VIcT	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
D	Vegetables and products (continued)			-	(63)	84.9	3.2	1.4	(9.4)	-	1.1	39	74	23	231	1.1	0.23	0.3	0	1859	155	0.34	0.17	0.60	26	
AAD55	IDD60,PHD077	Fern, leaf, raw	Tukod langit dahon(PH)	-	32	89.7	2.4	0.3	2.9	3.8	0.9	70	45	5	210	0.7	-	-	0	1344	112	0.07	0.12	0.60	27	
AAD57	THD7,MYD165, PHD085	Garlic, leaf, raw	Pucuk bawang putih(MY), Bawang dahon(PH), กระเทียม, ต้น(TH)	-	68	85.6	4.5	4.5	0p	4.5	1.7	207	69	-	-	3.2	-	-	0	3985	332	0.16	0.34	1.40	65	
AAD59	PHD020,THD128	Gourd, bitter, leaf and top, raw	Ampalaya dahon(PH), มะละกอก(TH)	-	16	94.0	0.9	0.1	1.5	2.8	0.7	33	26	12	155	0.7	0.00	0.1	0	170	14	0.06	0.05	0.20	42	
AAD60	PHD018,THD129 VND134, MYD166	Gourd, bitter, mixed variety, raw	Petai(MY), Ampalaya bunga(PH), มะละกอก(TH), Muối dâng(VN)	-	20	95.1	0.5	1.0	1.5	1.5	0.4	19	16	4	130	0.3	0.10	0.1	0	11	1	0.03	0.03	0.50	12	
AAD62	PHD025,THD49, MYD167,VND83	Gourd, bottle, raw	Labu jantung(MY), Upo bunga(PH), ป่าลูก(TH), Bốp(VN)	-	17	94.6	0.8	0.1	2.1	2.1	0.3	15	7	8	51	0.8	-	-	0	76		0.03	0.05	0.40	13	
AAD63	THD54,MYD168, PHD205	Gourd, snake, raw	Ketola ular(MY), Pakupis bunga(PH), มะนาว(TH)	-	21	94.1	0.9	0.3	3.0	1.2	0.5	23	30	16	109	0.4	-	-	0	10	1	0.04	0.04	0.30	6	
AAD64	THD53,VND133,M YD180	Gourd, sponge, raw	Ketola air(MY), มะบะน(MY), Muối(TH)	-	16	94.9	0.5	0.2	2.3	1.7	0.4	21	20	5	135	0.3	0.02	0.1	0	0	0	0	0.02	0.13	0.20	39
AAD65	VND84,MYD169,P HD269,THD107	Gourd, wax, mixed variety, raw	Kundur/Tong-kuah(MY), Kundol bunga(PH), พืช เขื่อง(TH), Bi đao (bi xanh)(VN)	-	20	92.4	1.4	0.4	0.5	4.2	1.1	3	5	-	-	0.4	0.08	0.2	0	23	2	0.09	0.05	-	147	
AAD66	THD130	Gourd/cucumber, bitter, Thai variety, raw	มะระໄທ່ມະຮັບຕື່ນ(TH)	-	(47)	86.2	2.9	0.1	(8.7)	-	2.1	-	-	-	-	-	-	-	0	2872	239	-	-	-	-	
AAD68	THD132	Horseradish, leaf, raw	ນາງມາ, ໄປ(TH)	-	(90)	76.5	6.0	1.1	(14.1)	-	2.3	304	96	9	426	3.8	-	-	0	5336	445	0.24	0.62	3.70	169	
AAD69	PHD094,MYD161	Horseradish-tree, leaf, raw	Deun kelor/Remunggai(MY), Malunggay dahon(PH)	-	(63)	83.6	3.2	0.3	(11.9)	-	1.0	24	36	3	222	0.9	-	-	0	68	6	0.05	0.09	0.50	239	
AAD70	MYD170,VND196,THD60	Indian pennwort, leaf, raw	Pegaga(MY), խաչ, նա (TH), Rau má, má mó(VN)	-	34	87.8	2.3	0.4	3.1	4.5	1.9	182	21	21	391	4.8	-	-	0	1946	162	0.17	0.14	0.10	30	
AAD71	THD91	Ivygourd, fresh, raw	ຫັກຕໍ່ເສີ້ນ(TH)	-	26	91.0	3.6	0.2	1.2	2.7	1.3	57	69	19	166	1.4	0.14	0.5	0	4036	336	0.11	0.17	0.80	13	
AAD72	PHD104,THD15	Jackfruit, unripe	Langka, hilaw(PH), խն ճան(TH)	-	(50)	87.2	4.7	(1.0)	(5.5)	-	1.6	335	86	-	-	8.7	-	-	0	5515	460	0.11	0.21	1.10	86	
AAD73	PHD107,VND145	Jute, leaf, raw	Saluyot dahon(PH), Rau day (VN)	-	(38)	89.4	2.7	0.3	(6.1)	-	1.5	178	20	17	331	2.5	-	-	0	2641	220	0.09	0.16	0.90	117	
AAD74	MYD173,THD85	Kale, Chinese, raw	Kai-lan-coy(MY), ຜົກຄະນາ, ມອດຂອບ(TH)	-	(34)	90.7	1.7	0.1	(6.5)	-	1.0	48	67	2	45	1.2	-	0.4	0	-		0.06	0.05	0.30	17	
AAD75	PHD113,THD13, VND125	Leek, Chinese, onion fragrant	Tai-suen(MY), Tòi tây (cà lát)(VN)	-	23	92.3	2.3	0.2	1.7	2.7	0.8	68	46	12	247	7.1	0.06	0.3	0	1509	126	0.05	0.11	1.00	18	
AAD76	PHD115,THD77, VND144, MYD178	Lettuce, garden, leaf and petiole	Daun salad/Sang-coy (MY), Lettugas dahon at tangkay(PH), ຜົກຄະນາ (TH), Rau diếp(VN)	-	15	94.7	1.3	0.1	1.3	1.8	0.8	62	32	19	190	1.8	-	-	0	1555	130	0.06	0.13	0.40	23	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
D Vegetables and products (continued)																										
AAD76	THD59, MYD179, PHD219	Loofah, angled	Ketola segi(MY), Patola bunga(PH), บัวบูรพา(VN)	-	21	94.0	0.8	0.3	3.0	1.4	0.5	19	16	25	119	0.7	0.05	0.1	0	18	2	0.05	0.04	0.40	6	
AAD80	PHD131, VND118 THD39, MYD185	Mung bean, sprout, raw	Tau-geh(MY), Toge(PH), ถั่วงอก(VN), ก้าวสีด(VN)	-	41	88.2	4.3	0.2	4.1	2.6	0.6	29	73	13	106	1.4	0.13	0.5	0	28	2	0.11	0.14	0.80	23	
AAD81	THD40	Mung bean, sprout, in brine, canned	ถั่วงอก, ในน้ำเกลือ, มาร์ก(SP)(TH)	-	23	92.5	1.5	0.1	3.0	1.9	1.0	33	-	313	-	0.3	-	-	0	-	-	-	-	-	2	
AAD82	THD175	Mushroom, abalone, raw	เห็ดเป้าเรือ(TH)	-	(45)	88.6	2.6	0.9	(6.7)	-	1.2	7	85	45	487	1.3	0.04	0.1	0	-	-	0.07	0.27	2.80	8	
AAD84	THD167	Mushroom, button/champignon, canned in brine, drained	เห็ดเชมปิ雍, ในน้ำเกลือ, มาร์ก(SP)(VN), ไม่หวาน(TH)	-	31	90.2	4.0	0.5	1.1	3.2	1.0	16	42	394	27	0.8	0.33	3.4	0	-	-	-	-	-	4	
AAD83	THD165	Mushroom, button/champignon, raw	เห็ดกระดุม(TH)	-	(33)	90.5	4.7	0.2	(3.2)	-	1.4	9	139	8	528	5.7	0.38	0.2	0	-	-	-	-	-	5.50	4
AAD85	MYD186, THD182	Mushroom, Chinese/shitake, dried, raw	Cendawan Cina, kering(MY), หัวเต่าแห้ง(VN), แห้ง(TH)	-	(333)	13.2	16.0	1.0	(64.9)	-	4.9	22	345	31	2103	3.6	0.75	6.6	0	0	0	0	0.07	1.50	12.30	9
AAD118	THD181	Mushroom, Chinese/shitake, fresh, raw	เห็ดเต่า, สด(TH)	-	(32)	91.6	2.2	0.1	(5.5)	-	0.6	6	46	7	237	1.1	0.08	0.1	0	-	-	-	-	1.03	3.20	-
AAD88	THD177	Mushroom, Chinese/straw, fresh, raw	เห็ดฟาง(TH)	-	31	90.8	3.0	0.2	3.6	1.4	1.0	6	101	21	317	1.0	0.38	0.3	0	-	-	0.09	0.32	6.40	9	
AAD87	MYD187, THD174	Mushroom, grey, oyster, fresh, raw	Cendawan tiram, segar(MY), เห็ดนางรม(TH)	-	(40)	89.9	3.2	0.5	(5.7)	-	0.7	4	78	22	214	1.5	0.06	0.2	0	0	0	0	0.04	0.31	3.90	10
AAD69	THD184, VND193 MYD171, PHD277	Mushroom, Jew's ear/black wood ear, dried, raw	Mook-yi(MY), Tengang daga, tuyu(PH), เห็ดหูหมู, แมง(TH), Mộc nhĩ(VN)	-	243	11.4	8.3	0.3	27.6	48.4	4.0	223	209	181	756	20.1	0.30	5.7	0	11	1	0.07	0.62	2.80	2	
AAD70	THD183	Mushrooms, Jew's ear/ black wood ear, fresh, raw	เห็ดหูหมู, สด(TH)	-	23	89.8	0.8	0.1	0.7	8.2	0.4	23	15	28	54	0.5	0.03	0.1	0	-	-	0.01	0.14	0.20	1	
AAD138	VND97, MYD189	Mustard green, India (leaf and stem)	Kai-coy(MY), Cải sen(VN)	-	18	94.3	1.7	0.4	1.0	1.8	0.8	68	17	16	319	1.5	-	-	0	1492	124	0.07	0.17	0.50	63	
AAD89	VND179, PHD281 THD76	Mustard, Chinese, leaf, pickled	Mustasa dahon, buro(PH), ผักกาดเขียว, ยอดเขียว(TH), Dưa cải Bùi(VN)	-	(21)	91.5	1.5	0.2	(3.40)	-	3.4	79	248	-	-	5.7	-	-	0	966	81	0.02	0.03	0.40	20	
AAD90	PHD134, THD73, MYD188	Mustard, leaf, raw	Sawi/Coy-sam(MY), Mustasa dahon(PH), ผักกาดเขียว(TH)	-	(28)	92.5	2.2	0.5	(3.7)	-	1.1	152	49	11	426	2.5	-	-	0	1901	158	0.06	0.16	0.90	80	
AAD91	THD143	Neem, leaf and tip	ธัญเดา, ใบและยอด(TH)	-	78	73.3	5.6	0.4	7.3	11.6	1.8	162	70	12	331	2.7	0.14	0.4	0	4810	401	0.06	0.11	2.50	92	
AAD73	MYD176, THD2	Okra (Lady's fingers), young pod, raw	Kacang bendii(MY), กะซังเงี้ยวน, กัลกอณ(VN)	-	(31)	91.9	1.6	0.2	(5.6)	-	0.7	44	17	26	68	1.3	-	-	0	171	14	0.08	0.12	1.20	17	
AAD94	THD31	Onion, flower	ต้นหอม, ดอก(TH)	-	(23)	94.0	1.2	0.1	(4.2)	-	0.5	23	25	-	-	0.6	-	-	0	378	32	0.04	0.10	0.20	19	
AAD96	PHD147, MYD221	Onion, spring, fresh, raw	Daun Bawang(MY), Sibuyas, mura(PH)	-	39	89.2	2.2	0.7	4.6	2.6	0.7	55	39	16	137	2.3	-	-	0	2848	237	0.06	0.09	0.30	42	
AAD97	PHD154, THD134 VND116	Papaya, unripe, raw	มะละกอ, ดิบ(TH), Đu đủ xanh(VN)	-	24	92.6	0.8	0.1	4.0	2.0	0.5	47	32	21	203	0.6	0.01	0.0	0	0	0	0	0.04	0.03	0.30	29
AAD103	THD144, MYD203	Parkia, seed, raw	Petai(MY), สะตอ, ยะล็อก(TH)	-	124	69.9	9.0	2.9	14.2	2.7	1.3	101	43	47	376	2.1	-	-	0	151	13	0.13	0.11	0.80	28	
AAD99	PHD159, VND154 MYD197	Parsley, leaf, raw	Pasi(MY), Rau mùi tàu(VN)	-	33	88.5	3.0	0.9	1.0	4.7	1.9	216	51	13	804	6.0	-	-	0	2100	175	0.13	0.21	0.50	106	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF		
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
D Vegetables and products (continued)																									
AAD100	VND114, THD47, M YD198, PHD211	Pea, garden, pod, fresh, raw	Kacang pea, segar(MY), Sitsaro(PH), ถั่วสีเขียว(TH), Rau câu tươi(VN)	-	57	84.5	4.9	0.4	7.3	2.1	0.8	53	56	2	139	0.9	0.11	0.8	0	85	7	0.24	0.12	1.00	49
AAD105	THD108, IDD65, VND85, MYD205, P HD225	Pumpkin, raw	Labu merah(MY), Kalabasa bunga(PH), ฟักหวาน(TH), Bí ngô(VN)	-	44	87.4	1.3	0.3	7.8	2.4	0.8	31	30	43	178	0.7	0.06	0.9	0	1019	85	0.06	0.05	0.50	15
AAD106	VND141, THD110 PHD227	Pumpkin, young leaf, raw	Kalabasa dahon(PH), ฟัก幼苗, ยอดอ่อน(TH), Rau Bé(VN)	-	27	91.4	2.9	0.3	1.9	2.4	1.1	90	46	49	363	3.5	-	-	0	1050	88	0.11	0.15	1.00	20
AAD107	PHD180, VND198 MYD206	Purslane, leaf, raw	Gelong pasir(MY), Olasiman dahon(PH), Rau sam(VN)	-	32	89.7	2.4	0.1	4.9	1.1	1.8	120	44	5	354	4.5	-	-	0	4992	416	0.04	0.15	0.70	27
AAD108	PHD183, VND104 THD257, MYD207	Radish, chinese, white, raw	Lobak(MY), Labanos(PH), หัวบรอก/ไก่ย่าง(TH), Củ cải trắng(VN)	-	20	93.9	0.7	0.2	3.2	1.4	0.6	37	23	51	113	0.8	0.03	0.2	0	T	-	0.05	0.04	0.30	25
AAD110	PHD186, MYD209	Rhubarb, raw	Tai-wong(MY)	-	(35)	92.1	0.9	1.3	(4.8)	-	0.9	162	17	5	126	0.7	-	-	0	111	9	0.02	0.03	0.80	14
AAD111	THD1	Roselle (Red sorrel), leaf, raw	กระท่อมสีเขียวเปรี้ยว, ใบ(TH)	-	(57)	85.6	1.7	0.1	(12.4)	-	0.2	9	4	-	-	-	-	-	0	797	66	0.11	0.24	4.50	44
AAD145	THD147	Seaweed, raw	สาหร่ายทะเล(TH)	-	(329)	11.6	21.9	-	(60.3)	-	6.2	465	92	-	-	15.7	-	-	0	-	-	-	-	-	
AAD115	THD148	Sesbania, yellow flower, raw	ไบบัน, ดอก(TH)	-	40	87.1	3.1	0.5	3.2	5.1	1.0	49	59	-	-	5.2	-	-	0	206	17	0.20	0.26	2.80	32
AAD116	PHD201, THD26, MYD213	Sesbania/Cork Wood, young leaf, raw	Daun Turi/Geti(MY), Katurray dahon(PH), ไม้ตุรี่(TH)	-	75	78.0	7.7	1.5	4.1	7.0	1.7	254	73	22	343	2.4	-	-	0	4318	360	0.63	0.47	3.70	94
AAD117	PHD145, IDD53, THD30	Shallot, leaf, spring onion, raw	Sibuyas, Tagalog, dahon(PH), ต้นหอม(TH)	-	32	90.4	1.8	0.3	4.4	2.3	0.8	76	35	17	135	1.8	0.10	0.3	0	829	69	0.04	0.10	0.30	25
AAD53	THD122	Solanum, raw	มะเขือเทศ(TH)	-	46	80.9	2.8	0.8	0.2	13.6	1.7	182	132	4	302	0.9	0.21	0.2	0	103	9	0.18	0.13	1.60	18
AAD119	VND119, THD42, M YD214	Soybean sprout, raw	Tau-jeh kacang soya(MY), ถั่วงอกหัวใจ(TH), Giá đậu tương(VN)	-	72	83.9	7.9	2.5	4.2	0.6	0.9	51	65	4	180	2.4	-	-	0	0	0	0.15	0.16	1.00	10
AAD120	PHD217, MYD217	Spinach, amaranth, spine, raw	Bayam duri(MY), Uray dahon(PH)	-	36	87.8	3.9	0.4	2.8	2.8	2.3	520	75	14	833	4.9	-	-	0	5331	444	0.02	0.28	1.00	85
AAD122	MYD215, THD61	Spinach, Chinese, raw	Por-coy(MY), ป่า泊เจ๊(TH)	-	21	92.3	2.5	0.5	0.2	2.7	1.8	63	50	70	533	4.1	0.10	0.9	0	3778	315	0.12	0.31	0.60	37
AAD121	PHD121, MYD219 VND152	Spinach, Malabar, raw	Remayong(MY), Alugbati dahon(PH), โรเมยอง(TH), Rau mồng tơi(VN)	-	18	92.9	1.9	0.1	1.1	2.5	1.5	140	28	15	233	3.1	-	-	0	3351	279	0.06	0.12	0.60	73
AAD123	PHD223, THD109	Squash/pumpkin, flower, raw	Kalabasa bulaklak(PH), ฟักทอง, ดอก(TH)	-	22	92.6	1.7	0.3	2.3	1.7	1.4	63	38	-	-	1.9	-	-	0	395	33	0.04	0.08	0.80	21
AAD124	PHD242, MYD222 VND155, THD93	Swamp cabbage, kangkong, raw	Kangkung(MY), Kangkong dahon(PH), คังกง(ไทย)(TH), Rau muống(VN)	-	26	91.4	2.9	0.3	1.9	2.2	1.3	70	38	62	239	3.3	0.12	0.5	0	2741	228	0.08	0.24	0.80	28
AAD125	PHD244, THD136 VND151, MYD223	Sweet potato, leaf, raw	Pucuk ubi keledek(MY), Kamote dahon(PH), ฟ้าทะลายโภ, ยอด(TH), Rau khoai lang(VN)	-	39	88.6	3.1	0.5	4.4	2.0	1.4	65	43	24	378	4.9	-	-	0	3985	332	0.10	0.18	0.90	55
AAD127	PHD249, THD115	Tamarind, young leaf, raw	Sampalok dahon(PH), มะขาม, ยอดอ่อน(TH)	-	(68)	82.2	3.8	0.3	(12.4)	-	1.3	46	48	-	-	1.5	-	-	0	2283	190	0.18	0.21	1.90	32

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOL	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
D	Vegetables and products (continued)			Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
AAD126	THD112	Tamarind, young pod, raw	มะขาม, ติบ, ซ่อน(TH)	-	55	76.9	1.7	0.2	0p	23.0	1.0	-	-	-	-	-	-	0	76	6	-	-	-	-	
AAD128	PHD257,THD118 VND88,MYD225	Tomato, raw	Tomato(MY), Kamatis(PH), มะเขือเทศ (TH), Cà chua(VN)	-	23	93.5	1.0	0.3	3.4	1.2	0.6	17	26	9	151	0.9	0.13	0.2	0	526	44	0.07	0.06	0.40	29
AAD130	THD119	Tomato, cherry, small, raw	มะเขือเทศสีดา(TH)	-	23	93.2	1.0	0.3	3.3	1.7	0.5	9	23	10	204	0.5	0.07	0.2	0	-	-	0.09	0.04	0.70	33
AAD164	THD146	Water lily, stem, raw	สาหร่ายน้ำ(TH)	-	8	96.6	0.3	0.1	0.7	1.7	0.6	8	9	-	-	0.4	-	-	0	44	4	-	-	-	9
AAD132	THD63	Water mimosa, raw	ผักกระเฉด(TH)	-	38	87.3	4.2	0.4	2.0	4.9	1.2	63	58	12	228	4.8	0.06	0.4	0	3536	295	0.13	0.33	1.90	29
AAD133	PHD268,VND98,M YD234	Watercress, raw	Semanggi/Sai-yong-coy(MY), Cải xoong(VN)	-	18	93.6	1.9	0.1	1.1	2.5	0.8	158	39	62	249	1.5	-	-	0	1175	98	0.09	0.13	0.70	57
AAD16	PHD272,VND115 THD46,MYD134	Winged bean, pod, fresh, raw	Kacang botor(MY), Sigarilyas bunga(PH), đỗ lợ, đỗ(TH), Đậu rồng (quả non)(VN)	-	23	91.4	2.2	0.1	0.9	4.9	0.5	64	28	3	93	0.7	0.16	0.4	0	234	20	0.07	0.10	0.60	19
AAD17	PHD232,THD44, MYD136	Yard long bean, pod, green, fresh, raw	Kacang panjang(MY), Sitaw bunga, berde(PH), ถั่วฝักยาว(TH)	-	35	90.1	2.6	0.6	3.4	2.7	0.6	53	43	15	139	0.8	0.20	0.5	0	246	21	0.10	0.11	0.80	20

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins						
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	
Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C				
E	Fruits and Products																								
AAE2	PHE001,THE132,VNE246,MYE238	Apple, green	Epal hijau(MY), Mansanas, berde(PH), ເມັບປັກ(TH), Táo tát(VN)	-	53	86.3	0.4	0.2	12.2	0.6	0.3	11	9	35	98	0.8	-	-	0	62	5	0.03	0.03	0.20	4
AAE3	PHE002,MYE239	Apple, red	Epal merah(MY), Mansanas, pula(PH)	-	(63)	84.5	0.5	0.4	(14.4)	-	0.2	7	9	3	83	0.2	-	-	0	86	7	0.03	0.01	0.30	2
AAE4	PHE004,MYE240	Avocado, green	Apkok(MY), Mansanas,pula(PH)	-	(168)	76.9	1.5	15.7	(5.1)	-	0.8	19	37	7	385	1.6	-	-	0	165	14	0.06	0.23	1.20	12
AAE1	MYE242,THE3,VNE206	Banana, apple variety, ripe	Pisang abu(MY), ກ້າວຍິນ້າງ(TH), Chuối tát(VN)	-	100	73.2	1.0	0.2	22.4	2.4	0.8	11	20	6	269	0.4	0.05	0.1	0	87	7	0.04	0.03	0.60	12
AAE13	VNE208,THE4	Banana, apple, whole, sun-dried	ກ້າວຍິນ້າງ(TH), Chuối khô(VN)	-	(285)	26.4	3.6	0.1	(67.5)	-	2.4	13	89	-	-	1.4	-	-	0	-	-	0.05	0.12	-	3
AAE10	PHE008,IDE73,THE7,MYE245	Banana, cavendish, ripe	Pisang embun(MY), Saging, cavendish, hing(PH), ກ້າວຍິນ້າງ(TH)	-	94	75.7	1.3	0.6	19.9	1.7	0.8	13	19	12	370	0.4	0.20	0.2	0	77	6	0.04	0.04	0.60	8
AAE11	PHE006,MYE243,VNE207	Banana, dessert banana, dwarf	Pisang brangan(MY), Saging, bungulan(PH), Chuối tiều(VN)	-	(104)	73.5	1.2	0.3	(24.1)	-	0.9	12	26	36	370	0.4	-	-	0	150	13	0.04	0.05	0.60	11
AAE12	THE6	Banana, dessert, Valery, Hom variety	ກ້າວຍິນ້າງ(TH)	-	109	70.9	1.3	0.1	24.8	1.9	1.0	5	21	21	323	0.6	0.05	0.1	0	-	-	0.05	0.05	0.90	5
AAE14	PHE013,MYE249	Banana, pink banana	Pisang rajah udang/merah(MY), Saging, murado(PH)	-	(96)	75.5	1.1	0.3	(22.3)	-	0.8	13	20	2	258	0.5	-	-	0	252	21	0.03	0.04	0.70	9
AAE15	MYE244,IDE74	Banana, pisang kari	Pisang kari(MY)	-	(112)	71.6	0.9	0.3	(26.3)	-	0.9	8	33	6	273	0.5	0.10	0.2	0	220	18	0.08	0.01	0.50	8
AAE17	PHE012,THE1,MYE247,IDE75	Banana, rice banana	Pisang mas(MY), Saging, latundan(PH), ກ້າວຍິນ້າງ(TH)	-	98	74.1	1.1	0.2	22.0	1.8	0.8	24	19	6	303	0.4	0.10	0.2	0	190	16	0.03	0.06	0.60	11
AAE135	THE8	Banana, silver bluggoe, Hug-mook variety	ກ້າວຍິນ້າງ(TH)	-	(115)	71.2	1.1	0.6	(26.4)	-	0.7	16	36	-	-	-	-	-	0	279	23	0.08	0.11	0.80	15
AAE19	PHE019,MYE253	Bilimbi, fruit	Belimbing masam/buluh(MY), Kamias(PH)	-	25	94.3	0.7	1.3	1.9	1.5	0.3	10	6	4	80	0.4	-	-	0	165	14	0.01	0.06	0.80	13
AAE22	THE59,VND128,MYE255,PHE087	Carambola/Star fruit	Belimbing manis(MY), Belimbing(PH), ນະພົບ(TH), Khé(VN)	-	(32)	91.6	0.6	0.1	(7.2)	-	0.5	8	14	6	140	0.7	-	-	0	118	10	0.04	0.09	0.80	29
AAE24	PHE025,MYE256	Cashew, fruit	Jambus agus(MY), Kasuy bunga(PH)	-	(53)	86.6	0.7	0.2	(12.2)	-	0.3	4	14	9	83	0.4	-	-	0	25	2	0.02	0.02	1.50	154
AAE25	PHC007,MYC116,VNC55	Coconut, very immature	Isi kelapa muda(MY), Saging, butuan(PH), Cùi dừa non(VN)	-	(41)	90.7	1.6	1.4	(5.6)	-	0.7	9	39	9	284	0.9	-	-	0	0	0	0.04	0.03	0.50	5
AAE31	PHE028,THE33,THE34,THE35,MYE260	Durian, assorted	Duriان(MY), ດຸຈີນ(TH), ຖືເຫັນລວງ/ຖືເຫັນນອນທອງ(TH)	-	152	64.1	2.4	3.9	25.0	3.6	1.0	27	41	25	309	1.2	0.12	0.2	0	150	13	0.30	0.20	1.40	33
AAE35	IDE76,THE55	Fig, fresh	ມະເດືອ(TH)	-	(49)	86.9	2.0	0.2	(9.7)	-	1.2	43	27	2	180	0.6	0.10	0.2	0	16	1	0.14	0.47	-	43
AAE36	THE38,PHE107	Fruit cocktail, tropical, in syrup, canned	ແກ້ໄຂໄວມ, ໃນນໍ້າເຄືອມ, ພະຈຸກກົບປົ່ວ(TH)	-	82	79.3	0.3	0.7	17.9	1.6	0.2	17	4	9	-	0.4	-	-	0	53	4	0.01	0.16	0.20	13

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
E	Fruits and products (continued)			-	(70)	82.2	0.4	0.1	(16.9)	-	0.4	18	4	-	-	0.5	-	-	0	-	-	0.02	0.00	0.80	243	
AAE43	THE50	Gooseberry, Indian	มะขามป้อม(TH)	-	53	85.9	0.6	0.1	11.8	1.1	0.5	20	21	11	136	0.8	0.20	0.1	0	21	2	0.04	0.04	0.20	5	
AAE38	THE130,THE131,V NE238,MYE265	Grape, assorted	Buah anggur(MY), องุ่น เชือกธูมดํา(TH), Nho ta (nho chua)(VN)	-	55	83.8	0.9	0.2	10.1	4.4	0.6	21	19	19	97	0.9	0.04	0.5	0	50	4	0.07	0.06	1.20	141	
AAE41	PHE032,VNE240 THE39,MYE267	Guava, white flesh	Jambu batu(MY), Bayabas, puti(PH), ฝาง(TH), ตัง(VN)	-	(84)	78.2	1.3	0.4	(18.7)	-	1.4	28	25	46	362	1.0	-	-	0	108	9	0.08	0.07	0.70	5	
AAE44	PHE033,THE10, VNE227,MYE272	Jackfruit, fresh	Nangka(MY), Langka(PH), ชากูน(TH), Mit dai(VN)	-	100	75.3	0.7	1.0	21.7	0.9	0.4	11	-	12	-	0.2	-	-	0	-	-	-	-	-	-	
AAE47	THE11	Jackfruit, in syrup, canned	บานanas เชื่อม, บรรจุน้ำเชื่อม(TH)	-	50	86.1	0.9	0.1	10.2	2.2	0.5	34	42	-	-	0.5	-	-	0	65	5	0.02	0.28	0.90	29	
AAE49	PHE036,VNE245 THE43	Jujube	Mansanitas(PH), ทุเรียนญี่ปุ่น(TH), Táo ta(VN)	-	(67)	82.9	0.9	0.1	(15.6)	-	0.5	5	35	-	-	0.7	0.09	0.2	0	-	-	0.08	0.04	1.70	24	
AAE50	THE90	Lancet/Langsium/Langsat	วงศ์สอด(TH)	-	"(31)	92.2	0.6	0.3	(6.5)	-	0.4	21	6	17	175	0.3	-	-	0	0	0	0	0.05	0.03	0.20	32
AAE51	PHE040,MYE280	Lemon	Limau susu/Limau mata kerbau(MY), Limon(PH)	-	(48)	88.8	0.7	(1.0)	(9.0)	-	0.5	29	17	3	457	0.7	-	-	0	0	0	0	0.03	0.01	0.20	43
AAE90	PHE023,VNE205	Lemon, Philippine	Kalamansi(PH), Chanh(VN)	-	(70)	82.4	1.0	0.4	(15.7)	-	0.5	6	31	5	157	0.4	0.07	0.2	0	0	0	0	0.02	0.08	0.80	24
AAE53	PHE045,THE100,V NE247,MYE285	Litchi	Lai-ci(MY), Lechiyas(PH), ลีชี(TH), Vải(VN)	-	95	77.0	0.4	1.0	20.9	0.5	0.2	9	-	14	-	0.2	-	-	0	-	-	0.03	0.03	-	4	
AAE54	THE103	Litchi, in syrup, canned	ลีชี, ในน้ำเชื่อม, บรรจุน้ำเชื่อม(TH)	-	(319)	17.8	4.6	0.4	(74.3)	-	2.9	28	-	5	2012	-	-	-	0	-	-	-	-	-	-	
AAE57	THE99	Longan, dried	ฟักไช, แห้ง(TH)	-	71	81.3	1.0	0.2	15.8	0.9	0.8	15	23	9	216	0.4	0.22	0.4	0	0	0	0	0.08	0.09	0.50	52
AAE55	IDE71,THE98, MYE296,VNE235	Longan, fresh	Mata kucing(MY), ลักษ์(TH), Nhân(VN)	-	94	77.5	0.3	1.1	20.5	0.3	0.3	10	-	6	-	0.2	-	-	0	-	-	-	0.02	0.03	-	20
AAE56	THE93	Longan, in syrup, canned	ลักษ์, ในน้ำเชื่อม, บรรจุน้ำเชื่อม(TH)	-	(42)	89.4	0.5	0.2	(9.5)	-	0.4	14	17	-	172	0.7	-	-	0	-	-	0.02	0.03	-	20	
AAE59	PHE047,THE26	Malay apple, red	Yambo(PH), มะยมร้อนเผ็ด(TH)	-	42	88.7	1.0	0.3	8.1	1.5	0.4	57	27	18	122	0.3	0.07	0.1	0	136	11	0.07	0.05	0.30	22	
AAE60	THE115,VNE241,M YE302	Mandarin/tangerine	Limau Cina(MY), ลักษ์เชียงใหม่(TH), Quất chín (cà vông)(VN)	-	79	78.6	0.8	0.2	17.2	2.7	0.5	6	15	3	142	0.2	0.06	0.1	0	192	16	0.07	0.02	0.50	29	
AAE63	THE63	Mango,Kiew-sa- weya variety, unripe	มะม่วงว้าเชียวเซียว, ลิบ(TH)	-	49	86.7	0.5	0.0	11.0	1.6	0.2	6	12	3	140	0.6	0.10	0.0	0	261	22	0.03	0.03	0.20	37	
AAE65	PHE049,IDE70	Mango, Indian mango, unripe	Mangga, Indyan, hilaw(PH)	-	75	79.6	0.6	0.2	16.2	3.0	0.4	13	9	3	126	0.6	0.06	-	0	-	-	0.06	0.04	0.40	39	
AAE67	THE61	Mango, kaew variety, mature, unripe	มะม่วงแก้ว, ติบ(TH)	-	78	79.6	0.9	0.2	17.5	1.2	0.6	6	16	3	144	0.3	0.10	0.1	0	897	75	0.11	0.06	1.80	5	
AAE68	THE74	Mango, nung-klangwan variety, ripe	มะม่วงวงคัลกวัน, สูก(TH)	-	(85)	78.7	0.5	0.2	(20.2)	-	0.4	25	15	-	-	0.3	-	-	0	-	-	0.07	0.07	0.80	34	
AAE69	THE75	Mango, okrong variety, ripe	มะม่วงອกร่อง, สูก(TH)	-	79	79.3	0.8	0.2	17.9	1.3	0.5	17	17	44	191	0.4	0.06	0.1	0	144	12	0.05	0.07	1.90	10	

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				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C					
E	Fruits and products (continued)			-	80	77.7	0.9	0.5	17.0	1.8	2.1	15	12	-	-	-	-	0	-	-	0.04	0.04	0.60	31		
AAE73	THE70	Mango, pimsem-mun variety, mature, unripe	มะม่วงพิสม์มน, ดีบ(TH)	-	76	79.8	0.5	0.2	16.8	2.3	0.4	20	13	76	138	0.6	0.06	0.1	0	-	-	0.04	0.05	0.50	19	
AAE74	THE73	Mango, rad variety, mature, unripe	มะม่วงแมด, ดีบ(TH)	-	(82)	79.1	0.6	0.0	(19.9)	-	0.4	41	16	-	-	0.4	-	-	0	-	-	0.03	0.05	-	25	
AAE70	THE67	Mango, thong-dum variety, ripe	มะม่วงทองคำ, สุก(TH)	-	(94)	76.0	1.1	0.0	(22.3)	-	0.6	-	22	-	-	-	-	-	0	-	-	0.09	0.08	-	45	
AAE71	THE65	Mango, tub-ped variety, ripe	มะม่วงตับปี๊ด, สุก(TH)	-	68	82.7	0.6	0.6	14.4	1.5	0.2	11	13	10	63	0.6	0.10	0.1	0	0	0	0.06	0.03	0.30	3	
AAE75	PHE058,THE83, MYE295	Mangosteen	Manggis(MY), มะวงศ(TH)	-	(31)	92.3	0.3	(0.3)	(6.7)	-	0.4	23	12	-	-	0.4	-	-	0	7	1	0.02	0.02	0.50	8	
AAE76	PHE062,VNE213	Melon, honeydew	D-a hàng	-	(16)	95.4	0.3	0.0	(3.8)	-	0.5	21	15	-	-	0.4	-	-	0	220	18	0.04	0.02	0.30	30	
AAE77	PHE063,THE29	Muskmelon	Milon, Tagalog(PH), มะละกอกะ(TH)	-	45	87.5	0.8	0.3	8.6	2.4	0.4	31	18	5	124	1.0	0.03	0.0	0	85	7	0.07	0.03	0.30	33	
AAE81	PHE065,THE117,M YE300	Orange, green skin/Kalanchoe	Lima manis(MY), Dalandan, Ladu(PH), ลิม่า แขก(TH)	-	40	89.1	0.9	0.1	8.1	1.3	0.5	25	16	14	135	1.4	0.02	0.1	0	851	71	0.03	0.05	0.30	62	
AAE83	PHE069,THE82,VN E217,MYE303	Papaya, ripe	Papaya/Betik(MY), มะละกอกะ, ဏ(TH), Du đù chin(VN)	-	(59)	85.1	0.5	0.1	(14.0)	-	0.3	21	12	2	62	1.0	-	-	0	19	2	0.04	0.03	0.10	5	
AAE85	PHE070,VNE223, MYE307	Pear	Buah pir hijau(MY), Peras(PH), Quả lê(VN)	-	(45)	88.7	0.6	0.2	(10.1)	-	0.4	10	10	14	134	0.6	-	-	0	15	1	0.03	0.06	0.40	5	
AAE86	MYE308,THE44	Pear, chinese, yellow	Buah lai(MY), ลาง(TH)	-	68	81.9	0.6	0.1	15.1	1.9	0.4	47	18	1	103	0.3	-	-	0	324	27	0.04	0.01	0.20	23	
AAE88	PHE071,VNE221, MYE309	Persimmon, hard variety, ripe	Pisang kaki(MY), Hồng ngâm(VN)	-	48	87.2	0.5	0.1	10.8	1.0	0.4	17	10	21	128	0.6	0.03	0.1	0	20	2	0.08	0.05	0.20	17	
AAE91	PHE073,MYE311,V NE214,THE120	Pineapple	Nenas(MY), Pinya(PH), ลูกแพร(TH), Dứa lai(VN)	-	(353)	10.1	0.9	0.0	(87.3)	-	1.7	35	-	-	-	0.7	-	-	0	-	-	-	-	-	-	
AAE93	THE126	Pineapple, dried	ผักปะกา, แห้ง(TH)	-	90	77.2	0.3	0.2	21.3	0.8	0.2	11	3	9	18	0.4	-	-	0	20	2	0.10	0.01	0.20	6	
AAE94	THE122,MYE312 PHE114	Pineapple, slice, in heavy syrup, canned	Nenas, dengan sirup, dalam tin(MY), ลูกแพรในถังเชือดหนัก, บรรจุหัวใจ(TH)	-	(69)	82.1	0.6	0.1	(16.3)	-	0.9	19	33	6	323	0.8	-	-	0	0	0	0.08	0.01	0.40	5	
AAE95	PHE074,VNE224	Pomegranate	Granada(PH), Quả lựu(VN)	-	44	88.4	0.6	0.2	9.6	0.7	0.5	21	22	18	310	0.6	-	-	0	118	10	0.04	0.03	0.30	59	
AAE96	PHE075,THE119,V NE203,MYE317	Pomelo	Limau Betawi/Limau Beli(MY), Suha(PH), ลิม่า ลา(TH), บุรี(VN)	-	(288)	26.5	2.4	0.6	(68.3)	-	2.2	61	74	9	646	3.7	-	-	0	0	0	0.12	0.17	2.00	0	
AAE97	MYE316,PHE115	Prune, dried	Prun(MY)	-	(300)	24.0	2.7	0.4	(71.3)	-	1.6	74	96	15	632	3.4	-	-	0	0	0	0.11	0.08	0.20	0	
AAE98	MYE319,PHE116	Raisin	Kismis(MY), Pasas(PH)	-	(56)	86.0	0.6	0.4	(12.6)	-	0.4	4	17	2	95	1.8	-	-	0	0	0	0.03	0.07	0.50	31	
AAE99	THE60,MYE320	Rambai	Rambai(MY), ลังไทร(TH)	-	(69)	82.6	0.9	0.1	(16.0)	-	0.4	19	12	14	93	0.7	0.15	0.1	0	0	0	0	0.02	0.06	0.40	43
AAE100	THE17,MYE321	Rambutan	Rambutan(MY), แจง(TH)	-	91	78.2	0.4	1.1	19.4	0.7	0.2	11	-	10	-	0.2	-	-	0	-	-	0.03	0.02	-	7	
AAE101	THE21	Rambutan and pineapple, in syrup, canned	เงาะได้สับปะรด, ในน้ำเชื่อม, บรรจุหัวใจ(TH)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOL	CARTB	VITA_RAE	THIA	RIBF	NIA	VIDC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
E	Fruits and products (continued)																									
AAE102	THE20	Rambutan, in syrup, canned	ຮោគ, ឃានក្រឹម, បរាងុក្រប់ដែល(TH)	-	107	75.1	0.3	1.9	21.6	1.0	0.1	19	-	10	-	0.2	-	-	0	0p	0p	-	-	-	8	
AAE103	PHE026,VNE243 THE24,MYE329	Roseapple	Salak(MY), Makopa(PH), សាលុកម្ខាត់(TH), Gioi(VN)	-	(27)	93.2	0.6	0.1	(5.9)	-	0.2	9	9	2	81	0.3	-	-	0	4	0	0.03	0.02	0.20	21	
AAE133	THE84	Salak palm	សាលក(TH)	-	(60)	84.5	0.5	0.1	(14.3)	-	0.6	8	18	-	-	0.4	-	-	0	-	-	-	-	0.20	-	6
AAE106	VNE222,PHE079 THE85,MYE324	Sapodilla, ripe	Ciku(MY), Chico(PH), សោចុម(TH), Hồng xiêm(VN)	-	69	79.1	0.5	0.7	11.1	8.1	0.5	30	12	22	94	1.2	0.03	0.1	0	95	8	0.02	0.03	1.20	14	
AAE109	PHE083,MYE326	Soursop	Durian Belanda(MY), Guyabano(PH)	-	(72)	82.0	1.2	0.4	(15.8)	-	0.6	14	22	2	294	0.6	-	-	0	8	1	0.09	0.08	0.70	27	
AAE111	PHE084,THE45	Spanish plum	Siniguvelas(PH), សិនុវិលស(TH)	-	(88)	77.3	0.8	0.2	(20.8)	-	0.9	68	39	-	-	1.0	-	-	0	184	15	0.07	0.13	0.90	30	
AAE112	PHE085,VNE249	Star apple, green	Kaymito, berde(PH), Vú súta(VN)	-	60	84.6	0.9	(1.1)	10.2	2.6	0.6	43	23	-	-	0.4	-	-	0	4	0	0.02	0.02	0.70	6	
AAE114	THE78	Star gooseberry	ធម៌ឆង(TH)	-	(34)	91.7	0.7	0.7	(6.3)	-	0.6	5	23	-	-	0.4	-	-	0	5	0	0.01	0.05	-	40	
AAE115	PHE088,VNE210 MYE327	Strawberry	Strawberri(MY), Dâu tây(VN)	-	26	92.4	0.8	0.2	4.3	1.9	0.4	21	16	3	66	0.8	-	-	0	23	2	0.02	0.02	0.20	59	
AAE116	PHE089,THE36, VNE234,MYE257	Sugar apple	Buah nona(MY), Atis(PH), ធម៌យោង(TH), Na(VN)	-	86	77.2	1.6	0.3	18.0	2.2	0.7	29	43	4	250	0.7	-	-	0	39	3	0.09	0.13	0.70	26	
AAE120	PHE093,THE52, MYE328	Tamarind, fruit, ripe	Buah Asam Jawa(MY), Sampalok, hinog(PH), ធម៌ខាមព្យាយារ(TH)	-	(303)	22.3	2.8	0.5	(71.8)	-	2.6	135	96	10	158	0.9	-	-	0	10	1	0.29	0.05	0.80	30	
AAE58	PHE046,THE49	Tamarind, Madras thorn	Camachili(PH), ធម៌មេបេតិ(TH)	-	85	77.8	3.4	1.0	13.8	3.4	0.6	33	47	-	-	0.5	-	-	0	15	1	0.21	0.43	1.10	94	
AAE119	THE107	Toddy palm, cotyledon	ទាក់, ទាកំ(TH)	-	(116)	69.8	2.4	0.1	(26.3)	-	1.4	12	112	-	-	0.8	-	-	0	-	-	0.23	0.04	-	7	
AAE118	THE108	Toddy palm, in syrup, canned	ទាក់ដាច, ឃានក្រឹម, បរាងុក្រប់ដែល(TH)	-	93	76.8	0.2	0.5	21.2	1.2	0.1	5	-	11	-	0.0	-	-	0	0p	0p	-	-	-	0	
AAE142	THE127	Water chestnut	ធម៌(TH)	-	(91)	75.9	1.2	0.1	(21.3)	-	1.5	8	64	261	548	1.0	-	-	0	-	-	0.05	0.03	2.30	7	
AAE124	THE25	Water Rose, Nak (redish color) variety	ធម៌ស្អាត(TH)	-	(27)	93.2	0.3	0.0	(6.4)	-	0.1	4	12	-	-	0.5	-	-	0	-	-	0.01	0.02	0.10	25	
AAE126	PHE064,THE30, VNE212,MYE330	Watermelon	Tembikai(MY), Pakwan(PH), ដោងណូ(TH), Dứa hấu(VN)	-	24	93.6	0.6	0.1	5.1	0.3	0.3	8	13	6	76	0.2	0.03	0.1	0	255	21	0.03	0.04	0.20	6	
AAE125	THE23	Wax jambu, Water Rose, green color variety	ធម៌ស្អើសុខ(TH)	-	30	92.0	0.5	0.1	6.1	1.1	0.2	5	15	66	107	0.7	-	-	0	-	-	0.03	0.03	0.40	13	

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins								
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC		
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C		
F	Meat, other animals and products																										
AAF9	PHF001,VNF268,T HF60	Beef, blood	Baka dugo(PH), បាក់, ដឹកត (TH), Tiết bò(VN)	-	81	77.4	19.5	0.2	0.3	0	2.6	12	30	-	62	46.8	-	-	45	225	64	T	0.03	0.90	0		
AAF11	VNF265,PHF003	Beef, brain, raw	Baka utak(PH), óc bò(VN)	-	124	79.3	9.7	9.5	0.0	0	1.5	9	260	-	-	1.7	-	-	115	0	115	0.13	0.19	3.80	0		
AAF18	MYF359,VNF267 PHF011	Beef, heart, raw	Jantung lembu(MY), Baka puso(PH), Tim bò(VN)	-	112	76.1	17.6	4.0	1.3	0	1.0	14	150	28	239	4.3	-	-	137	142	149	0.28	0.50	5.10	1		
AAF19	VNF258,MYF360 PHF014	Beef, kidney, raw	Buah pinggang lembu(MY), Baka batu(PH), Bầu dục bò(VN)	-	89	79.5	16.1	2.3	0.9	0	1.2	26	212	168	188	8.5	-	-	246	476	286	0.31	1.00	5.00	5		
AAF23	MYF361,VNF262 PHF019	Beef, liver, raw	Hati lembu(MY), Baka atay(PH), Gan bò(VN)	-	133	69.9	20.3	3.5	5.0	0	1.3	16	304	23	280	10.1	-	-	8212	353	8241	0.28	1.51	11.30	18		
AAF188	THF63	Beef, Longissimus dorsi, raw	ជាតិ, សំណង់(TH)	-	-	76.8	-	-	-	0	-	4	238	72	365	2.6	0.00	3.1	-	-	-	-	-	-	-		
AAF25	VNF266,MYF362 PHF021	Beef, lungs, raw	Paru-paru lembu(MY), Baka baga(PH), Phổi bò(VN)	-	93	78.1	16.0	(1.8)	3.1	0	1.0	23	136	114	203	6.1	-	-	71	144	83	0.12	0.21	2.50	6		
AAF2	THF61	Beef, meat ball	ជាតិ, ស្រុក(TH)	-	84	77.5	16.5	0.7	2.9	0	2.4	21	58	779	-	5.0	-	-	-	-	-	-	-	-	-		
AAF44	VNF264,PHF047	Beef, tongue, raw	Beka dilai(PH), Luôti bò(VN)	-	191	68.0	14.2	13.4	3.5	0	0.9	25	158	-	-	2.3	-	-	100	0	100	0.08	0.17	4.20	0		
AAF185	THF36	Chicken, black, thigh, w/ skin, raw	ក្រីន, សំពើ, គិរិយាយ(TH)	-	127	73.3	22.7	4.0	0p	0	0.8	-	134	-	-	2.4	-	-	-	-	-	-	0.16	0.26	1.60	-	
AAF91	THF26	Chicken, blood, cooked	ក្រីន, ដឹក, ឆាំ(TH)	-	30	91.5	7.1	0.2	0.0	0	1.2	10	45	317	47	12.9	-	-	-	-	-	-	-	-	0.30	-	
AAF99	THF29,MYF365, PHF093	Chicken, breast, w/ skin, raw	Daging ayam, bahagian dada(MY), Manok pitso(PH), ក្រីន, ខាង(TH)	-	152	71.2	19.9	8.0	0p	0	1.0	12	186	71	252	0.9	0.07	0.4	16	3	16	0.05	0.09	6.80	1		
AAF100	THF11,PHF102	Chicken, drumstick, raw	Manok binti(PH), ក្រីន, ដឹក, ឈុំ(TH)	-	152	70.0	17.9	7.2	4.0	0	0.9	10	142	118	201	1.0	0.14	1.3	10	0	10	0.07	0.27	3.90	2		
AAF101	MYF371,PHF094	Chicken, feet, deboned, raw	Kaki ayam, tanpa tulang(MY), Manok pa(PH)	-	205	65.5	25.5	11.4	0p	0	0.8	75	78	109	55	1.5	-	-	17	0	17	0.01	0.08	1.20	1		
AAF95	PHF096,VNF324,M YF372,THF32	Chicken, gizzard, raw	Hempedal ayam(MY), Manok balun-balunan(PH), ក្រីន, ភី, គិរិយាយ(TH), Mè gà(VN)	-	102	76.0	20.2	1.8	1.2	0	0.8	13	124	34	206	3.1	0.10	-	31	20	33	0.05	0.21	3.20	3		
AAF96	VNF325,MYF373	Chicken, heart, raw	Jantung ayam(MY), Tim gá(VN)	-	112	77.8	15.8	5.4	0.0	0	1.0	14	186	106	260	4.0	-	-	75	0	75	0.11	0.42	4.50	6		
AAF102	MYF374,PHF100	Chicken, intestine, raw	Urus ayam(MY), Manok bituka(PH)	-	154	77.3	10.7	12.3	0p	0	0.6	17	163	22	90	1.1	-	-	37	0	37	0.08	0.44	2.30	16		
AAF186	THF43	Chicken, jungle fowl, wing, w/ skin, raw	ក្រីន, ប៊ូ, ដឹក, មេដៃនៅង, គិរិយាយ(TH)	-	187	66.4	22.1	11.0	0p	0	0.8	-	164	-	-	1.7	-	-	-	-	-	-	0.08	0.11	2.10	-	
AAF97	VNF323,MYF375 PHF103,THF15	Chicken, liver, raw	Hati ayam(MY), Manok atay(PH), ក្រីន, គិប(TH), Gan gá(VN)	-	121	73.5	18.6	4.1	2.5	0	1.3	13	243	63	213	7.3	0.48	0.5	11481	96	11489	0.32	2.49	8.90	14		
AAF103	VNF318,MYF364	Chicken, matured, dressed carcass, raw	Ayam, dibersihkan(MY), Thit gá(VN)	-	153	69.9	22.4	7.0	0p	0	0.9	21	180	113	221	2.2	-	-	-	-	-	-	-	0.15	0.19	7.10	2
AAF104	PHF107,THF19	Chicken, thigh, w/ skin, raw	Manok hita(PH), ក្រីន, តែវា, គិប(TH)	-	198	69.1	17.7	14.1	0p	0	0.9	12	113	98	133	0.9	0.07	0.8	10	0	10	0.08	0.19	4.20	2		
AAF105	MYF367,PHF109 THF22	Chicken, wing, w/ skin, raw	Daging ayam, sayap(MY), Manok pakpak(PH), ក្រីន, ភី, គិប(TH)	-	223	66.9	17.6	17.0	0p	0	0.8	27	128	82	177	1.0	0.06	1.4	28	0	28	0.03	0.14	3.40	2		
AAF190	THF50	Duck, blood, cooked	ប៊ែត, ដឹក, គិប(TH)	-	25	93.4	5.9	0.1	0p	0	0.7	14	41	161	8	13.7	-	-	-	-	-	-	-	0.04	0.10	-	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
F	Meat, other animals and products (continued)				-	125	73.4	16.4	4.7	4.2	0	1.3	33	192	-	-	13.5	-	-	840	50	844	0.35	1.11	10.00	4
AAF110	VNF330,PHF120	Duck, liver, raw	Pato atay(PH), Gan vịt(VN)	-	233	64.9	15.6	19.0	0p	0	0.7	14	134	-	-	1.8	-	-	-	-	-	-	0.09	0.20	5.10	-
AAF111	VNF329,THF49	Duck, meat, raw	เป็ด, เนื้อ, ลิบ(TH), Thịt vịt(VN)	-	80	78.4	15.1	2.0	0.4	0	4.1	1293	671	122	199	3.8	-	-	-	-	-	-	0.08	0.53	3.60	-
AAF114	THF46	Frog, small	สัตอ(TH)	-	146	71.7	20.4	7.2	0p	0	1.3	11	185	91	256	2.7	-	-	22	0	22	0.15	0.22	4.80	2	
AAF145	MYF380,VNF275	Button, lean, raw	Daging kambing(MY), Thịt cừu(VN)	-	185	65.0	20.1	11.6	0p	0	3.5	15	132	-	-	1.3	-	-	-	-	-	-	0.24	0.10	3.80	-
AAF148	THF54	Nam/Jhn-som (Pork sausage, fermented), packed in banana leaf	แนม, หมู(TH)	-	49	89.0	12.1	0.1	0p	0	0.6	14	12	219	28	20.3	-	0.3	16	-	-	nd	0.10	0.30	-	
AAF194	THF81N	Pork, blood, cooked	หมู, เสือด, ต้ม(TH)	-	125	79.5	9.6	9.5	0.2	0	1.2	10	270	-	-	1.2	-	-	-	-	-	-	0.18	0.35	2.60	0
AAF120	VNF292,PHF192	Pork, brain, raw	Baboy litsunin, utak(PH), óc lợn(VN)	-	159	65.1	18.6	4.7	10.6	0	1.0	6	187	52	380	0.9	0.10	0.2	6	T	6	0.83	0.47	8.40	0	
AAF119	PHF165,THF82	Pork, ham, raw	Baboy pig(PH), หมู, แมม, lợn(TH)	-	114	76.2	16.8	4.5	1.5	0	1.0	5	160	140	130	3.8	0.50	0.1	6	5	6	0.32	1.00	4.90	2	
AAF121	VNF297,PHF167,T HF91	Pork, heart, raw	Baboy puso(PH), หมู, หัวใจ, ตับ(TH), Tim lợn(VN)	-	102	77.3	15.2	3.1	3.3	0	1.1	11	206	-	-	6.2	-	-	40	10	41	0.32	1.58	9.00	10	
AAF124	VNF285,PHF171	Pork, kidney, raw	Baboy bato(PH), Bầu dục lợn(VN)	-	208	62.9	21.6	12.8	1.7	0	1.0	32	131	-	-	0.9	-	-	5	10	6	0.34	0.28	3.80	2	
AAF149	PHF173,VNF281	Pork, leg, deboned, raw	Baboy pata(PH), Chân giò lợn (bò xưng)(VN)	-	174	61.4	29.3	5.1	2.8	0	1.4	11	240	46	130	5.0	6.10	3.7	25992	-	25992	0.23	3.07	7.90	2	
AAF196	THF77	Pork, liver, boiled	หมู, ตับ, ต้ม(TH)	-	268	47.0	33.2	13.0	4.6	0	2.2	8	370	120	350	14.7	9.20	2.3	30755	-	30755	0.36	4.01	16.00	0	
AAF197	THF78	Pork, liver, fried	หมู, ตับ, 烤肉(TH)	-	125	72.0	19.2	3.8	3.6	0	1.4	12	308	119	270	15.5	6.40	0.5	14513	20	14515	0.32	1.79	10.60	12	
AAF126	VNF288,PHF174,T HF76	Pork, liver, raw	Baboy atay(PH), หมู, ตับ, ต้ม(TH), Gan lợn(VN)	-	98	80.4	13.6	4.7	0.4	0	0.9	29	174	-	-	4.8	-	-	20	-	20	0.09	0.27	2.50	10	
AAF130	VNF293,PHF178,T HF80	Pork, lung, raw	Baboy baga(PH), หมู, ป่า, ตับ(TH), Phổi lợn(VN)	-	86	78.4	16.9	1.2	1.8	0	1.7	7	27	-	-	65.5	-	-	-	-	-	-	0.22	0.42	2.00	0
AAF187	THF79	Pork, pancreas, raw	หมู, ตับอ่อน, ตับ(TH)	-	210	63.7	17.1	13.8	4.4	0	1.0	31	134	100	240	1.1	0.10	1.5	4	20	6	0.65	0.14	4.20	1	
AAF150	VNF282,PHF182,T HF72	Pork, rib, deboned, raw	Baboy tadyang(PH), หมู, ตับ, ตับ(TH), Suon lợn (bò xưng)(VN)	-	189	69.3	18.4	12.8	0p	0	1.0	3	170	45	330	0.9	0.10	0.4	4	-	4	1.00	0.48	4.20	0	
AAF152	THF97	Pork, shoulder, broiled	หมู, คอ, ย่าง(TH)	-	296	44.5	35.9	14.0	3.6	0	2.0	8	340	150	610	1.4	0.20	1.5	0	-	0	0.68	0.42	5.60	0	
AAF202	THF96	Pork, shoulder, fried	หมู, คอ, ทอด(TH)	-	625	1.2	52.7	46.0	0p	0	0.6	31	54	-	-	2.4	-	-	59	T	59	0.03	0.09	1.60	0	
AAF159	PHF242,THF47	Pork, skin, fried	Sitsaron baboy(PH), หมู, ผิวหนัง, ชีซึรอน(TH)	-	116	74.5	21.8	3.2	0p	0	1.3	4	237	97	381	1.0	0.10	1.0	0	-	-	1.35	0.34	4.50	0	
AAF204	THF88	Pork, tenderloin, raw	หมู, สายใน, ตับ(TH)	-	126	72.1	21.7	3.8	1.2	0	1.2	16	213	53	403	1.3	-	-	30	0	30	0.07	0.07	7.00	3	
AAF164	VNF309,MYF382	Rabbit, whole carcass, raw	Arbab(MY), Thịt thỏ nhả(VN)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOALDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
				Density	Energy-by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
G	Finfish, shellfish, other aquatic animals and products																									
AAG1	MYG397, THG138	Anchovy, dried	Ikan bilis, kering, seluruh(MY), ปลาบีบีส์, แห้ง(TH)	-	242	24.9	53.4	2.8	0.7	0	18.2	1241	728	341	639	4.7	-	-	8	0	8	0.08	0.09	3.70	0	
AAG2	MYG395, THG137 PHG005	Anchovy, fresh, whole	Ikan bilis, segar, seluruh(MY), ปลาบีบีส์, สด(TH)	-	81	78.9	18.5	0.7	0.1	0	1.8	168	226	584	133	1.0	-	-	18	0	18	0.06	0.07	1.80	0	
AAG16	THG183	Baby clams, smoked, canned	หอยเชลล์, หวานกรอบ, บรรจุขวด(TH)	-	358	45.3	14.6	30.4	5.7	2	2.4	91	-	554	-	24.2	-	-	-	-	-	-	-	-	-	
AAG18	PHG012, VNG338 MYG405, THG101	Carp, common, raw	Lee koh(MY), Karpa(PH), ปลากะพง, กระพง(TH), Cá chép(VN)	-	105	76.0	17.0	2.7	3.2	0	1.1	26	179	78	332	1.2	-	-	36	10	37	0.01	0.09	3.10	0	
AAG22	PHG013, MYG408	Catfish, freshwater, raw	Kelii(MY), Hito(PH)	-	102	78.0	18.5	3.1	0p	0	1.1	44	189	33	302	1.0	-	-	115	31	118	0.04	0.07	2.50	1	
AAG25	THG74	Catfish, gunther's walking, boiled	ปลาดุกชี้突出, ต้ม(TH)	-	212	65.2	18.2	15.5	0.0	0	1.1	22	154	45	354	0.7	0.00	0.5	-	-	-	-	0.10	-	-	
AAG26	THG75	Catfish, gunther's walking, fried	ปลาดุกชี้突出, ทอด(TH)	-	315	51.8	28.1	22.5	0p	0	1.9	91	289	95	470	2.3	0.10	0.5	-	-	-	-	0.09	0.23	4.10	-
AAG24	THG77	Catfish, gunther's walking, raw	ปลาดุกชี้突出, สด(TH)	-	209	65.1	17.8	14.7	1.3	0	1.1	20	168	65	288	0.8	0.10	0.2	-	-	-	-	0.01	0.45	2.30	-
AAG27	THG76	Catfish, gunther's walking, roasted	ปลาดุกชี้突出, ย่าง(TH)	-	276	52.0	27.8	17.9	0.9	0	1.4	103	245	91	408	3.9	0.20	1.0	-	-	-	-	0.09	0.13	4.30	-
AAG217	THG128	Catfish, striped, , w/ skin, raw	ปลาสวาย, สด(TH)	-	215	66.1	15.0	16.5	1.5	0	0.9	24	134	64	272	1.4	0.00	0.1	-	-	-	-	0.02	0.19	0.80	2
AAG218	THG127	Catfish, striped, w/ skin, steamed	ปลาสวาย, นึ่ง(TH)	-	188	66.0	20.3	11.2	1.4	0	1.1	24	154	66	248	0.6	0.00	0.1	-	-	-	-	ND	0.17	1.20	-
AAG160	THG15	Catfish, truncated estuarine, raw	ปลาดุกชี้突出(กอดหน้า)(TH)	-	92	78.4	18.7	1.9	0.1	0	0.9	98	168	-	-	4.2	-	-	-	-	-	-	0.17	-	1.30	-
AAG250	THG180	Clam, undulated surf	หอยลาย(TH)	-	64	82.3	10.3	0.5	4.5	0	2.4	94	112	-	-	5.7	-	-	-	-	-	-	0.00	0.16	-	2
AAG288	THG15	Cobia/Black kingfish, raw	ปลาช่อนทะเล(TH)	-	92	78.4	18.7	1.9	0.1	0	0.9	98	168	-	-	4.2	-	-	-	-	-	-	0.17	-	1.30	-
AAG224	MYG414, THG169	Cockle/ark shell, fresh	Kerang(MY), แมลงภู่(TH)	-	71	81.3	11.7	1.1	3.5	0	2.4	181	135	325	228	10.5	0.21	2.4	94	78	101	0.06	0.35	2.10	-	
AAG38	VNG344, PHG042	Crab, shore, raw	Talangka(PH), Cua đồng bò vồ(VN)	-	104	71.3	13.1	3.6	4.9	0	7.1	3576	320	-	-	2.9	-	-	279	58	284	0.03	0.65	2.50	0	
AAG39	THG157, MYG417, PHG041	Crabmeat, mud, boiled	Ketam bunga, direbus(MY), Alimango laman, nilaga(PH), ปูนางอ, เนื้อ, ต้ม(TH)	-	86	78.1	17.7	1.6	0.3	0	2.3	206	246	327	209	1.2	1.30	3.1	54	110	63	0.02	0.31	2.20	0	
AAG40	PHG040, THG156	Crabmeat, mud, fresh	Alimango laman(PH), ปูนางอ, เม็ด, เมี๊ยะ(TH)	-	98	77.7	17.9	2.9	0p	0	2.0	183	232	-	-	2.6	-	-	199	232	218	0.05	0.17	3.40	0	
AAG41	MYG420, VNG361	Cuttlefish, dried	Sotong, kering(MY), Mực khô(VN)	-	295	26.0	60.4	3.7	4.9	0	5.0	62	523	1000	583	4.2	-	-	93	0	93	0.05	0.12	9.30	0	
AAG42	MYG419, THG141, VNG350	Cuttlefish, raw	Sotong(MY), ปลาหมึก กระดอง, สด(TH), Mực tươi(VN)	-	72	84.5	15.9	0.9	0p	0	1.2	16	93	213	67	1.1	-	-	22	0	22	0.01	0.08	1.50	2	
AAG44	PHG049, VNG349	Eel, silver pike (daggetooth pike conger), sea water , raw	Pindanga(PH), Lươn(VN)	-	88	79.2	18.8	1.4	0p	0	1.3	63	179	-	-	0.8	-	-	185	3	185	0.11	0.04	2.70	0	

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins						
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VIc
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
G	Finfish, shellfish, other aquatic animals and products (continued)																								
AAG146	THG151	Eel, swamp, boiled	ปลาไหล, ต้ม(TH)	-	92	76.9	20.7	0.6	0.9	0	0.9	23	139	64	248	1.6	0.10	0.7	-	-	-	0.00	0.99	2.10	-
AAG286	THG150	Eel, swamp, raw	ปลาไหล, สด(TH)	-	86	78.9	19.7	0.8	0p	0	1.1	33	153	58	253	1.7	0.00	0.8	-	-	-	0.07	0.09	8.80	0
AAG45	THG117, MYG425	Featherback, grey (knifefish), raw	Belida(MY), ปลาสตาด (ปลาดอก), สด(TH)	-	94	77.1	19.6	1.5	0.5	0	1.3	77	176	19	245	0.3	-	-	87	0	87	0.00	0.03	3.70	5
AAG62	THG118	Featherback, grey (knifefish), roasted	ปลาสตาด, ย่าง(TH)	-	366	3.9	81.7	0.1	9.5	0	4.8	536	214	-	-	2.3	-	-	-	-	-	0.01	0.21	-	-
AAG208	THG23	Featherback, spotted (knifefish) flesh, cooked	ปลากราย, ชุด, ต้ม(TH)	-	82	79.6	16.0	0.8	2.7	0	0.9	58	108	147	118	0.6	0.10	0.1	-	-	-	0.00	0.29	0.70	-
AAG206	THG21	Featherback, spotted (knifefish), flesh, raw	ปลากราย, ชุด, ลับ(TH)	-	84	79.9	17.5	1.6	0.0	0	1.0	45	172	-	-	1.2	-	-	-	-	-	0.04	0.07	8.50	-
AAG207	THG22	Featherback, spotted (knifefish), raw	ปลากราย, หางเป็น, สด(TH)	-	78	80.3	16.7	1.2	0.2	0	1.6	75	156	193	219	1.2	0.00	0.1	-	-	-	0.01	0.32	1.30	-
AAG225	THG110	Fermented fish (Pla-ra), canned	ปลาทู, บรรจุกระป๋อง(TH)	-	(70)	80.8	5.4	3.4	(4.4)	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
AAG46	THG103	Fermented fish (Pla-ra), from markets	ปลาทู, จากท้องตลาด(TH)	-	102	53.4	13.3	3.9	3.2	1	25.7	1477	806	6267	195	5.5	-	-	3	-	3	0.01	0.13	0.80	-
AAG48	PHG161, MYG427 SGT88	Fish ball, uncooked	Bebola ikan(MY)	-	92	76.7	10.5	1.6	8.9	0	2.2	45	91	662	83	0.8	-	-	19	25	21	0.02	0.13	0.80	0
AAG52	THG1	Fish, maw, dried, raw	กระเพราปลา(TH)	-	279	23.5	64.1	0.5	4.4	0	7.5	31	-	-	-	-	-	-	-	-	-	-	-	-	
AAG166	PHG054, MYG437	Flatfish/Turbot, Indian (halibut), raw	Sabelah(MY), Kalangkaw(PH)	-	87	77.1	21.2	0.2	0.2	0	1.3	50	192	108	449	0.5	-	-	55	5	55	0.04	0.06	3.70	0
AAG55	THG26	Giant seaperch, boiled	ปลา hakkha, ต้ม(TH)	-	136	71.8	23.7	4.6	0p	0	1.0	48	179	67	207	0.4	0.10	0.0	-	-	-	0.06	0.09	2.50	-
AAG99	THG28, MYG455, MY G454	Giant seaperch, raw	Siakap(MY), ปลากะพงขาว, สด(TH)	-	111	75.5	20.5	3.2	0p	0	1.2	26	202	56	329	0.4	0.09	0.0	15	0	15	0.10	0.16	2.10	0
AAG56	THG27N	Giant seaperch, steamed	ปลา hakkha, นึ่ง(TH)	-	138	70.8	21.2	5.2	1.7	0	1.1	39	188	70	224	0.6	0.10	0.0	-	-	-	0.04	0.11	2.30	0
AAG57	PHG060, VNG337 MYG432	Goby, all species, raw	Ketutu(MY), Biyang puti(PH), Cá bống(VN)	-	80	79.6	18.5	0.6	0.1	0	1.2	40	162	56	362	0.7	-	-	56	13	57	0.02	0.14	1.80	2
AAG59	PHG062, MYG433	Gourami, giant, raw	Kalui(MY), Gurami(PH)	-	97	78.5	17.3	2.9	0.3	0	1.0	102	189	20	312	0.8	-	-	84	10	85	0.08	0.19	1.50	0
AAG138	THG123	Gourami, snake skin, dried	ปลาสัตอ, แห้ง(TH)	-	265	36.2	45.3	9.0	0.6	0	8.9	213	90	-	-	1.6	-	-	-	-	-	0.13	0.40	-	-
AAG60	THG124, MYG434	Gourami, snake skin, raw	Sepat siam(MY), ปลาสัตอ, สด(TH)	-	83	79.9	17.6	1.3	0.1	0	1.1	59	188	10	267	1.8	-	-	24	0	24	0.55	0.28	1.80	3
AAG179	THG120	Gourami, snake skin, salted, dried, boiled	ปลาสัตอ, มีเกลือ, แห้ง, ผัด(TH)	-	166	58.6	30.8	4.8	0p	0	6.0	156	166	1793	222	1.3	0.10	0.6	-	-	-	0.10	0.31	2.00	-
AAG180	THG121	Gourami, snake skin, salted, dried, fried	ปลาสัตอ, มีเกลือ, แห้ง, ทอด(TH)	-	347	25.7	44.1	19.0	0p	0	12.1	349	379	3220	470	2.9	0.20	0.5	-	-	-	0.12	0.43	3.00	-
AAG181	THG122	Gourami, snake skin, salted, dried, grilled	ปลาสัตอ, มีเกลือ, แห้ง, ย่าง(TH)	-	265	35.2	46.1	9.0	0p	0	12.1	238	325	3244	444	1.8	0.10	0.4	-	-	-	0.12	0.56	3.30	-
AAG269	THG35	Grouper, fried	ปลา grouper, ทอด(TH)	-	241	53.3	32.0	12.5	0.1	0	2.1	164	315	268	293	0.7	0.00	0.2	-	-	-	0.01	0.08	1.60	-
AAG268	THG37	Grouper, raw	ปลา grouper, สด(TH)	-	82	79.0	18.9	0.6	0.3	0	1.2	54	146	165	198	0.4	0.00	0.2	-	-	-	0.02	0.04	1.20	-

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOALDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
G	Finfish, shellfish, other aquatic animals and products (continued)																								
AAG270	THG36	Grouper, steamed	ปลาบ่าบี, นึ่ง(TH)	-	103	73.8	23.9	0.7	0.2	0	1.4	122	193	164	303	0.5	0.00	0.2	-	-	-	0.01	0.04	1.30	-
AAG71	THG165,PHG172	Jellyfish, dried	Dikya, tuyu(PH), แมงกะพรุน, แห้ง(TH)	-	53	72.2	7.1	0.3	5.5	0	14.9	124	40	-	-	1.9	-	-	0	0	0	0.01	0.03	T	0
AAG77	THG113, MYG447	Mackerel, Indian, raw	Kembong(MY), ปลาดิบ(ที่ น้ำ), สด(TH)	-	119	73.4	21.5	3.7	0p	0	1.5	48	263	59	370	1.8	-	-	24	4	24	0.09	0.14	4.70	0
AAG226	THG82	Mackerel, salted (Pla-too-khem)	ปลาดิบ, นึ่ง(TH)	-	145	54.8	24.4	4.2	2.3	0	14.3	131	50	-	-	-	-	-	-	-	-	0.10	0.24	-	-
AAG199	THG88	Mackerel, short-bodied, steamed, fried	ปลาดิบ, นึ่ง, ทอด(TH)	-	233	53.6	27.5	13.6	0.1	0	5.2	190	361	1018	726	1.6	0.20	1.1	-	-	-	0.18	0.25	5.90	-
AAG195	THG94	Mackerel, short-bodied, boiled	ปลาดิบ, ดิบ, หมก(TH)	-	145	69.4	23.4	5.6	0.2	0	1.4	93	267	101	216	1.1	0.10	0.7	-	-	-	0.08	0.14	5.10	-
AAG196	THG95	Mackerel, short-bodied, fried	ปลาดิบ, สด, หมก(TH)	-	236	56.2	28.0	13.6	0.3	0	1.9	114	343	132	333	2.4	0.20	1.0	-	-	-	0.13	0.22	1.70	-
AAG75	THG92	Mackerel, short-bodied, in oil, canned, drained	ปลาดิบ, ในน้ำมัน, บรรจุรูป, เผยวงน้ำ(TH)	-	138	68.3	23.0	4.9	0.5	0	3.3	506	-	417	-	2.0	-	-	-	-	-	-	-	-	-
AAG78	THG90	Mackerel, short-bodied, in tomato sauce and chilli, canned	ปลาดิบ, ในซอสมะเขือเทศ-พริก, บรรจุกระป๋อง(TH)	-	101	75.4	15.2	3.3	1.8	1.7	2.6	276	-	389	-	2.1	-	-	-	-	-	-	-	-	-
AAG76	THG89,PHG179	Mackerel, short-bodied, in tomato sauce, canned	ปลาดิบ, ซอสมะเขือเทศ, บรรจุกระป๋อง(TH)	-	98	76.3	15.2	3.6	0.5	1.6	2.8	343	261	347	-	2.0	-	-	8	-	8	0.03	0.26	5.20	4
AAG129	PHG070,THG93	Mackerel, short-bodied, raw	ปลาดิบ(TH), ปลาดิบ, ซอส(TH)	-	122	74.1	21.4	4.0	0p	0	1.5	62	250	97	331	1.4	0.20	0.6	102	61	107	0.11	0.24	7.10	5
AAG76	THG89,PHG179	Mackerel, short-bodied, in tomato sauce, canned	ปลาดิบ, ซอสมะเขือเทศ-พริก, บรรจุกระป๋อง(TH)	-	98	76.3	15.2	3.6	0.5	1.6	2.8	343	261	347	-	2.0	-	-	8	-	8	0.03	0.26	5.20	4
AAG198	THG87	Mackerel, short-bodied, steamed, boiled	ปลาดิบ, นึ่ง, ต้ม(TH)	-	120	70.4	21.9	2.7	1.9	0	3.1	193	254	568	444	1.4	0.10	0.9	-	-	-	0.13	0.18	4.70	-
AAG201	THG152	Mackerel, Spanish, fried	ปลาอินเดีย, ชิ้น, หมก(TH)	-	190	61.2	28.2	8.5	0.2	0.0	1.9	27	312	161	390	0.5	0.10	0.2	-	-	-	0.04	0.23	3.20	-
AAG141	THG153,MYG448,P, HG072	Mackerel, Spanish, sliced, raw	Tenggiri(MY), Tangig(PH), ปลาอินเดีย, ชิ้น, สด(TH)	-	103	76.3	19.4	2.8	0.0	0	1.5	17	230	109	228	0.8	0.00	0.4	134	45	138	0.03	0.10	3.30	0
AAG262	THG19	Mullet, bluespot gray, raw	ปลากะรังบอก (ปีกเหตือล), สด(TH)	-	117	76.3	24.7	2.0	0p	0	1.7	94	217	-	-	4.3	-	-	20	-	20	0.04	0.19	4.10	-
AAG255	THG177	Mussel, green, raw	หอยเม่นญี่ปุ่น(TH)	-	53	85.4	9.3	0.9	2.0	0	2.4	25	178	211	72	10.3	0.20	1.0	-	-	-	0.01	0.26	1.90	11
AAG221	THG97	Nile tilapia, boiled	ปลา尼ล, ต้ม(TH)	-	123	73.4	21.4	4.2	0p	0	1.1	190	173	74	344	1.0	0.00	0.2	-	-	-	0.04	0.22	2.30	-
AAG222	THG99	Nile tilapia, fried	ปลา尼ล, หมก(TH)	-	44.7	30.9	21.8	0.3	0	2.3	264	328	146	600	2.1	0.10	0.4	-	-	-	0.04	0.42	2.50	-	
AAG95	PHG089,THG174, MYG450	Oyster, raw	Tiram(MY), Talabas(PH), หอยนางรม(TH)	-	58	86.4	7.5	1.9	2.6	0	1.6	110	102	40	22	5.2	6.39	7.1	96	15	97	0.23	0.21	2.20	7
AAG98	PHG035, MYG453, THG140	Perch, climbing	Puyu/Betok(MY), Marliniko(PH), ปลาน้ำตกไทย, สด(TH)	-	145	76.7	17.9	8.2	0p	0	1.2	110	184	22	231	1.2	-	-	38	0	38	0.03	0.39	2.90	1
AAG9	THG43,MYT708	Pomfret, black, fried	ikan bawal hitam goreng(MY), ปลากระเบนดำ, หมก(TH)	-	259	49.8	31.8	14.3	0.8	0	3.3	114	297	157	311	1.4	0.09	0.7	54	0	54	0.28	0.28	0.30	0

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOALDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
G	Finfish, shellfish, other aquatic animals and products (continued)																									
AAG102	THG44,PHG094,M YG456	Pomfret, black, raw	บัวลิ่ม(MY), Pampano(PH), ปลาจะงะเนื้อตื้น, สด(TH)	-	102	76.3	19.8	2.5	0.1	0	1.3	43	204	94	196	0.6	0.00	0.3	97	0	97	0.23	0.16	3.80	0	
AAG10	THG45	Pomfret, black, steamed	ปลาจะงะเนื้อตื้น, นึ่ง(TH)	-	160	67.2	22.8	6.9	1.6	0	1.5	58	208	105	214	0.7	0.10	0.3	-	-	-	0.24	0.15	1.60	-	
AAG193	THG40	Pomfret, silver, fried	ปลาจะงะเนื้อขาว, ทอด(TH)	-	335	44.4	32.7	22.7	0p	0	1.8	32	325	206	277	0.7	0.10	0.9	-	-	-	0.17	0.12	3.40	-	
AAG194	THG41	Pomfret, silver, steamed	ปลาจะงะเนื้อขาว, นึ่ง(TH)	-	158	70.3	22.9	7.4	0p	0	1.0	23	161	301	173	0.5	0.10	0.2	-	-	-	0.10	0.08	2.50	-	
AAG103	THG42,MYG458	Pomfret, silver/white, raw	บัวลิ่ม(MY), ปลาจะงะเนื้อขาว, สด(TH)	-	126	75.2	19.4	5.4	0p	0	1.1	15	185	145	263	0.6	0.10	0.3	27	0	27	0.10	0.09	2.00	1	
AAG283	THG4	Prawn, fresh water, giant, raw	กุ้งก้ามภูมิ, สด(TH)	-	108	76.3	17.9	3.7	0.8	0	1.3	17	141	-	-	-	-	-	-	-	-	-	0.09	1.90	1	
AAG105	PHG115,THG12	Prawn, fresh water, raw	Uhang(PH), กุ้งเผาเนื้อสด, สด(TH)	-	98	75.5	17.5	1.7	3.1	0	2.2	44	212	-	-	1.7	-	-	18	4	18	0.04	0.39	3.60	0	
AAG106	THG5	Prawn, giant tiger, headless, frozen	กุ้งตุ้ยดำ, แม่น้ำชี, เอราวัณ, นึ่ง(TH)	-	88	77.5	20.0	0.9	0p	0	1.8	209	-	114	-	0.5	-	-	-	-	-	-	-	-	-	
AAG282	THG7	Prawn, green tiger, raw	กุ้งตุ้ยเขียว(กุ้งหงส์), สด(TH)	-	79.6	-	-	-	-	-	-	65	280	181	325	2.2	0.70	1.4	-	-	-	-	0.10	5.00	0	
AAG232	THG136	Queenfish, Slender, dried	ปลากระเบน, แม่น้ำ(TH)	-	176	43.7	37.8	2.8	0p	0	16.0	253	407	-	-	9.0	-	-	-	-	-	-	0.13	0.14	11.50	-
AAG3	THG173	Radiated scallop	หอยเชลล์ผ่าหัว(TH)	-	106	72.8	22.3	0.4	3.3	0	1.2	14	138	-	-	0.6	-	-	-	-	-	-	0.05	0.02	-	-
AAG113	THG62	Sardine, in oil, canned, drained	ปลา沙丁, ในน้ำมัน, บรรจุขวด, เผาเนื้อ(TH)	-	133	69.8	22.2	4.9	0.1	0	3.0	518	-	336	-	1.9	-	-	5	-	5	-	-	-	-	
AAG116	THG59	Sardine, in tomato sauce and chilli, canned	ปลา沙丁, ในซอสมะเขือเทศและพริก, เผาเนื้อ(TH)	-	69	80.5	10.6	1.3	2.7	2	2.9	352	-	521	-	1.7	-	-	2	-	2	-	-	-	-	
AAG115	THG60,PHG203	Sardine, in tomato sauce, canned	Sardinias, sa tomato sce, de lata(PH), ปลา沙丁, ในซอสมะเขือเทศ, บรรจุขวด(TH)	-	93	76.2	12.3	2.2	5.6	1	2.7	278	183	412	-	2.1	-	-	8	42	12	0.02	0.19	4.30	0	
AAG112	THG63	Sardine, w/ lemon, in oil, canned, drained	ปลา沙丁ปีกลิ้น, เผาเนื้อ(TH)	-	(152)	66.7	23.0	6.7	(0p)	-	3.7	495	-	513	-	2.8	-	-	3	-	3	-	-	-	-	
AAG117	PHG104, MYG473	Scad, big-eyed/caranx, raw	Pelata(MY), Matang baka(PH)	-	102	76.2	21.2	1.9	0p	0	1.5	62	224	55	303	0.9	-	-	78	26	80	0.10	0.22	6.10	0	
AAG118	MYG471, THG149	Scad, hardtail (torpedo), dried	Cincaru, kering(MY), ปลา沙丁แห้ง, แห้ง(TH)	-	166	46.3	37.4	1.8	0p	0	15.1	116	210	5924	228	4.7	-	-	71	0	71	0.06	0.17	10.40	0	
AAG119	THG147, MYG470	Scad, hardtail (torpedo), raw	Cincaru(MY), ปลา沙丁ซีร์ฟ (แห้งให้แห้งทั่วหมด), สด(TH)	-	93	76.4	21.3	0.8	0.2	0	1.3	58	216	67	246	2.3	-	-	27	0	27	0.05	0.23	3.40	0	
AAG284	PHG108, MYG475	Sea cucumber/sea slug, cleaned, raw	Trepang, dibersih(MY), Balatan(PH)	-	21	94.5	4.8	0.2	0.1	0	0.4	76	5	20	25	0.6	-	-	3	0	3	0.00	0.00	0.20	0	
AAG228	THG163	Sea horse	ม้าน้ำ(TH)	-	194	24.7	28.5	0.4	19.2	0	27.2	563	-	-	-	-	-	-	-	-	-	-	-	-		
AAG124	THG188	Shark fins, dried	หอยดาม, แห้ง(TH)	-	282	24.4	61.6	2.3	3.8	0	7.9	70	-	-	-	-	-	-	-	-	-	-	0.08	0.90	0	
AAG127	VNG342,THG100	Sheat-fish, raw	ปลาเนื้ออ่อน, สด(TH), Cá trê(VN)	-	106	75.6	16.3	2.5	4.5	0	1.1	26	54	-	-	0.9	-	-	-	-	-	0.01	0.06	1.80	0p	

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C					
G	Finfish, shellfish, other aquatic animals and products (continued)																									
AAG132	IDG48,VNG363	Shrimp, dried	Tôm khô(VN)	-	316	13.8	69.1	4.0	1.0	0	12.1	770	517	547	365	5.3	2.40	3.2	40	-	-	-	-	0.10	-	
AAG237	THG14	Shrimp, salted, dried	กุ้ง, แมลง, ตัวเล็ก(TH)	-	263	16.1	46.4	2.9	12.8	0	21.8	2305	625	-	-	20.0	-	-	-	-	-	-	0.05	0.20	5.70	-
AAG34	THG80	Silver-barb, common, raw	ปลากะพี้ญขาว, สด(TH)	-	124	74.0	21.1	4.4	0p	0	1.3	32	172	90	202	0.6	0.10	0.1	-	-	-	-	0.02	0.06	3.10	-
AAG176	THG78	Silver-barb, common, boiled	ปลากะพี้ญขาว, ด้อม(TH)	-	177	68.2	19.3	10.7	0.8	0	1.0	37	179	64	188	0.6	0.10	0.2	-	-	-	-	0.00	0.14	2.30	-
AAG177	THG79	Silver-barb, common, fried	ปลากะพี้ญขาว, ทอด(TH)	-	311	49.3	25.5	22.8	0.9	0	1.5	78	257	106	313	1.7	0.10	0.4	-	-	-	-	0.04	0.14	3.40	-
AAG135	PHG126, MYG459	Slipmouth, ponyfish, raw	Kikek gedebang(MY), Sapsap(PH)	-	84	79.2	18.8	1.0	0p	0	1.3	56	181	99	227	0.5	-	-	29	18	31	0.02	0.08	2.50	0	
AAG53	VNG351,VNG353	Snail, fresh water, all species	ốc bùn, ốc nhồi(VN)	-	84	77.2	11.5	0.7	7.9	0	2.7	1334	128	-	-	-	-	-	-	-	-	-	0.01	0.06	1.00	-
AAG253	THG168	Snail, pond, river	หอยเชลล์(TH)	-	74	79.3	12.1	0.7	4.9	0	3.0	-	114	-	-	8.7	-	-	-	-	-	-	0.01	0.60	3.40	0
AAG92	THG51	Snakehead, striped, dried	ปลากะอ้อน, แห้ง(TH)	-	249	38.1	45.7	7.0	0.8	0	8.4	194	184	-	-	3.3	-	-	-	-	-	-	0.03	0.06	-	-
AAG184	THG30	Snapper, red, Malabar, boiled	ปลากะเพงดองสันหนาป่าນ, ด้อม(TH)	-	104	74.2	23.9	0.9	0.0	0	1.0	55	178	114	195	0.4	0.00	1.2	-	-	-	-	0.02	0.18	3.20	-
AAG185	THG31	Snapper, red, Malabar, fried	ปลากะเพงดองสันหนาป่าນ, ทอด(TH)	-	215	58.3	29.3	10.9	0p	0	1.6	101	272	189	321	0.5	0.00	0.2	-	-	-	-	0.02	0.07	3.90	-
AAG183	PHG098, THG33	Snapper, red, Malabar, raw	ปลากะเพงดองสันหนาป่าນ, สด(TH)	-	72	81.5	16.9	0.5	0.0	0	1.1	31	144	104	182	0.6	0.00	0.1	28	T	28	0.04	0.08	3.00	0	
AAG186	THG32	Snapper, red, Malabar, steamed	ปลากะเพงดองสันหนาป่าນ, นึ่ง(TH)	-	98	75.3	22.9	0.7	0p	0	1.2	39	171	107	230	0.3	0.00	0.2	-	-	-	-	0.03	0.07	-	-
AAG140	THG34,MYG489	Snapper, russell, raw	Tando(MY), ปลากะเพงป่าบ้านช้างลาย, สด(TH)	-	82	78.5	19.5	0.3	0.2	0	1.5	46	211	79	300	0.5	-	-	4	0	4	0.04	0.09	2.10	0	
AAG204	THG146	Squid, splendid, dried	ปลาหมึกหัวย, แห้ง(TH)	-	252	36.2	47.9	5.6	2.5	0	7.8	24	-	-	-	-	-	-	-	-	-	-	-	-	-	
AAG202	THG143	Squid, splendid, raw	ปลาหมึกหัวย, สด(TH)	-	68	82.5	15.4	0.4	0.6	0	1.1	8	163	254	107	2.1	0.20	1.1	-	-	-	-	-	-	-	
AAG203	THG142	Squid, splendid, salted and dried	ปลาหมึกหัวย, แห้ง(เต้มผัด) (TH)	-	299	24.1	62.4	3.8	3.7	0	6.0	78	282	-	-	1.6	-	-	-	-	-	-	0.04	0.12	-	-
AAG205	THG145	Squid, splendid, skin removed, whole cleaned, frozen	ปลาหมึกหัวย, ออกหนัง (ตีหัว, แข็งแข็ง)(TH)	-	59	85.6	11.8	1.0	0.7	0	0.9	12	-	238	-	0.5	-	-	-	-	-	-	-	-	-	
AAG143	MYG491, PHG133	Sting ray, blue spotted, raw	Pari nyiru(MY), Dahonan(PH)	-	88	78.1	21.3	0.3	0p	0	1.4	18	103	80	220	0.6	-	-	11	2	11	0.04	0.06	2.70	0	
AAG151	PHG142,PHG143, PHG144, MYG494	Threadfin, all species, raw	Senangin(MY), Mamale(PH)	-	108	77.0	20.2	3.0	0p	0	1.3	32	197	29	226	0.5	-	-	10	1	10	0.10	0.07	3.50	1	
AAG150	MYG493	Threadfin, dried	Kurau, kereng(MY)	-	178	44.8	40.1	1.9	0p	0	15.3	112	166	3158	122	1.0	-	-	44	0	44	0.08	0.15	3.90	0	
AAG15	MYG400,MYG401, MYG402,PHG145, THG98	Tilapia, all species, raw	Tilapia, Tilapia merah, Kensi(MY), ปลากะเพง, สด(TH)	-	94	77.7	18.4	1.9	0.8	0	1.2	46	194	56	292	0.8	0.00	0.2	31	3	31	0.03	0.10	2.20	0	
AAG6	THG129	Trevally, black-banded, fried	ปลาเข้าฟี, ทอด(TH)	-	241	56.8	26.0	15.0	0.4	0	1.8	91	256	249	362	0.8	0.10	0.5	-	-	-	-	0.06	0.16	4.70	-
AAG7	THG131	Trevally, black-banded, grilled	ปลาเข้าฟี, เม็ด(TH)	-	146	70.4	22.1	6.4	0p	0	1.2	62	201	206	276	0.5	0.00	0.4	-	-	-	-	0.06	0.12	4.70	-
AAG4	THG132	Trevally, black-banded, raw	ปลาเข้าฟี, สด(TH)	-	134	71.9	18.6	5.3	2.9	0	1.3	42	108	284	274	0.6	0.10	0.3	-	-	-	-	0.04	0.11	5.70	-

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
G	Finfish, shellfish, other aquatic animals and products (continued)				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
AAG8	THG130	Trevally, black-banded, steamed	ปลาสีดำ, นึ่ง(TH)	-	163	68.1	21.2	8.6	0.3	0	1.8	62	173	344	264	0.8	0.10	0.7	-	-	-	0.05	0.13	6.70	-	
AAG238	THG83	Tuna, Skipjack or Yellow Fin, canned in brine, drained	ปลาทูน่า, บรรจุน้ำเค็ม, เผาแห้งแล้ว(TH)	-	105	73.1	23.9	0.7	0.8	0.0	1.5	8	-	269	-	1.1	-	-	4	0p	4	-	-	-	-	
AAG239	THG85	Tuna, Skipjack or Yellow Fin, canned in oil, drained	ปลาทูน่า, บรรจุน้ำมัน, เผาแห้งแล้ว(TH)	-	176	70.1	22.4	9.6	0p	0	1.6	10	-	276	-	1.2	-	-	-	-	-	-	-	-	-	
AAG241	THG84	Tuna, Skipjack or Yellow Fin, canned in water, drained	ปลาทูน่า, บรรจุน้ำ, เผาแห้งแล้ว(TH)	-	113	73.0	26.1	0.9	0p	0	0.9	10	-	95	-	1.1	-	-	-	-	-	-	-	-	0	
AAG171	THG185	Wedge shell, bean clam (Donax), fermented	หอยเชือบ, ดอง(TH)	-	(149)	43.9	10.6	0.5	(25.5)	-	19.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AAG172	PHG148, MYG500	Whiting, common/silver, raw	Bulus-bulus/Puntung damar(MY), Asohos(PH)	-	89	77.5	20.8	0.6	0p	0	1.4	86	211	80	358	0.6	-	-	24	0	24	0.05	0.05	3.70	0	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	mg	
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
H	Eggs and Products			-																						
AAH2	PHH015, MYH383	Egg, century	Pei-tan(MY), Century egg(PH)	-	190	63.1	13.2	10.5	10.7	0	2.5	63	170	345	90	4.7	-	-	146	279	169	0.02	0.40	0.40	0	
AAH3 (N)	PHH011, THH17	Egg, duck, boiled	Itlog, pugo, nilaga(PH)	-	157	73.2	13.2	11.3	0.7	0	1.7	78	195	128	139	2.2	0.08	1.1	181	25	183	0.22	0.45	0.12	0	
AAH7	MYH386, THH15, PHH021	Egg, duck, salted	Telur asin, sebijji(MY), Itlog, pato, maalat(PH), เต่าเป็ด, เต่าเผือก(TH)	-	190	64.6	13.9	12.5	5.4	0	3.6	97	198	510	148	2.3	-	-	208	14	209	0.25	1.04	0.60	0	
AAH8	PHH006, THH12	Egg, duck, white	Itlog, pato, puti(PH), ไข่เป็ด, ไข่ขาว(TH)	-	52	86.5	12.8	(0.1)	0.0	0	0.6	10	21	207	169	0.1	0.15	0.1	19	0	19	0.01	0.02	0.10	0	
AAH9	THH14, VNH372, M YH384, PHH007	Egg, duck, whole	Telur itik, sebijji(MY), Itlog, pato, buo(PH), ไข่เป็ด, ไข่ต้ม(TH), Trứng vịt(VN)	-	183	70.1	12.6	13.6	2.5	0	1.2	62	206	145	113	3.2	0.18	1.0	292	436	328	0.23	0.38	0.10	0	
AAH10	PHH008, MYH385 THH13	Egg, duck, yolk	Telur itik, kuning telur(MY), Itlog, pato, pula(PH), ไข่เป็ด, ไข่แดง(TH)	-	364	48.6	14.7	32.9	2.3	0	1.5	146	415	103	88	3.9	-	2.4	852	724	912	0.72	0.66	1.40	0	
AAH11	THH4	Egg, hen, omelet	ไข่ไก่, เตี๋ยว(TH)	-	259	64.3	7.0	24.3	3.1	0	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AAH13	THH6	Egg, hen, steamed	ไข่ไก่, ตุ๋น(TH)	-	75	84.7	4.9	4.8	3.1	0	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AAH14	PHH002, MYH390 THH1, VNH371	Egg, hen, white	Telur ayam, putih telur(MY), Itlog, manok, puti(PH), ไข่ไก่, ไข่ขาว(TH), Lòng trắng trứng gà(VN)	-	52	86.7	10.9	0.4	1.3	0	0.7	10	14	179	151	0.4	0.03	0.4	6	0	6	0.01	0.28	0.40	0	
AAH12	VNH369, MYH388 PHH003, THH3	Egg, hen, whole	Telur ayam, sebijji(MY), Itlog, manok, buo(PH), ไข่ไก่, ไข่ต้ม(TH), Trứng gà toan phần(VN)	-	159	72.9	13.2	11.1	1.5	0	1.3	56	200	150	125	2.8	0.17	1.1	323	23	325	0.13	0.35	0.20	0	
AAH15 (N)	PHH004, THH18	Egg, hen, whole, boiled	Itlog, manok, buo, nilaga(PH)	-	152	74.2	13.4	10.4	1.2	0	0.9	60	189	134	125	2.6	0.03	1.1	160	15	161	0.08	0.40	0.09	0	
AAH16	MYH389, THH2, VNH370, PHH005	Egg, hen, yolk	Telur ayam, kuning telur(MY), Itlog, manok, pula(PH), ไข่ไก่, ไข่แดง(TH), Lòng đỏ trứng gà(VN)	-	332	52.0	14.8	29.5	1.9	0	1.8	133	482	106	102	6.5	0.19	2.4	620	60	625	0.31	0.48	0.20	0	
AAH17	THH9	Egg, quail, in brine	ไข่ไก่กระ卵, ในน้ำเกลือ(TH)	-	173	71.0	13.0	12.4	2.3	0	1.3	47	-	233	-	2.4	-	-	179	-	179	-	-	-	-	
AAH19	MYH391, PHH010 THH8	Egg, quail, whole, boiled	Telur puyuh, sebijji(MY), Itlog, pugo(PH), ไข่ไก่กระ卵, ไข่เม็ด(TH)	-	168	72.6	12.4	12.4	1.6	0	1.0	68	203	113	133	2.9	-	-	217	54	222	0.12	0.78	0.50	0	
AAH23	PHH013, MYH392 THH7	Egg, turtle, whole	Telur penyu, sebijji(MY), Itlog, pawikan, buo(PH), ไข่เต่าเหลืองตัวตื้น, ไข่เต่ามะเขือเทศ(TH)	-	128	78.0	11.9	8.9	0.1	0	1.1	75	205	124	153	1.6	-	-	19	4	19	0.11	0.40	0.00	0	
AAH24	THH10	Roe, bluespot grey mullet, salted	ไข่ปลากระบง, เต็ม(TH)	-	480	22.2	41.7	34.8	0p	0	3.8	19	564	-	-	1.3	-	-	-	-	-	-	0.48	1.08	2.60	-
AAH26	PHG051, MYG429	Roe, fish, raw	Telur ikan kerapu(MY), Isida, itlog(PH)	-	134	72.5	19.9	5.7	0.7	0	1.2	35	255	133	137	1.5	-	-	86	13	87	0.08	0.03	0.70	0	

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAVLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VIcT	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
J	Milk and products			-																						
AAJ3	PHJ001, MYJ508, M YJ509, THJ69	Cheese, processed, cheddar	Keju, dalam bukungsan plastik(MY), ชีส, เชดดาร์(TH)	-	323	42.0	21.7	23.0	7.3	0	6.0	563	517	1330	78	0.7	-	-	82	121	92	0.02	0.35	0.10	0	
AAJ5	VNJ385, PHJ007	Cream milk	Krema(PH), Mô sữa 30% lipid(VN)	-	267	66.4	2.4	27.0	3.6	0	0.6	88	66	-	-	0.2	-	-	124	233	143	0.05	0.24	0.10	0	
AAJ11	VNJ379, PHJ013	Milk, buffalo, fluid, full cream	Gatas, kalabaw(PH), Sữa trâu tươi(VN)	-	131	78.6	6.2	9.8	4.6	0	0.8	189	117	-	-	0.2	-	-	54	21	56	0.04	0.06	1.30	0	
AAJ12	VNJ377, PHJ014, M YJ513	Milk, cow, fresh	Susu lembu segar(MY), Gatas, baka(PH), Sữa bò tươi(VN)	-	68	87.4	3.5	4.1	4.2	0	0.8	122	90	13	104	0.3	-	-	34	13	35	0.04	0.19	0.20	1	
AAJ44	THJ9	Milk, cultured, yakult, per 100 ml	นมเปียร์, ชาคูลท์(TH)	1.065	83	85.5	1.5	0.1	19.0	0	0.4	51	47	-	-	0.6	-	-	-	-	-	-	-	0.21	0.40	1
AAJ14	MYJ514, PHJ016	Milk, evaporated, filled	Susu sejat(MY), Gatas, evaporaða, filled(PH)	-	134	72.9	7.7	6.7	10.8	0	1.9	320	206	129	4	0.2	-	-	158	11	159	0.06	0.09	T	0	
AAJ15	PHJ025, MYJ516, T HJ4	Milk, filled, condensed, sweetened, w/ palm oil and butter	Susu isian pekat manis(MY), Gatas, kondensada, filled(PH), นมข้น, แม่เหล็กข้น, สารบันดาลผงนมข้น, หวาน(TH)	-	339	25.4	8.5	9.5	54.8	0	1.8	292	227	106	268	0.3	-	-	280	0	280	0.59	0.44	0.20	1	
AAJ16	PHJ017, VNJ378	Milk, goat, fluid, full cream	Gatas, kambing(PH), Sữa dê tươi(VN)	-	71	86.7	3.6	4.1	4.8	0	0.8	136	111	-	-	0.4	-	-	35	0	35	0.04	0.42	0.30	2	
AAJ40	THJ67	Milk, human, 1 month lactation, per 100 ml	นมคน 1 เดือน(TH)	1.014	53	90.5	0.9	2.0	7.8	0	0.3	33	12	-	-	0.1	-	-	-	-	-	-	0.01	0.03	0.20	-
AAJ17	THJ6	Milk, human, 3 month lactation, per 100 ml	นมคน 3 เดือน(TH)	1.013	56	90.1	0.8	2.5	7.7	0	0.3	26	11	-	-	0.3	-	-	-	-	-	-	0.01	0.02	0.20	0
AAJ41	THJ68	Milk, human, 6 month lactation, per 100 ml	นมคน 6 เดือน(TH)	1.016	56	90.5	0.8	2.5	7.6	0	0.2	23	10	-	-	0.1	-	-	-	-	-	-	0.01	0.02	0.20	-
AAJ19	THJ40	Milk, pasteurised, chocolate flavour, per 100 ml	นมสด, ชาชากาแฟช็อกโกแลต(TH)	1.047	83	87.0	3.0	3.2	10.6	0	0.9	101	89	47	-	0.1	-	-	35	-	35	0.03	0.19	-	-	
AAJ18	THJ38	Milk, pasteurised, coffee flavour, per 100 ml	นมสด, ชาชากาแฟช็อกโกแลต(TH)	1.034	70	88.3	2.7	2.5	9.1	0	0.8	98	-	48	-	0.1	-	-	36	-	36	0.03	0.20	-	-	
AAJ20	THJ39	Milk, pasteurised, natural, per 100 ml	นมสด, ชาชากาแฟช็อกโกแลต(TH)	1.022	62	90.6	3.2	3.7	3.9	0	0.8	102	81	45	-	0.1	-	-	35	-	35	0.04	0.21	-	-	
AAJ21	THJ42	Milk, pasteurised, strawberry flavour, per 100 ml	นมสด, ชาชากาแฟช็อกโกแลต(TH)	1.035	76	87.9	2.9	3.2	8.8	0	0.7	103	-	53	-	0.2	-	-	26	-	26	0.04	0.21	-	-	
AAJ22	THJ7, PHJ020, MYJ518, VNJ382	Milk, powder, full cream	Susu tepung penutup krim(MY), Gatas, pulbos, full cream(PH), นมผงfull cream(VN), Sữa bột toàn phần(VN)	-	495	2.9	25.7	25.7	40.3	0	5.4	810	707	320	844	3.0	0.02	4.1	516	119	526	0.50	1.40	1.60	26	
AAJ25	PHJ021, MYJ517	Milk, powder, infant formula	Susu tepung bayi(MY), Gatas, pulbos, infant formula(PH)	-	500	2.6	16.6	24.9	52.4	0.0	3.5	566	349	188	486	5.9	-	-	311	83	318	0.56	1.31	0.70	-	
AAJ43	THJ66	Milk, powder, reduced fat	นมผงพัร์อัฟเนย์(TH)	-	405	2.9	30.4	11.6	44.8	0	10.3	1734	828	338	1322	15.3	0.02	3.3	1450	-	1450	0.42	1.79	1.00	121	
AAJ45	THJ50	Milk, sterilised, per 100 ml	นมสด, ชาชากาแฟช็อกโกแลต(TH)	1.015	61	89.7	3.3	3.4	4.2	0	0.9	114	82	52	-	0.2	-	-	35	-	35	0.03	0.11	T	4	
AAJ31	THJ5, VNJ384, MYJ521	Milk, sweetened, condensed	Susu pekat manis(MY), นมข้น, หวาน(TH), Sữa đặc có đường(VN)	-	337	25.1	8.2	8.9	56.0	0	1.8	302	213	120	6	0.4	-	-	223	46	227	0.32	0.43	0.40	Op	
AAJ33	PHQ004, MYJ522	Milk, UHT, chocolate flavour	Susu UHT, berperisa coklat(MY)	1.000	73	83.6	3.3	2.1	10.3	0	0.7	120	87	54	126	0.3	-	-	13	5	13	0.03	0.36	0.20	1	
AAJ46	THJ46	Milk, UHT, chocolate flavour, per 100 ml	นมสด, ชาชากาแฟช็อกโกแลต(TH)	1.053	79	88.0	3.2	2.6	10.6	0	0.9	121	89	48	154	0.2	-	-	18	-	18	0.02	0.14	0.10	0	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
J	Milk and products (continued)																								
AAJ47	THJ45	Milk, UHT, full cream, per 100 ml	นมสด, ยูเอชที, ชาเขียว(TH)	1.022	67	89.3	3.3	3.8	4.9	0	0.9	113	90	51	123	0.1	-	-	29	-	29	0.04	0.20	-	-
AAJ32	THJ43	Milk, whole, pasteurised, sweetened, per 100 ml	นมสด, ชาสูตรไวรัส, รสหวาน(TH)	1.042	77	88.4	3.2	3.3	8.5	0	0.8	96	81	48	-	0.1	-	-	33	-	33	0.03	0.40	0.50	-
AAJ35	PHJ026,VNJ380	Yoghurt	绍兴 chua(VN)	-	76	85.1	4.8	4.1	5.0	0	1.0	150	110	-	-	0.1	-	-	77	36	80	0.06	0.36	0.70	0
AAJ36	MYJ525,THJ63	Yoghurt, cream, flavour	绍兴布丁, รสผลไม้(MY), นมสด, ชาในร่วม(TH)	-	(182)	67.6	3.5	11.3	(16.6)	-	1.0	140	113	69	116	0.2	-	-	38	24	40	0.04	0.21	0.10	0
AAJ37	THJ25	Yoghurt, drinking, pasteurised, different flavours (except natural flavoured), average, per 100 ml	นมเปียร์โซ, พัฟฟ่อนดีม, ชาตุเรืองไวรัส, รสธรรมชาติ, เจลลี่(TH)	1.050	86	85.0	2.0	1.6	16.0	0	0.4	53	45	35	-	0.2	-	-	14	-	14	0.02	0.09	-	-
AAJ38	THJ26	Yoghurt, drinking, pasteurised, natural flavoured, per 100 ml	นมเปียร์โซ, พัฟฟ่อนดีม, ชาตุเรืองไวรัส, รสธรรมชาติ(TH)	1.034	82	84.9	1.5	2.0	14.6	0	0.4	51	54	-	-	-	-	-	15	-	15	-	0.09	-	-

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins						
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOALDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF		
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg		
Density					Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
K	Fats and oils																								
AAK23	THK5	Butter, pure creamery, salted	เนยสด, ชนิดเค็ม(TH), Bd(VN)	-	758	14.0	0.4	84.0	0p	0	2.2	15	-	563	-	0.2	-	-	415	-	415	0p	0p	-	0
AAK1	VNK250, THK7	Butter, unsalted	เนยสด, ชนิดเค็ม(TH), Bd(VN)	-	760	15.6	0.7	84.1	0p	0	0.1	21	-	11	-	0.2	-	-	685	-	685	0p	0.12	1.00	0
AAK3	PHK002, MYC117	Coconut cream	Santan kelapa(MY), Nyog, Kakang gata(PH)	-	(310)	61.0	4.2	31.6	(2.2)	-	1.0	12	103	16	445	1.5	-	-	0	0	0	0.06	0.01	0.40	0
AAK4	THK2	Coconut milk, canned, per 100 ml	กะทิ, กระป๋อง(TH)	0.990	184	75.9	1.9	19.0	1.4	0.1	0.7	5	-	19	-	0.6	-	-	-	-	-	-	-	0	
AAK5	MYC118, THK1	Coconut milk, powder, instant	Serbuk santan kelapa(MY), กะทิ, ผง(TH)	-	668	2.3	8.9	57.2	28.9	0.9	1.8	19	184	100	531	1.9	-	-	0	0	0	0.08	0.04	0.20	1
AAK6	PHC006, MYC115 VNC54	Coconut, mature kernel	isi kelapa tua(MY), Niyog, magulung(PH), Cùi dừa già(VN)	-	362	49.3	5.2	35.3	2.7	6.5	1.0	24	117	3	281	10.7	-	-	0	0	0	0.06	0.01	0.20	2
AAK9	PHK007, THK14	Mayonnaise	มายอยaise(TH)	-	712	16.2	1.8	76.7	3.6	0	1.7	19	22	515	-	0.6	-	-	61	T	61	0.02	0.02	-	0p
AAK24	THK19	Oil, corn	น้ำมันพืชเมล็ด胚芽米 100%(TH)	0.896	833	-	0p	92.6	0p	0	-	-	-	-	-	-	-	-	-	-	-	0p	0p	-	0
AAK28	THK21	Oil, palm, per 100 ml	น้ำมันปาล์มเมล็ด胚芽米 100%(TH)	0.892	791	-	0p	87.9	0p	0	-	-	-	-	-	-	-	-	-	-	-	0p	0p	-	0
AAK29	THK20	Oil, soybean, per 100 ml	น้ำมันถั่วเหลืองเมล็ด胚芽米 100%(TH)	0.887	817	-	0p	90.8	0p	0	-	-	-	-	-	-	-	-	-	-	-	0p	0p	-	0
AAK25	THK22	Oil, sunflower	น้ำมันเมล็ดทานตะวันเมล็ด胚芽米 100%(TH)	0.900	856	-	0p	95.1	0p	0	-	-	-	-	-	-	-	-	-	-	-	0p	0p	-	0
AAK30	THK3	Sandwich spread	แซนวิชสเปรย์(TH)	-	481	32.0	1.1	43.8	20.6	tr	2.5	12	-	605	-	0.7	-	-	58	-	58	0.10	0.04	-	0

M	Sugar, syrup and confectionery																								
AAM14	THT150	Jelly, w/ coconut cream	น้ำเชื่อมพืช(TH)	-	(128)	72.8	0.6	5.3	(19.5)	-	1.8	1	18	-	-	-	-	-	0	-	0	-	-	-	
AAM9	MYM332, PHM021	Honey	Madu(MY), Pulot-pukuytan(PH)	-	285	28.6	0.2	0.0	71.0	0	0.2	20	9	5	24	2.0	-	-	0	0	0	0.00	0.04	0.10	0
AAM20	THT151	Toddy palm, in heavy syrup	สาหร่าย, เจือม(TH)	-	(243)	38.8	1.5	0.1	(59.1)	-	0.5	-	-	-	-	-	-	-	0	-	0	-	-	-	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins						
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF		
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg		
				Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
N	Spices and condiments			-	(415)	8.0	15.2	13.4	(58.4)	-	5.0	76	541	-	-	6.7	-	-	0	8290	691	0.72	-	-	11
AAN3	THN24	Bird chilli, small, dried	พริกเผาแห้ง(TH)	-	56	81.2	3.7	1.1	2.9	9.9	1.2	24	95	22	461	1.2	0.19	0.4	0	1106	92	0.22	0.06	1.10	52
AAN4	THN23,MYD153	Bird chilli, small, fresh	Chili pad(MY), พริกเผา(TH)	-	(62)	63.8	7.9	1.2	(4.8)	-	22.3	42	31	-	-	4.3	-	-	9	-	9	-	0.17	-	-
AAN8	THN70	Budu, Muslim fish sauce	น้ำมูก(TH)	-	(87)	62.0	2.8	0.1	(18.8)	-	16.3	-	-	6987	-	-	-	-	0	-	-	-	0.15	0.90	21
AAN76	THN19	Cabbage, fermented, dried (Tang-chai)	ต้มถ่าย(TH)	-	(373)	9.6	9.5	6.3	(69.5)	-	5.1	16	23	-	-	12.6	-	-	0	-	-	-	0.12	0.45	-
AAN10	THN38	Cardamon, leaf	กระวาน, ใบ(TH)	-	24	92.0	1.4	0.2	2.6	3.2	0.6	10	37	9	183	0.5	0.07	0.2	0	53	4	0.22	-	-	250
AAN93	THD105	Chilli pepper, green, raw	พริกเขียว(TH)	-	(465)	4.4	14.2	21.4	(53.9)	-	6.1	155	396	-	-	8.7	-	-	0	-	-	-	0.41	0.50	-
AAN86	THN25	Chilli, bird, dried, ground	พริกเผา ป่น(TH)	-	(545)	21.7	5.2	48.3	(22.4)	-	2.4	-	-	-	-	-	-	-	0	0	0	-	-	-	
AAN11	THN114	Chilli, fried in oil	พริกเผาในน้ำมัน(TH)	-	(341)	14.1	3.3	1.7	(78.0)	-	2.9	276	43	5	132	12.3	-	-	0	0	0	0.05	0.92	0.00	0
AAN19	THN42,MYN562	Cinnamon	Kayu manis(MY), อบเชย(TH)	-	(327)	11.4	12.4	0.5	(68.3)	-	7.4	559	433	91	1783	48.8	-	-	0	75	6	0.12	0.35	1.80	0
AAN22	THN21,MYN564	Coriander, seed	Ketumbar(MY), ผักชี, เม็ด(TH)	-	(373)	12.6	14.3	10.6	(55.1)	-	7.4	929	382	15	1301	27.5	-	-	0	87	7	0.42	0.27	1.00	0
AAN24	MYN566,THN39	Cumin, seed	Jintan putih(MY), เม็ดเจียว(TH)	-	(301)	7.7	7.1	7.0	(52.4)	-	25.8	7254	72	-	-	-	-	-	-	-	-	-	1.59	1.80	-
AAN87	THN110	Curry powder, Thais	ผงเครื่อง(TH)	-	(49)	87.8	0.9	0.5	(10.2)	-	0.6	14	23	42	239	1.2	0.13	0.6	0	8	1	0.13	0.10	0.50	6
AAN34	THN11,MYN570	Galangal	Lengkuas(MY), ข่า(TH)	-	(51)	86.6	2.1	0.1	(10.4)	-	0.8	25	49	21	303	0.7	-	-	0	-	-	-	-	-	-
AAN35	THN2	Garlic, fresh	กระเทียม, สอด(TH)	-	39	89.1	1.2	0.8	5.2	2.9	0.8	32	32	3	107	1.6	-	-	0	0	0	0.04	0.04	0.80	3
AAN36	VNN462,THN16,M YN571,PHN012	Ginger, root, fresh	Halia(MY), Luya(PH), จือ, แหง(TH), Giungi tudu(VN)	-	42	86.3	3.3	0.5	4.0	4.1	1.8	203	127	146	315	2.7	0.14	0.5	0	5501	458	0.05	0.79	1.10	24
AAN39	THN3	Holy basil, leaf, fresh	กระเพรา, ใบ(TH)	-	18	94.7	0.2	0.5	2.9	0.6	1.1	-	14	20	288	3.6	-	-	0	-	-	-	0.41	0.50	-
AAN84	THN4	Kra-chai (Kaempfer/ Chinese deys)	กระชาย(TH)	-	(137)	65.3	5.5	3.1	(21.7)	-	4.4	1029	35	23	352	3.3	1.78	0.5	0	1321	110	0.20	0.00	1.00	20
AAN45	THN35	Leech lime, leaf	มะกรูด, ใบ(TH)	-	(124)	69.1	3.4	1.5	(24.2)	-	1.8	-	60	-	-	-	-	-	0	-	-	0.06	0.14	0.60	110
AAN5	THN34	Leech lime, peel	มะกรูด, ผิว(TH)	-	(78)	80.2	0.8	1.0	(16.5)	-	1.5	31	30	7	242	2.0	0.07	0.5	0	18	2	0.05	0.04	1.10	1
AAN42	THN18,MYN573	Lemon grass	Serai(MY), มะไดร์(TH)	-	(46)	72.6	0.5	0.1	(10.8)	-	16.0	-	-	-	-	-	-	-	0	-	-	-	-	-	
AAN46	THN36	Lime, pickled	มะนาว, ซอฟ(TH)	-	(390)	19.1	14.2	15.4	(48.7)	-	2.6	134	142	-	-	64.5	-	-	0	-	-	0.05	0.50	0.60	-
AAN47	THN7	Mace	ผลิต(TH)	-	289	2.2	7.7	2.3	58.2	2.5	27.1	298	-	7570	-	8.5	-	-	-	-	-	-	-	-	
AAN90	THN111	Marinade powder, for chicken	ผงผัดไก่(TH)	-	288	0.9	2.6	1.3	65.9	0.9	28.4	1177	-	8097	-	7.6	-	-	-	-	-	-	-	-	
AAN59	THN112	Marinade powder, for roasted pork	ผงหมูแดง(TH)	-	309	1.9	3.2	0.7	70.8	3.3	20.1	706	-	5569	-	11.1	-	-	-	-	-	-	-	-	
AAN63	THN120	Marinade powder, for satay	ผงเตี๊ยะ, ผง(TH)	-	33	89.4	2.9	0.8	1.4	4.3	1.2	179	29	29	179	4.1	-	-	0	2803	234	0.15	0.13	0.70	84
AAN48	MYD184,THN40,V ND164	Mint, leaf	Daun pudina(MY), ตระหง่าน, ใบ(TH), Rau thom(VN)	-	47	86.9	1.6	0.0	9.3	1.6	0.6	39	53	13	10	0.7	-	-	0	0	0	0.03	0.04	0.20	8
AAN52	PHD141,VND122 MYD192	Onion, large	Bawang besar(MY), Sibuyas, Bombay ulo(PH), Hành tây(VN)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
				g/mL	kcal	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg		
				Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available, by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A, retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
N	Spices and condiments (continued)			-																						
AAN25	THN95	Paste, curry, green	น้ำพริกแกงเขียวหวาน(TH)	-	59	72.2	3.5	0.8	5.9	7.1	10.5	90	-	3786	-	2.6	-	-	-	-	-	-	-			
AAN28	THN97	Paste, curry, panang	น้ำพริกแกงเผ็ด(TH)	-	92	61.6	4.6	1.8	10.1	8.6	13.3	110	-	4019	-	3.9	-	-	-	-	-	-	-			
AAN26	THN96	Paste, curry, red	น้ำพริกแกงเผ็ด(TH)	-	94	61.0	5.3	2.2	8.3	9.9	13.3	136	121	3781	-	2.8	-	-	-	-	-	0.62	10.20	22		
AAN27	THN92	Paste, curry, yellow (Kari)	น้ำพริกแกงกะหรี่(TH)	-	109	57.9	4.6	5.8	5.0	9.2	17.5	62	-	5294	-	3.7	-	-	-	-	-	-	-			
AAN31	THN43	Paste, shrimp, fermented (Ka-pi)	กะปิ(กุ้ง, คุณภาพดี)(TH)	-	(120)	44.0	21.0	1.0	(6.8)	-	27.3	1380	596	6000	393	20.5	0.84	2.0	-	-	-	0.01	0.12	3.70	-	
AAN67	THN49	Paste, tiny shrimp, fermented (Ka-pi)	กะปิ(กุ้ง, คุณภาพดี)(TH)	-	81	46.5	13.9	1.2	2.7	2.0	33.7	488	360	7000	270	39.2	0.44	1.1	-	-	-	0.01	0.11	1.50	-	
AAN6	THN26	Pepper, black, powder	พริกไทย, ดำ(TH)	-	(364)	13.1	12.4	7.3	(62.2)	-	5.0	262	215	-	-	8.6	-	-	0	-	-	0.04	0.22	3		
AAN7	THN28	Pepper, black, whole, fresh	พริกไทยอ่อน(TH)	-	(83)	80.0	3.5	1.7	(13.3)	-	1.5	102	36	-	-	2.1	-	-	0	173	14	-	0.12	2.60	8	
AAN15	THN32	Pepper, green, hot, fresh	พริกเขียว, เขียว(TH)	-	(55)	85.2	2.1	0.9	(9.7)	-	2.1	16	46	-	-	0.8	-	-	0	388	32	0.07	0.01	0.10	142	
AAN40	THN33	Pepper, hot, dried	พริกเผ็ด, แห้ง(TH)	-	(353)	18.0	15.0	8.6	(53.8)	-	4.6	66	394	-	-	12.9	-	-	0	-	-	0.14	1.34	7.20	107	
AAN17	THN31	Pepper, red, hot, fresh	พริกเผ็ด, แดง(TH)	-	(75)	83.0	3.0	2.3	(10.5)	-	1.2	8	52	-	-	1.2	-	-	0	935	78	0.15	0.01	0.10	142	
AAN54	THN27,MYN576	Pepper, white, powder	Serbuk lada putih(MY), พริกขาว, ขาว(TH)	-	(373)	11.4	10.6	4.6	(72.2)	-	1.2	728	96	4	101	3.9	-	-	0	24	2	0.05	0.06	1.40	0	
AAN16	THN29	Pepper, yellow, hot, fresh	พริกเผ็ด(TH)	-	(112)	72.6	4.1	1.9	(19.7)	-	1.7	19	52	-	-	1.5	-	-	0	933	78	0.17	0.09	3.00	95	
AAN33	MYG431,VNN473 VNN474	Sauce, fish	Budu(MY), Nước mắm cá (loại I), Nước mắm cá (loại II)(VN)	-	(48)	67.2	5.4	1.1	(4.1)	-	22.2	333	202	4926	14	2.4	-	-	52	29	54	0.00	0.12	2.50	0	
AAN66	THN72	Sauce, fish, grade 1, per 100 ml	น้ำปลา, เกรด 1(TH)	-	(56)	73.0	11.6	T	(2.4)	-	36.4	39	-	9294	-	2.9	-	-	0	-	-	-	-	-	-	
AAN12	THN54	Sauce, chilli, hot	ซอสเผ็ด(TH)	-	(104)	67.9	0.8	0.7	(23.7)	-	6.9	10	-	1473	-	0.8	-	-	0	-	-	-	-	-	-	
AAN38	THN60,MYG451	Sauce, oyster	Sos tiram(MY), ซอสหอยนางรม(TH)	-	(73)	71.1	2.9	0.3	(14.7)	-	11.0	17	32	3379	74	1.1	-	-	6	0	6	0.01	0.04	0.40	7	
AAN70	THN64	Sauce, soy, dark	ซอสถั่ว(TH)	-	(210)	40.3	4.4	0.0	(48.1)	-	7.2	79	17	3472	2190	-	-	-	0	-	-	0.01	0.09	0.20	0	
AAN98	THN61	Sauce, soy, light, grade 1, per 100 ml (120.7 g)	ซอสขาว, เกรด 1(TH)	1,207	36	80.2	5.9	0.0	3.2	0	31.4	1	-	9489	-	-	-	-	0	-	-	-	-	-	-	
AAN77	THN58,PHN005, MYD227	Sauce, tomato (ketchup)	Sos tomato/Ketchup tomato(MY), ซอสหนึ่ง(TH)	-	114	67.3	1.6	0.0	26.5	1.0	3.6	20	24	954	139	0.9	-	-	0	383	32	0.09	0.06	1.80	9	
AAN51	PHD143,THN41, MYD193	Shallot, bulb	Bawang merah(MY), Sibuyas, Tagalog ulo(PH), หอมใหญ่(TH)	-	62	82.8	1.7	0.1	12.3	2.4	0.7	50	40	10	256	0.9	0.08	0.3	0	3	0	0.11	0.06	0.30	9	
AAN95	THN50	Shrimp, ground, with chilli	กระปี้เผ็ด(TH)	-	277	6.8	56.1	3.6	0.0	9.9	23.6	2953	-	4919	-	27.9	-	-	-	-	-	-	-	-	-	
AAN71	THN37	Sweet basil, leaf	ใบโหระพา, ใบ(TH)	-	36	88.4	2.9	0.1	4.8	2.0	1.8	155	63	26	398	7.6	0.16	0.8	0	2713	226	0.11	0.15	0.90	21	
AAN81	PHN026,VNN464 THN8	Turmeric, rhizome, fresh	Dilaw(PH), ขมิ้น(TH), Nghé tươi(VN)	-	38	86.7	1.1	0.3	4.4	6.5	1.0	50	74	52	587	1.4	-	-	0	0	0	0.03	0.03	0.40	4	
AAN82	THN9	Turmeric, white, fresh	ขมิ้นขาว(TH)	-	(36)	90.4	0.5	0.3	(7.7)	-	1.1	14	81	-	-	9.4	-	-	0	-	-	0.03	0.01	0.50	10	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOALDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOL	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg
Density	Energy - by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available: by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A: retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C				
P	Beverages, alcoholic																								
AAP1	VNP446,PHP001	Beer, pale pilsen	Serbesa, pale pilsen(PH), Bia(VN)	-	16	95.8	0.4	(T)	3.6	0	0.2	53	16	-	-	0.2	-	-	0	0	0	T	0.03	0.50	0

Q	Beverages, nonalcoholic																									
AAQ9	THQ3	Coffee, iced, per 100 ml	กาแฟเย็น(TH)	1.056	63	90.0	1.7	0.6	12.6	0p	0.7	49	-	68	-	0.1	-	-	-	-	-	-	-	-	-	
AAQ16	THQ25	Drink, aloe vera flavour, canned, per 100 ml	น้ำดื่มว่านหางจระเข้ รสสตั้งๆ (TH)	1.000	49	88.3	0.0	0.6	10.7	0.2	0.2	31	3	22	12	-	-	0.1	0	-	-	-	0.03	T	16	
AAQ47	THQ11	Drink, roselle, per 100 ml	น้ำดื่มเชือบ(TH)	1.062	66	89.6	0.0	0.0	16.4	0.1	0.1	10	-	10	-	0.4	-	-	0	-	-	-	0.00	1.00	1.80	8
AAQ59	THQ6	Energy drink, chocolate flavoured, powder (Milo+Ovaltine)	เครื่องดื่มรสช็อกโกแลต, สง(TH)	-	396	2.3	12.0	5.5	74.7	0p	5.5	474	482	-	-	9.8	-	-	0	-	-	-	-	-	-	-
AAQ65	THQ20	Juice, coconut, per 100 ml	น้ำมะพร้าว(TH)	1.000	(41)	89.7	0.1	0.3	(9.5)	-	0.4	15	-	14	-	0.1	-	-	0	-	-	-	-	-	-	-
AAQ5	MYC119, PHQ010,VNP450	Juice, coconut, immature kernel, per 100 g	Air kelapa(MY), Niyog, tubig(PH), Nước dừa non(VN)		(22)	94.2	0.2	0.0	(5.2)	-	0.4	30	16	1	198	0.2	-	-	0	0	0	0.00	0.00	0.00	5	
AAQ15	THQ24	Juice, lychee, 25%, canned, per 100 ml	น้ำสับปะรด 25%(TH)	1.041	55	90.3	0.1	0.0	13.6	0.0	0.1	2	-	12	-	0.2	-	-	0	-	-	-	0.03	T	1	
AAQ43	THQ27	Juice, orange, 100%, per 100 ml	น้ำส้ม 100%(TH)	1.055	56	91.1	0.6	0.1	13.1	0.1	0.5	8	-	26	117	0.3	-	-	0	-	-	0.03	0.20	2.10	0	
AAQ32	THQ14	Juice, palm, 100%, per 100 ml	น้ำตาลสัด 100%(TH)	1.088	(96)	84.0	0.0	T	(24.1)	-	0.7	26	-	26	-	0.2	-	-	0	-	-	0.01	0.05	0.60	41	
AAQ33	THQ31	Juice, passion fruit, 25%, per 100 ml	น้ำสับปะรด 25%(TH)	1.060	73	87.5	0.2	T	18.0	0.1	0.2	5	-	11	-	0.2	-	-	0	-	-	-	0.01	-	1	
AAQ57	PHQ059,VNC69,M YC100	Soybean milk	Susu kacang soya, kacik(MY), Sữa đậu nành(VN)		53	88.7	2.3	1.9	6.7	0.1	0.3	20	23	2	38	0.4	-	-	0	75	6	0.08	0.04	0.50	0	
AAQ66	THQ10	Soybean milk, commercial, per 100 ml	นมถั่วเหลือง(TH)	1.048	82	88.0	2.5	3.5	10.0	0.4	0.4	24	-	37	-	0.4	-	-	0	-	-	0.01	0.05	-	0	
AAQ55	THQ8	Tea, w/ milk, per 100 ml	ชาไข่มุก(TH)	1.036	68	87.8	0.1	1.1	14.5	0p	0.1	1	-	18	-	0.1	-	-	-	-	-	-	-	-	-	

The Concise ASEAN Food Composition Tables (composition per 100 g edible portion)

ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins							
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC	
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg	
S	Fast foods: franchise foods			Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C	
AAS1	THS20,PHR008	Burger, beef	เบอร์เกอร์, เนื้อ(TH)		-	275	47.2	13.4	14.8	21.4	1.4	1.8	60	118	-	-	2.2	-	-	10	10	11	0.16	0.15	2.60	0
AAS3	THS17	Burger, chicken	เบอร์เกอร์, ไก่(TH)	g/mL	-	294	43.6	13.3	16.0	23.1	2.3	1.7	53	93	515	202	0.8	0.06	0.9	10	5	10	0.09	0.04	-	nd
AAS4	THS23	Burger, Fish	เบอร์เกอร์, ปลา(TH)		-	289	44.2	11.6	15.6	24.6	2.0	2.0	68	139	562	187	1.0	-	1.0	-	-	-	-	-	-	-
AAS6	THS37,PHB034	French fries	ฟรีฟาย(TH)	kcal	-	336	34.8	3.9	18.1	37.2	4.2	1.8	16	133	-	-	0.0	-	-	0	0	0	0.16	0.06	2.40	0
AAS7	THS38	Hot Dog	ฮอทด็อก(TH)		-	268	45.0	9.9	12.3	28.1	2.7	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAS9	THS27	Pizza, seafood, thin crust	พิซซ่า, หอยดิบ, ชีสเค้ก(TH)	g	-	232	47.9	15.2	7.9	23.4	3.4	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAS10	THS6	Sandwich, chicken	แซนวิช, ไก่(TH)		-	286	45.5	12.0	15.6	23.5	1.6	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAS11	THS9	Sandwich, ham	แซนวิช, แฮม(TH)	g	-	220	54.6	9.3	10.2	22.2	0.9	2.8	26	129	589	142	0.7	-	0.6	-	-	-	-	-	-	-

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ASEAN Food ID	Origin	Food and description	Alternate name	DEN	Main nutrients							Minerals							Vitamins												
					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOLE	CARTB	VITA_RAE	THIA	RIBF	NIA	VIWC						
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg						
T	Mixed food dishes: local			Density	Energy- by calculation							Carbohydrate, available; by difference							Total dietary fibre												
	<i>Cereal dishes</i>				Moisture	Protein, total	Fat, total			Ash		Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol		β-carotene		Vitamin A: retinol activity equivalent		Vitamin B1, thiamin		Vitamin B2, riboflavin		Niacin		Vitamin C
AAT351	THT68	Porridge, rice, ground, with minced pork	ข้าว, หมู(TH)	-	(57)	87.7	1.6	2.6	(6.9)	-	1.2	6	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-			
AAT12	THT50	Porridge, rice, ready to eat	ข้าวต้ม(TH)	-	(59)	85.4	4.1	0.8	(8.9)	-	0.8	-	-	205	129	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
AAT362	THT65	Rice and seasoned fried pork	ข้าวหนูหอ(TH)	-	(144)	67.4	7.7	3.2	(21.1)	-	0.6	-	-	222	208	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
AAT353	THT51	Rice porridge with pork	ข้าวต้ม, หมู(TH)	-	(65)	84.2	4.2	1.2	(9.4)	-	1.0	-	72	272	136	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
AAT366	THT48	Rice w/ pig leg and gravy	ข้าวขาหมู(TH)	-	161	65.3	7.2	5.9	19.3	1.0	1.3	236	43	324	52	0.8	-	-	-	-	-	-	-	0.08	0.21	1.00	-	-	-		
AAT363	THT54	Rice, chicken and holy basil leaves, fried	ข้าวคาดใบผักโภค(TH)	-	(188)	59.5	8.6	6.6	(23.6)	-	1.7	172	66	-	-	0.4	-	-	-	-	-	-	-	-	0.07	0.20	3	-	-		
AAT364	THT56	Rice, pork and vegetable and egg, fried	ข้าวผัดหมู(TH)	-	(151)	69.0	5.9	6.7	(16.7)	-	1.7	103	62	141	91	0.6	-	-	-	-	-	-	-	0.02	0.25	1.90	-	-			
AAT359	THT44	Rice, covered w/ egg in five spices soup	ข้าวราดไข่พะโล้(TH)	-	(181)	61.6	5.7	6.4	(25.2)	-	1.1	-	-	305	134	3.7	-	-	-	-	-	-	-	-	-	-	-	-			
AAT204	THT39	Fermented rice noodle with fish curry	ข้าวเส้น, น้ำยา(TH)	-	82	80.4	2.7	2.1	13.0	0.4	1.5	70	32	419	-	0.1	-	-	-	-	-	-	-	-	0.25	0.80	-	-			
AAT347	THT123	Rice noodle, big size, with beef ball and soup	เส้นใหญ่, ลูกชิ้นเนื้อบัว, น้ำ(TH)	-	(61)	83.4	4.6	0.7	(9.0)	-	2.3	23	30	752	188	-	-	-	-	-	-	-	-	0.01	0.04	-	-				
AAT348	THT127	Rice noodle, big size, with pork, w/o soup	เส้นใหญ่, หมู, น้ำ(TH)	-	75	83.7	7.1	3.6	2.8	1.6	1.2	-	-	366	65	1.2	-	-	-	-	-	-	-	-	-	-	-	-			
AAT113	THT131	Rice noodle, deep fried, crispy (Mee-krop)	เมี๊กนอก(TH)	-	(505)	9.1	2.9	29.4	(57.1)	-	1.5	6	47	-	-	0.6	-	-	-	-	-	-	-	0.08	0.00	2.00	2	-			
AAT346	THT122	Rice noodle, fine thread, w/ beef ball and soup	เส้นเม็ด, ลูกชิ้นเนื้อบัว, น้ำ(TH)	-	49	87.5	3.2	1.3	5.8	0.7	1.5	44	40	440	90	0.9	-	-	-	-	-	-	-	0.02	0.11	1.00	-				
AAT345	THT121	Rice noodle, fine thread, w/ meat ball, w/o soup	เส้นเม็ด, ลูกชิ้นเนื้อวัว, แห้ง(TH)	-	(152)	65.7	5.9	4.6	(21.7)	-	2.1	26	47	411	162	-	-	-	-	-	-	-	0.02	0.06	1.30	-					
AAT349	THT111	Rice noodle, small size, with pork, w/o soup	เส้นเล็ก, หมู, แห้ง(TH)	-	(209)	59.5	7.9	10.4	(21.0)	-	1.2	147	128	311	132	1.9	-	-	575	-	-	-	0.08	0.54	2.50	1	-				
<i>Fish and seafood dishes</i>				DEN																											
AAT134	THT31	Baby clam, curry (Pa-naeng) type cooked with coconut milk,	นางพะเนง-หลอยลาย, พะยอมบีกอก(TH)		-	126	76.9	7.2	9.0	3.4	1.4	2.1	73	-	350	-	6.9	-	-	10	-	10	-	-	-	-	-	-			
AAT147	THT134	Baby clam, fried with chilli	หอยลายทอดกับพริก(TH)	DEN	-	384	22.5	19.8	21.4	25.7	4.7	5.9	113	-	1370	-	12.2	-	-	22	-	22	-	-	-	-	-	-			
<i>Vegetable dishes</i>																															
AAT13	THT73	Bamboo shoot salad, Northeastern style	ขุปเหงียน(TH)	DEN	-	(33)	89.7	2.8	0.5	(4.4)	-	2.6	207	30	-	-	1.3	-	-	-	-	-	-	-	0.20	0.70	1	-			
AAT149	THT103	Salad, w/ unripe papaya, Northeastern style	ส้มตำ, มีสา(TH)		-	(28)	90.4	1.8	0.3	(4.5)	-	3.0	94	44	-	-	-	-	-	-	-	-	-	0.01	0.05	0.70	3	-			

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF			
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg			
					Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
T	Mixed food dishes: local (continued)																									
	<i>Desserts and snacks</i>																									
AAT133	THT137	Custard, egg, baked	ขบมนมสดไข่(TH)	-	197	58.1	6.3	7.8	24.1	2.8	0.9	5	60	-	-	-	-	-	16	-	16	0.04	0.22	1.00	-	
AAT263	THT138	Custard, mungbean, baked	ขบมนมสดถั่ว(TH)	-	207	54.2	5.8	7.2	27.7	4.2	0.9	9	72	-	-	-	-	-	8	-	8	0.05	0.18	0.80	-	
AAT173	THT139	Glutinous rice, steeped in coconut milk	ข้าวเหนียวมะลิ(TH)	-	281	35.8	3.1	6.3	52.2	1.7	0.9	1	18	-	-	-	-	-	-	-	-	-	-	0.03	0.30	-
AAT259	THT171	Moon's cake, durian and egg filling	ขบมไน้พะรำชันทร์, ไส้ทุเรียน+ไข่(TH)	-	379	18.7	6.5	13.2	57.0	3.2	1.4	36	-	83	-	1.4	-	-	25	-	25	-	-	-	-	
AAT255	THT170	Moon's cake, durian filling	ขบมไน้พะรำชันทร์, ไส้ทุเรียน(TH)	-	363	18.8	5.0	10.3	60.7	3.7	1.5	23	-	67	-	1.2	-	-	-	-	-	-	-	-	-	
AAT258	THT172	Moon's cake, five nuts filling	ขบมไน้พะรำชันทร์, ไส้หงอน 5 ถั่ว(TH)	-	430	13.8	10.5	19.3	52.3	2.6	1.5	43	-	189	-	3.5	-	-	0	-	0	-	-	-	-	
AAT257	THT169	Moon's cake, lotus seed and egg filling	ขบมไน้พะรำชันทร์, ไส้เมล็ดบัว+ไข่(TH)	-	404	20.0	6.7	18.2	52.3	1.9	0.9	62	-	64	-	1.9	-	-	25	-	25	-	-	-	-	
AAT254	THT168	Moon's cake, lotus seed filling	ขบมไน้พะรำชันทร์, ไส้เมล็ดบัว(TH)	-	384	20.7	5.8	14.8	55.6	2.4	0.7	45	-	40	-	1.1	-	-	0	-	0	-	-	-	-	
AAT430	THT144	Taro ball in coconut milk	ขบลอยผึ้งบัว(TH)	-	150	66.2	0.8	4.1	26.5	1.7	0.7	4	24	-	-	-	-	-	-	-	-	-	-	0.30	-	
AAT431	THT145	Taro in coconut milk	เนื้อกะหล่ำบัว(TH)	-	133	70.6	1.0	4.5	21.6	0.9	1.4	25	-	112	-	0.8	-	-	-	-	-	-	-	-	-	

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					ENERC (ENERC)	WATER	PROCNT	FAT	CHOAQLDF (CHOCDF)	FIBTG	ASH	CA	P	NA	K	FE	CU	ZN	RETOl	CARTB	VITA_RAE	THIA	RIBF	NIA	VITC
					g/mL	kcal	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mcg	mcg	mcg	mg	mg	mg	mg
U	Miscellaneous			Density	Energy- by calculation	Moisture	Protein, total	Fat, total	Carbohydrate, available; by difference	Total dietary fibre	Ash	Calcium, Ca	Phosphorus, P	Sodium, Na	Potassium, K	Iron, Fe	Copper, Cu	Zinc, Zn	Retinol	β-carotene	Vitamin A; retinol activity equivalent	Vitamin B1, thiamin	Vitamin B2, riboflavin	Niacin	Vitamin C
	AAU21	THU17	Bamboo caterpillar, raw		-	-	60.0	15.3	-	-	-	42	155	14	139	1.8	-	-	-	-	-	0.12	1.05	0.90	-
AAU22	THU18	Bamboo caterpillar, deep fried	หนอนไผ่เผา, หอยด(TH)		-	644	4.5	25.5	55.3	11.0	0p	3.7	4	356	609	674	2.7	-	-	-	-	-	-	-	-
AAU26	THU16	Bird nest, in sealed bottle	รังนก(TH)	1.026	-	69	82.5	0.5	0.0	16.8	0	0.2	55	-	5	-	0.2	-	-	-	-	-	0.00	0.02	-
AAU23	THU12	Buffalo dung beetle, blanched	แมลงดง(TH)		-	125	68.4	17.2	4.3	1.3	5.9	2.9	31	158	293	288	7.7	-	-	-	-	-	0.19	1.09	3.40
AAU57	THU22	Chicken essence, 100 ml.	น้ำใต้กระดูก(TH)	1.026	32	93.7	8.1	0.0	0.0	0	0.8	6	-	122	-	0.5	-	-	-	-	-	0.00	0.05	-	-
AAU40	THU1,PHT005, MYU552	Creamer, non-dairy	Krimer, bukan tenusu(MY), ครีเมอร์นม(TH)		-	471	2.9	3.2	18.4	73.1	0	2.4	19	295	104	788	0.5	-	-	12	8	13	0.00	0.06	0.50
AAU33	THU3	Cricket	แมลงธิต(TH)	-	127	71.4	12.9	5.5	4.6	3.5	2.1	76	185	87	306	9.5	-	-	-	-	-	0.36	1.91	3.10	-
AAU35	THU14	Giant water bug	แมลงตาม(TH)	-	174	63.2	19.8	8.3	2.8	4.3	1.6	44	226	84	192	13.6	-	-	-	-	-	0.09	1.50	3.90	-
AAU36	THU19	Hornet, young	ตัวต่อ(TH)	-	(141)	71.7	13.7	6.3	(7.4)	-	0.9	61	142	-	-	-	-	-	0	205	17	0.01	-	3.00	-
AAU24	THU13	June beetle	แมลงกินน้ำ(TH)	-	88	74.1	13.4	1.4	2.9	5.0	3.2	23	207	465	463	6.4	-	-	-	-	-	0.29	1.19	4.00	-
AAU37	THU8	Locust	แมลงแมลง(TH)	-	97	76.7	14.3	3.3	0.6	4	1.1	28	150	32	217	3.0	-	-	-	-	-	0.19	1.50	3.90	-
AAU39	THU11	Mole cricket	แมลงกระชอน(TH)	-	130	71.2	15.4	6.3	1.5	2.9	2.7	76	254	97	268	41.7	-	-	-	-	-	0.20	1.89	4.80	-
AAU43	THU10	Red ant	แมลงแดง(TH)	-	111	74.0	13.9	3.5	5.1	1.8	1.7	48	206	56	222	5.7	-	-	-	-	-	0.24	0.88	3.40	-
AAU44	THU9	Red ant, egg	แมลงแดง(TH)	-	83	81.9	7.0	3.2	5.6	1.7	0.6	8	113	28	96	4.1	-	-	-	-	-	0.15	0.19	0.90	-
AAU45	THU6	Red ant, young female	ตัวต่อ(TH)	-	189	66.1	12.7	12.5	5.2	2.5	1.0	23	173	50	168	3.4	-	-	-	-	-	0.31	0.71	3.30	-
AAU48	THU4	Silk worm, pupae	แมลงพี(TH)	-	123	75.3	12.2	7.0	1.8	2.0	1.7	42	167	14	139	1.8	-	-	-	-	-	0.12	1.05	0.90	-
AAU50	THU20	Spirulina, dried	สาหร่ายสีปู(โรโน, สาหร่ายสีฟ้า)(TH)	-	359	6.3	62.3	6.5	8.0	9.6	7.3	346	709	847	1091	37.6	0.80	1.7	0	-	-	1.95	2.53	16.50	-
AAU51	THU21	Spirulina, fresh	สาหร่ายสีปู(โรโน, สาหร่ายสีฟ้า)(TH)	-	45	89.1	7.5	0.8	0p	4.1	1.0	50	86	84	122	3.9	0.00	0.2	0	-	-	0.33	0.38	1.00	-
AAU25	THU15	True water beetle	แมลงตืบตืด(TH)	-	166	61.2	21.0	7.1	1.3	6.6	2.8	37	205	62	198	6.4	-	-	-	-	-	0.31	3.51	6.90	-

Appendices

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
A	Cereals and products	
AAA38	Corn, whole-kernel, raw	<i>Zea mays</i>
AAA37	Corn, yellow, on the cob, boiled	<i>Zea mays</i>
AAA61	Rice, flour, glutinous, white	<i>Oryza glutinosa</i>
AAA59	Rice, glutinous, black, polished, raw	<i>Oryza glutinosa</i>
AAA60	Rice, glutinous, white, polished, raw	<i>Oryza glutinosa</i>
AAA62	Rice, parboiled	<i>Oryza sativa</i>
AAA63	Rice, white, polished, cooked	<i>Oryza sativa</i>
AAA65	Rice, white, polished, raw	<i>Oryza sativa</i>
AAA64	Rice, white, polished, raw, jasmine variety	<i>Oryza sativa</i>
AAA67	Rice, whole-grain, milled by machine, raw	<i>Oryza sativa</i>
AAA74	Wheat, flour, all purpose	<i>Triticum aestivum T. vulgare</i>
B	Starchy roots, tubers and products	
AAB6	Cassava, tuber, raw	<i>Manihot esculenta</i>
AAB8	Coleus, tuber	<i>Coleus tuberosus</i>
AAB10	Potato, raw	<i>Solanum tuberosum</i>
AAB12	Sago, flour	<i>Metroxylon sp.</i>
AAB14	Sweet potato, purple, raw	<i>Ipomeo batatas</i>
AAB16	Sweet potato, white, raw	<i>Ipomeo batatas</i>
AAB18	Sweet potato, yellow, raw	<i>Ipomeo batatas</i>
AAB20	Tapioca, flour	<i>Manihot esculenta</i>
AAB21	Taro, raw	<i>Colocasia esculenta</i>
AAB22	Water chestnut, Kra-jub, boiled	<i>Trapa bispinosa</i>
AAB26	Yam, spiny, raw	<i>Dioscorea esculenta</i>
C	Legumes, nuts, seeds and products	
AAC3	Bambara groundnut, boiled	<i>Voandzeia subterranea</i>
AAC2	Bambara groundnut, raw	<i>Voandzeia subterranea</i>
AAC4	Bean, black, dried, raw	<i>Vigna unguiculata</i>
AAC6	Bean, hyacinth, dried, raw	<i>Dolichos lablab / Lablab Purpureus</i>
AAC10	Broad bean, seed, dried, raw	<i>Vicia faba</i>
AAC117	Cashew nut, baked	<i>Anacardium occidentale</i>
AAC16	Cashew nut, fresh	<i>Anacardium occidentale</i>
AAC19	Chickpea, dried, raw	<i>Cicer arietinum</i>
AAC27	Cowpea, seed, mixed colour, dried, raw	<i>Vigna sinensis</i>
AAC118	Jackfruit, seed	<i>Artocarpus heterophylla</i>
AAC47	Job's tears, seed, whole	<i>Coix lachryma-jobi</i>
AAC48	Kidney bean, red, dried, raw	<i>Phaseolus vulgaris</i>
AAC53	Mungbean noodle, dried, raw	<i>Vigna radiata</i>
AAC55	Mungbean, seed, green, dried, raw	<i>Phaseolus aureus</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
C	Legumes, nuts, seeds and products (continued)	
AAC41	Mungbean, seed, red, dried, raw	<i>Phaseolus angularis</i>
AAC58	Mungbean, seed, split, dry, dehulled, raw (Golden gram)	<i>Phaseolus aureus</i>
AAC62	Pea, seed, dried, raw	<i>Pisum sativum</i>
AAC63	Peanut/Groundnut, seed, w/ skin, dried, raw	<i>Arachis hypogaea</i>
AAC122	Pumpkin, seed, w/o shell	<i>Cucurbita moschata/ Cucurbita pepo</i>
AAC121	Pumpkin, seed, w/o shell, roasted	<i>Cucurbita moschata / Cucurbita pepo</i>
AAC123	Pumpkin, seed, w/o shell, baked, salted	<i>Cucurbita moschata/ Cucurbita pepo</i>
AAC71	Rice bean, seed, dried, raw	<i>Phaseolus calcaratus</i>
AAC72	Rice bean, seed, red, dried, raw	<i>Phaseolus calcaratus</i>
AAC73	Sesame, seed, black, dried, raw	<i>Sesamum indicum</i>
AAC74	Sesame, seed, white, dried, raw	<i>Sesamum indicum</i>
AAC101	Soya bean, seed, fresh, raw	<i>Glycine max, Glycine soja</i>
AAC85	Soybean, seed, black, dried, raw	<i>Glycine max/G. soja/G. hispida</i>
AAC87	Soybean, seed, yellow, dried, raw	<i>Glycine max/G. soja/G. hispida</i>
AAC99	Soybean, young seed, boiled	<i>Glycine max</i>
AAC130	Sugar pea, baked	<i>Pisum sativum</i>
AAC103	Tamarind, seed, roasted	<i>Tamarindus indica</i>
AAC108	Winged bean, seed, dry, raw	<i>Psophocarpus tetragonolobus</i>

D	Vegetables and products	
AAD36	Acacia pennata (Cha-om), leaf	<i>Acacia pennata</i>
AAD152	Amaranth	<i>Amaranthus tricolor</i>
AAD2	Amaranth, spineless, fresh, raw	<i>Amaranthus tricolor</i>
AAD3	Asparagus, canned	<i>Asparagus officinalis</i>
AAD4	Asparagus, fresh, raw	<i>Asparagus officinalis</i>
AAD6	Bamboo shoot, canned	<i>Bambusa sp.</i>
AAD9	Bamboo shoot, in water, canned, drained	<i>Bambusa sp.</i>
AAD8	Bamboo shoot, spring variety, fresh, raw	<i>Bambusa sp.</i>
AAD10	Banana, flower and bud, raw	<i>Musa sp</i>
AAD13	Banana, shoot and young stem, raw	<i>Musa sapientum</i>
AAD15	Bean, mixed variety, pod, fresh, raw	<i>Phaseolus vulgaris.</i>
AAD136	Beetroot, raw	<i>Beta vulgaris</i>
AAD19	Bell pepper, green, capsicum, fresh, raw	<i>Capsicum annuum</i>
AAD22	Broccoli, raw	<i>Brassica oleracea</i>
AAD23	Cabbage, Chinese, raw	<i>Brassica spp</i>
AAD24	Cabbage, Chinese, salted	<i>Brassica spp</i>
AAD25	Cabbage, Chinese, wongbok, raw	<i>Brassica chinensis</i>
AAD134	Cabbage, Chinese/ Flowering white cabbage, flower	<i>Brassica napus, var chinensis</i>
AAD56	Cabbage, Chinese/ Flowering white cabbage, raw	<i>Brassica napus, var chinensis</i>
AAD26	Cabbage, common, leaf, raw	<i>Brassica oleracea</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
D	Vegetables and products (continued)	
AAD28	Carrot, raw	<i>Daucus carota</i>
AAD29	Cashew nut, leaf and top, raw	<i>Anacardium occidentale</i>
AAD30	Cassava, young leaf and top, raw	<i>Manihot utilissima, M. esculenta</i>
AAD31	Cassia, flower, raw	<i>Cassia siamea</i>
AAD32	Cassia, leaf, raw	<i>Cassia siamea</i>
AAD33	Cassia, tender tip, raw	<i>Cassia siamea</i>
AAD34	Cauliflower, inflorescence, raw	<i>Brassica oleracea var. botrytis</i>
AAD35	Celery, leaf and petiole, raw	<i>Apium graveolens</i>
AAD37	Chayote, fruit, raw	<i>Sechium edule</i>
AAD40	Chrysanthemum, leaf, raw	<i>Chrysanthemum coronarium</i>
AAD41	Coriander, leaf, raw	<i>Coriandrum sativum</i>
AAD42	Corn, baby	<i>Zea mays</i>
AAD43	Corn, baby, in brine, canned, drained	<i>Zea mays</i>
AAD44	Cowpea, mixed variety, pod, raw	<i>Vigna sinensis, V. unguiculata</i>
AAD46	Cucumber, long	<i>Cucumis sativus</i>
AAD45	Cucumber, small	<i>Cucumis sativus</i>
AAD52	Egg plant, purple, raw	<i>Solanum melongena</i>
AAD50	Eggplant/aubergine, green, long, raw	<i>Salonum melongena</i>
AAD54	Eggplant/brinjal, raw	<i>Solanum xanthocarpum</i>
AAD154	Fennel	<i>Eryngium foetidum</i>
AAD57	Garlic, leaf, raw	<i>Allium sativum</i>
AAD59	Gourd, bitter, leaf and top, raw	<i>Momordica charantia</i>
AAD60	Gourd, bitter, mixed variety, raw	<i>Momordica charantia</i>
AAD62	Gourd, bottle, raw	<i>Lagenaria siceraria, L.vulgaris</i>
AAD63	Gourd, snake, raw	<i>Trichosanthes anguina</i>
AAD64	Gourd, sponge, raw	<i>Luffa cylindrica</i>
AAD65	Gourd, wax, mixed variety, raw	<i>Benincasa hispida, B. cerifera</i>
AAD61	Gourd/cucumber, bitter, Thai variety, raw	<i>Momordica charantia</i>
AAD48	Horseradish, leaf, raw	<i>Moringa oleifera</i>
AAD49	Horseradish-tree, pod, raw	<i>Moringa oleifera/M. pterygosperma</i>
AAD67	Indian pennywort, leaf, raw	<i>Centella asiatica</i>
AAD58	Ivygourd, raw	<i>Coccinia grandis / C. indica</i>
AAD68	Jackfruit, unripe	<i>Artocarpus heterophyllus</i>
AAD71	Jute, leaf, raw	<i>Corchorus olitorius</i>
AAD72	Kale, Chinese, raw	<i>Brassica oleracea var.alboglabra</i>
AAD153	Leek, Chinese, onion fragrant	<i>Allium porrum</i>
AAD74	Leek, Chinese, raw	<i>Allium odorum</i>
AAD75	Lettuce, garden, leaf and petiole	<i>Lactuca sativa</i>
AAD76	Loofah, angled	<i>Luffa acutanguta</i>
AAD80	Mung bean, sprout, raw	<i>Phaseolus aureus</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
D	Vegetables and products (continued)	
AAD81	Mung bean, sprout, salted	<i>Phaseolus aureus</i>
AAD82	Mushroom, abalone, raw	<i>Pleurotus cystidiosus</i>
AAD84	Mushroom, button/ champignon, in brine, canned, drained	<i>Agaricus bisporus</i>
AAD83	Mushroom, button/ champignon, raw	<i>Agaricus bisporus</i>
AAD85	Mushroom, Chinese/ shiitake, dry, raw	<i>Lentinus edodes</i>
AAD118	Mushroom, Chinese/ shiitake, fresh, raw	<i>Lentinus edodes</i>
AAD88	Mushroom, Chinese/straw, raw	<i>Volvaria volvacea</i>
AAD87	Mushroom, grey, oyster, fresh, raw	<i>Pleurotus ostreatus</i>
AAD69	Mushroom, Jew's ear/black wood ear, dry, raw	<i>Auricularia polytricha</i>
AAD70	Mushrooms, Jew's ear/ black wood ear, fresh, raw	<i>Auricularia polytricha</i>
AAD138	Mustard green, India (leaf and stem)	<i>Brassica juncea</i>
AAD89	Mustard, Chinese, leaf, pickled	<i>Brassica juncea</i>
AAD90	Mustard, leaf, raw	<i>Brassica juncea</i>
AAD92	Neem, flower, raw	<i>Aradirachta indica</i> var. <i>siamensis</i>
AAD91	Neem, leaf and tip	<i>Aradirachta indica</i> var. <i>siamensis</i>
AAD73	Okra (Lady's fingers), young pod, raw	<i>Hibiscus esculenta</i>
AAD94	Onion, flower	<i>Allium</i> sp.
AAD96	Onion, spring	<i>Allium fistulosum</i>
AAD97	Papaya, unripe	<i>Carica papaya</i>
AAD103	Parkia, seed	<i>Parkia speciosa</i>
AAD99	Parsley, leaf	<i>Petroselinum crispum</i> , <i>P. hortense</i>
AAD100	Pea, garden, pod, fresh, raw	<i>Pisum sativum</i>
AAD105	Pumpkin, raw	<i>Cucurbita moschata</i>
AAD106	Pumpkin, young leaf, raw	<i>Cucurbita moschata</i> , <i>C. pepo</i>
AAD107	Purslane, leaf, raw	<i>Portulaca oleracea</i>
AAD108	Radish, chinese, white, raw	<i>Raphanus sativus</i>
AAD110	Rhubarb, raw	<i>Rheum rhabonticum</i>
AAD111	Roselle (Red sorrel), leaf, raw	<i>Hibiscus sabdariffa</i>
AAD115	Sesbania, yellow flower	<i>Sesbania javanica</i>
AAD116	Sesbania/Cork Wood, young leaf	<i>Sesbania grandiflora</i>
AAD117	Shallot, leaf, spring onion	<i>Allium ascalonicum</i>
AAD53	Solanum, raw	<i>Salonum torvum</i>
AAD119	Soybean sprout, raw	<i>Glycine max</i>
AAD120	Spinach, amaranth, spine	<i>Amaranthus spinosus</i>
AAD122	Spinach, Chinese	<i>Spinacia oleracia</i>
AAD121	Spinach, Malabar	<i>Basella rubra</i> , <i>B. alba</i>
AAD123	Squash/pumpkin, flower	<i>Cucurbita</i> sp
AAD124	Swamp cabbage, kangkong	<i>Ipomoea aquatica</i> (TH)/ <i>Ipomoea reptans</i> (TH), <i>Ipomoea batatas aquatica</i> (PH)
AAD125	Sweet potato, leaf	<i>Ipomoea batatas</i>
AAD127	Tamarind, young leaf	<i>Tamarindus indica</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
D	Vegetables and products (continued)	
AAD126	Tamarind, young pod	<i>Tamarindus indica</i>
AAD128	Tomato	<i>Lycopersicum esculentum</i>
AAD130	Tomato, cherry, small	<i>Lycopersicum esculentum</i>
AAD132	Water mimosa	<i>Neptunia oleracea</i>
AAD133	Watercress	<i>Nasturtium officinale</i>
AAD16	Winged bean, pod, fresh, raw	<i>Psophocarpus tetragonolobus</i>
AAD17	Yard long bean, pod, green, fresh, raw	<i>Vigna sesquipedalis</i>

E	Fruits and products	
AAE2	Apple, green	<i>Pyrus malus</i>
AAE3	Apple, red	<i>Pyrus malus</i>
AAE4	Avocado, green	<i>Persea americana</i>
AAE1	Banana, apple variety, ripe	<i>Musa sapientum</i>
AAE13	Banana, apple, whole, dried	<i>Musa sapientum</i>
AAE10	Banana, cavendish, ripe	<i>Musa sp.</i>
AAE11	Banana, dessert banana, dwarf	<i>Musa sp.</i>
AAE12	Banana, dessert, Valery (Hom) variety	<i>Musa sp.</i>
AAE14	Banana, pink banana	<i>Musa sapientum</i> Teod var. <i>violacea</i>
AAE15	Banana, pisang kari	
AAE17	Banana, rice banana	<i>Musa sapientum</i> Linn., var. <i>cinerea</i>
AAE135	Banana, silver bluggoe (Hug-mook)	<i>Musa sp.</i>
AAE19	Bilimbi, fruit	<i>Averrhoa bilimbi</i>
AAE22	Carambola/Star fruit	<i>Averrhoa carambola</i>
AAE24	Cashew, fruit	<i>Anacardium occidentale</i>
AAE25	Coconut, very immature	<i>Cocos nucifera</i>
AAE31	Durian, assorted	<i>Durio zibethinus</i>
AAE35	Fig, fresh	<i>Ficus sp.</i>
AAE43	Gooseberry, Indian	<i>Phyllanthus emblica</i>
AAE38	Grape, assorted	<i>Vitis vinifera</i>
AAE41	Guava, white flesh	<i>Psidium guajava</i>
AAE44	Jackfruit, fresh	<i>Artocarpus heterophylla</i>
AAE47	Jackfruit, in syrup, canned	<i>Artocarpus heterophylla</i>
AAE49	Jujube	<i>Ziziphus jujuba</i>
AAE50	Lancet/Langsium/Langsat	<i>Lansium domesticum</i>
AAE51	Lemon	<i>Citrus limonum</i>
AAE90	Lemon, Philippine	<i>Citrus microcarpa</i>
AAE53	Litchi	<i>Litchi chinensis</i>
AAE54	Litchi, in syrup, canned	<i>Litchi chinensis</i>
AAE57	Longan, dry	<i>Euphoria longana</i>
AAE55	Longan, fresh	<i>Euphoria longana, Nephelium longana</i>
AAE56	Longan, in syrup, canned	<i>Euphoria longana</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
E	Fruits and products (continued)	
AAE59	Malay apple, red	<i>Syzygium malaccense, Eugenia malaccense</i>
AAE60	Mandarin/tangerine	<i>Citrus reticulata</i>
AAE132	Mango (Kiew-sa- weya), unripe	<i>Mangifera indica</i>
AAE65	Mango, Indian mango, unripe	<i>Mangifera indica</i>
AAE72	Mango, kaew variety, unripe	<i>Mangifera indica</i>
AAE67	Mango, num-dok-mai variety, ripe	<i>Mangifera indica</i>
AAE68	Mango, nung-klangwan variety, ripe	<i>Mangifera indica</i>
AAE69	Mango, okrong variety, ripe	<i>Mangifera indica</i>
AAE73	Mango, pimsen-mun variety, unripe	<i>Mangifera indica</i>
AAE74	Mango, rad variety, unripe	<i>Mangifera indica</i>
AAE70	Mango, thong-dum variety, ripe	<i>Mangifera indica</i>
AAE71	Mango, tub-ped variety, ripe	<i>Mangifera indica</i>
AAE75	Mangosteen	<i>Garcinia mangostana</i>
AAE76	Melon, honeydew	<i>Cucumis melo</i>
AAE77	Muskmelon	<i>Cucumis melo Cucurbitaceae</i>
AAE81	Orange, green skin/Kalanchoe	<i>Citrus nobilis</i>
AAE83	Papaya, ripe	<i>Carica papaya</i>
AAE85	Pear	<i>Pyrus communis</i>
AAE86	Pear, chinese, yellow	<i>Pyrus sinensis</i>
AAE88	Persimmon, hard variety, ripe	<i>Diospyros kaki, D. virginiana</i>
AAE91	Pineapple	<i>Ananas comosus</i>
AAE93	Pineapple, dry	<i>Ananas comosus</i>
AAE94	Pineapple, slice, canned	<i>Ananas comosus</i>
AAE95	Pomegranate	<i>Punica granatum</i>
AAE96	Pomelo	<i>Citrus grandis, C. maxima</i>
AAE98	Raisin	<i>Vitis vinifera</i>
AAE99	Rambai	<i>Baccaurea motleyana, B. ramiflora, B. sapida</i>
AAE100	Rambutan	<i>Nephelium lappaceum</i>
AAE102	Rambutan, in syrup, canned	<i>Nephelium lappaceum</i>
AAE103	Roseapple	<i>Syzygium sp., Eugenia sp.</i>
AAE133	Salak palm	<i>Salacca rumphii</i>
AAE106	Sapodilla, ripe	<i>Achras sapota, Manilkara zapota</i>
AAE109	Soursop	<i>Annona muricata</i>
AAE111	Spanish plum	<i>Spondias purpurea, S. pinnata</i>
AAE112	Star apple, green	<i>Chrysophyllum cainito</i>
AAE114	Star gooseberry	<i>Phyllanthus distichus</i>
AAE115	Strawberry	<i>Fragaria grandiflora</i>
AAE116	Sugar apple	<i>Annona squamosa</i>
AAE120	Tamarind, fruit, ripe	<i>Tamarindus indica</i>
AAE58	Tamarind, Madras thorn	<i>Pithecellobium dulce</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
E	Fruits and products (continued)	
AAE119	Toddy palm, cotyledon	<i>Borassus flabellifera</i>
AAE124	Water Rose, Nak (redish color) variety	<i>Eugenia javanica</i>
AAE126	Watermelon	<i>Citrullus vulgaris</i>
AAE125	Wax jambu, Water Rose, green color variety	<i>Eugenia javanica</i>
F	Meat, other animals and products	
AAF9	Beef, blood	<i>Bos indicus</i>
AAF11	Beef, brain, raw	<i>Bos indicus</i>
AAF18	Beef, heart, raw	<i>Bos indicus</i> .
AAF19	Beef, kidney, raw	<i>Bos indicus</i>
AAF23	Beef, liver, raw	<i>Bos indicus</i> .
AAF188	Beef, Longissimus dorsi, raw	<i>Bos indicus</i>
AAF25	Beef, lungs, raw	<i>Bos indicus</i> .
AAF2	Beef, meat ball	<i>Bos taurus</i>
AAF44	Beef, tongue, raw	<i>Bos indicus</i>
AAF185	Chicken, black, thigh, w/ skin, raw	<i>Gallus gallus domesticus</i>
AAF91	Chicken, blood, cooked	<i>Gallus gallus domesticus</i>
AAF99	Chicken, breast, w/ skin, raw	<i>Gallus gallus domesticus</i>
AAF100	Chicken, drumstick, raw	<i>Gallus gallus domesticus</i>
AAF101	Chicken, feet, deboned, raw	<i>Gallus gallus domesticus</i>
AAF95	Chicken, gizzard, raw	<i>Gallus gallus domesticus</i>
AAF96	Chicken, heart, raw	<i>Gallus gallus</i>
AAF102	Chicken, intestine, raw	<i>Gallus domesticus</i>
AAF186	Chicken, jungle fowl, wing, w/ skin, raw	<i>Gallus domesticus</i>
AAF97	Chicken, liver, raw	<i>Gallus domesticus</i>
AAF103	Chicken, matured, dressed carcass, raw	<i>Gallus domesticus</i>
AAF104	Chicken, thigh, w/ skin, raw	<i>Gallus domesticus</i>
AAF105	Chicken, wing, w/ skin, raw	<i>Gallus domesticus</i>
AAF190	Duck, blood, cooked	<i>Anas domesticus</i>
AAF110	Duck, liver, raw	<i>Anas domesticus</i>
AAF111	Duck, meat, raw	<i>Anas domesticus</i>
AAF114	Frog, small	<i>Rana sp.</i>
AAF145	Mutton, lean, raw	<i>Ovis aries</i>
AAF148	Nam/Jihn-som (Pork sausage, fermented), packed in banana leaf	<i>Sus scrofa</i>
AAF194	Pork, blood, cooked	<i>Sus scrofa</i>
AAF120	Pork, brain, raw	<i>Sus scrofa</i>
AAF119	Pork, ham, raw	<i>Sus scrofa</i>
AAF121	Pork, heart, raw	<i>Sus scrofa</i>
AAF124	Pork, kidney, raw	<i>Sus scrofa</i>
AAF149	Pork, leg, deboned, raw	<i>Sus scrofa</i>
AAF196	Pork, liver, boiled	<i>Sus scrofa</i>
AAF197	Pork, liver, fried	<i>Sus scrofa</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
F	Meat, other animals and products (continued)	
AAF126	Pork, liver, raw	<i>Sus scrofa</i>
AAF130	Pork, lung, raw	<i>Sus scrofa</i>
AAF187	Pork, pancreas, raw	<i>Sus scrofa</i>
AAF150	Pork, rib, deboned, raw	<i>Sus scrofa</i>
AAF158	Pork, shoulder, raw	<i>Sus scrofa</i>
AAF152	Pork, shoulder, broiled	<i>Sus scrofa</i>
AAF202	Pork, shoulder, fried	<i>Sus scrofa</i>
AAF159	Pork, skin, fried	<i>Sus scrofa</i>
AAF204	Pork, tenderloin, raw	<i>Sus scrofa</i>
AAF164	Rabbit, whole carcass, raw	<i>Oryctolagus cuniculus, Lepus cuniculus</i>

G	Finfish, shellfish, other aquatic animals and products	
AAG2	Anchovy, fresh, whole	<i>Stolephorus indicus</i>
AAG1	Anchovy, dried	<i>Stolephorus indicus</i>
AAG18	Carp, common, raw	<i>Cyprinus carpio</i>
AAG22	Catfish, freshwater, raw	<i>Clarias batrachus</i>
AAG25	Catfish, gunther's walking, boiled	<i>Clarias macrocephalus</i>
AAG26	Catfish, gunther's walking, fried	<i>Clarias macrocephalus</i>
AAG24	Catfish, gunther's walking, raw	<i>Clarias macrocephalus</i>
AAG27	Catfish, gunther's walking, roasted	<i>Clarias macrocephalus</i>
AAG217	Catfish, striped, , w/ skin, raw	<i>Pangasius sutchi</i>
AAG218	Catfish, striped, w/ skin, steamed	<i>Pangasius sutchi</i>
AAG160	Catfish, truncated estuarine, raw	<i>Arius truncatus</i>
AAG250	Clam, undulated surf	<i>Paphia undulata</i>
AAG288	Cobia/Black kingfish, raw	<i>Rachycentron canadum</i>
AAG224	Cockle/ark shell, fresh	<i>Area granosa</i>
AAG38	Crab, shore, raw	<i>Varuna litterata</i>
AAG39	Crabmeat, mud, boiled	<i>Scylla serrata</i>
AAG40	Crabmeat, mud, fresh	<i>Scylla serrata</i>
AAG41	Cuttlefish, dried	<i>Loligo sp. ommastrephes spp</i>
AAG42	Cuttlefish, raw	<i>Sepia pharaonis</i>
AAG44	Eel, silver pike (daggertooth pike conger), sea water , raw	<i>Muraenesox cinereus</i>
AAG146	Eel, swamp, boiled	<i>Fluta alba</i>
AAG286	Eel, swamp, raw	<i>Fluta alba</i>
AAG45	Featherback, grey (knifefish), raw	<i>Notopterus notopterus</i>
AAG62	Featherback, grey (knifefish), roasted	<i>Notopterus notopterus</i>
AAG208	Featherback, spotted (knifefish) flesh, cooked	<i>Notopterus chitala</i>
AAG206	Featherback, spotted (knifefish), flesh, raw	<i>Notopterus chitala</i>
AAG207	Featherback, spotted (knifefish), raw	<i>Notopterus chitala</i>
AAG166	Flatfish/Turbot, Indian (halibut), raw	<i>Psettodes erumei</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
G	Finfish, shellfish, other aquatic animals and products (continued)	
AAG55	Giant seaperch, boiled	<i>Lates calcarifer</i>
AAG99	Giant seaperch, raw	<i>Lates calcarifer</i>
AAG56	Giant seaperch, steamed	<i>Lates calcarifer</i>
AAG57	Goby, all species, raw	<i>Glossogobius giurus</i>
AAG59	Gourami, giant, raw	<i>Osphronemus goramy</i>
AAG138	Gourami, snake skin, dried	<i>Trichogaster pectoralis</i>
AAG60	Gourami, snake skin, raw	<i>Trichogaster pectoralis</i>
AAG179	Gourami, snake skin, salted, dried, boiled	<i>Trichogaster petoralis</i>
AAG180	Gourami, snake skin, salted, dried, fried	<i>Trichogaster petoralis</i>
AAG181	Gourami, snake skin, salted, dried, grilled	<i>Trichogaster petoralis</i>
AAG269	Grouper, fried	<i>Epinephelus sexfasciatus</i>
AAG268	Grouper, raw	<i>Epinephelus sexfasciatus</i>
AAG270	Grouper, steamed	<i>Epinephelus sexfasciatus</i>
AAG71	Jellyfish, dried	<i>Rhopilema esculenta</i>
AAG77	Mackerel, Indian, raw	<i>Rastrelliger kanagurta</i>
AAG226	Mackerel, salted (Pla-too-khem)	<i>Rastrelliger neglectus</i>
AAG199	Mackerel, short- bodied, steamed, fried	<i>Rastrelliger brachysoma</i>
AAG195	Mackerel, short-bodied, boiled	<i>Rastrelliger brachysoma</i>
AAG196	Mackerel, short-bodied, fried	<i>Rastrelliger brachysoma</i>
AAG75	Mackerel, short-bodied, in oil, canned, drained	<i>Rastrelliger brachysoma</i>
AAG78	Mackerel, short-bodied, in tomato sauce and chilli, canned	<i>Rastrelliger brachysoma</i>
AAG76	Mackerel, short-bodied, in tomato sauce, canned	<i>Rastrelliger brachysoma</i>
AAG129	Mackerel, short-bodied, raw	<i>Rastrelliger brachysoma</i>
AAG197	Mackerel, short-bodied, steamed	<i>Rastrelliger brachysoma</i>
AAG198	Mackerel, short-bodied, steamed, boiled	<i>Rastrelliger brachysoma</i>
AAG201	Mackerel, Spanish, fried	<i>Scomberomorus commerson</i>
AAG141	Mackerel, Spanish, raw	<i>Rastrelliger brachysoma</i>
AAG262	Mullet, bluespot gray, raw	<i>Valamugil sehelii</i>
AAG255	Mussel, green, raw	<i>Perna viridis</i>
AAG221	Nile tilapia, boiled	<i>Oreochromis nilotica</i>
AAG222	Nile tilapia, fried	<i>Oreochromis nilotica</i>
AAG95	Oyster, raw	<i>Ostrea sp.</i>
AAG98	Perch, climbing	<i>Anabas testudineus</i>
AAG9	Pomfret, black, fried	<i>Parastromateus niger</i>
AAG102	Pomfret, black, raw	<i>Parastromateus niger, Apolectus niger</i>
AAG10	Pomfret, black, steamed	<i>Parastromateus niger</i>
AAG193	Pomfret, silver, fried	<i>Pampus argenteus</i>
AAG194	Pomfret, silver, steamed	<i>Pampus argenteus</i>
AAG103	Pomfret, silver/white, raw	<i>Pampus argenteus</i>
AAG283	Prawn, fresh water, giant, raw	<i>Macrobrachium rosenbergii</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
G	Finfish, shellfish, other aquatic animals and products (continued)	
AAG105	Prawn, fresh water, raw	<i>Macrobrachium lanchesteri</i>
AAG106	Prawn, giant tiger, headless, frozen	<i>Penaeus monodon</i>
AAG282	Prawn, green tiger, raw	<i>Penaeus semisulcatus</i>
AAG232	Queenfish, Slender, dried	<i>Scomberoides tol</i>
AAG3	Radiated scallop	<i>Amusium pleuronectes</i>
AAG113	Sardine, in oil, canned, drained	<i>Sardinella sp.</i>
AAG116	Sardine, in tomato sauce and chilli, canned	<i>Sardinella sp.</i>
AAG115	Sardine, in tomato sauce, canned	<i>Sardinella sp.</i>
AAG112	Sardine, w/ lemon, in oil, canned, drained	<i>Sardinella sp.</i>
AAG117	Scad, big-eyed/caranx, raw	<i>Caranx crumenophthalmus</i>
AAG118	Scad, hardtail (torpedo), dried	<i>Megalaspis cordyla</i>
AAG119	Scad, hardtail (torpedo), raw	<i>Megalaspis cordyla</i>
AAG228	Sea horse	<i>Hippocampus sp.</i>
AAG124	Shark fins, dried	<i>Scoliodon walbeehmi</i>
AAG127	Sheat-fish, raw	<i>Kryptopterus bleekeri</i>
AAG132	Shrimp, dried	<i>Penaeus sp. Palaemon spp</i>
AAG237	Shrimp, salted, dried	<i>Palaemon sp.</i>
AAG34	Silver- barb, common, raw	<i>Pantius gonionotus</i>
AAG176	Silver-barb, common, boiled	<i>Pantius gonionotus</i>
AAG177	Silver-barb, common, fried	<i>Pantius gonionotus</i>
AAG135	Slipmouth, ponyfish, raw	<i>Leiognathus equulus</i>
AAG253	Snail, pond, river	<i>Sinotaia ingallsiana</i>
AAG92	Snakehead, striped, dried	<i>Channa striatus</i>
AAG184	Snapper, red, Malabar, boiled	<i>Lutjanus malabalicus</i>
AAG185	Snapper, red, Malabar, fried	<i>Lutjanus malabalicus</i>
AAG183	Snapper, red, Malabar, raw	<i>Lutjanus malabalicus</i>
AAG186	Snapper, red, Malabar, steamed	<i>Lutjanus malabalicus</i>
AAG140	Snapper, russell, raw	<i>Lutjanus russelli</i>
AAG204	Squid, splendid, dried	<i>Loligo formosana</i>
AAG202	Squid, splendid, raw	<i>Loligo formosana</i>
AAG203	Squid, splendid, salted and dried	<i>Loligo formosana</i>
AAG205	Squid, splendid, whole cleaned, frozen	<i>Loligo formosana</i>
AAG143	Sting ray, blue spotted, raw	<i>Dasyatis kuhlii, D. uarnak, D. zugei</i>
AAG151	Threadfin, all species, raw	<i>Eleutheronema tetradactylum, Polynemus heptadactylus, P. microstoma</i>
AAG15	Tilapia, all species, raw	<i>Tilapia sp.</i>
AAG6	Trevally, black-banded, fried	<i>Seriolima nigrofasciata</i>
AAG7	Trevally, black-banded, grilled	<i>Seriolima nigrofasciata</i>
AAG4	Trevally, black-banded, raw	<i>Seriolima nigrofasciata</i>
AAG8	Trevally, black-banded, steamed	<i>Seriolima nigrofasciata</i>
AAG238	Tuna, Skipjack or Yellow Fin, canned in brine, drained	<i>Katsuwonus pelamis or Thunnus albacares</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
G	Finfish, shellfish, other aquatic animals and products (continued)	
AAG239	Tuna, Skipjack or Yellow Fin, canned in oil, drained	<i>Katsuwonus pelamis</i> or <i>Thunnus albacares</i>
AAG241	Tuna, Skipjack or Yellow Fin, canned in water, drained	<i>Katsuwonus pelamis</i> or <i>Thunnus albacares</i>
AAG171	Wedge shell, bean clam (<i>Donax</i>), fermented	<i>Donax faba</i>
AAG172	Whiting, common/silver, raw	<i>Sillago sihama</i>

H	Eggs and Products	
AAH3	Egg, duck, boiled	<i>Anas domesticus</i>
AAH7	Egg, duck, salted	<i>Anas domesticus</i>
AAH8	Egg, duck, white	<i>Anas domesticus</i>
AAH9	Egg, duck, whole	<i>Anas domesticus</i>
AAH10	Egg, duck, yolk	<i>Anas domesticus</i>
AAH11	Egg, hen, omelet	<i>Gallus domesticus</i>
AAH13	Egg, hen, steamed	<i>Gallus domesticus</i>
AAH14	Egg, hen, white	<i>Gallus domesticus</i>
AAH12	Egg, hen, whole	<i>Gallus domesticus</i>
AAH15	Egg, hen, whole, boiled	<i>Gallus domesticus</i>
AAH16	Egg, hen, yolk	<i>Gallus domesticus</i>
AAH17	Egg, quail, in brine	<i>Coturnix communis</i>
AAH19	Egg, quail, whole, boiled	<i>Coturnix communis</i>
AAH23	Egg, turtle, whole	<i>Chelonia mydas</i>
AAH24	Roe, bluespot grey mullet, salted	<i>Valamugil siheli</i>

K	Fats and oils	
AAK3	Coconut cream	<i>Cocos nucifera</i>
AAK4	Coconut milk, canned, per 100 ml	<i>Cocos nucifera</i>
AAK5	Coconut milk, powder, instant	<i>Cocos nucifera</i>
AAK6	Coconut, mature kernel	<i>Cocos nucifera</i>

N	Spices and Condiments	
AAN3	Bird chilli, small, dried	<i>Capsicum minimum</i>
AAN4	Bird chilli, small, fresh	<i>Capsicum minimum</i>
AAN10	Cardamon, leaf	<i>Electaria cardamomum</i>
AAN93	Chilli pepper, green, raw	<i>Capsicum annuum</i> .
AAN19	Cinnamon	<i>Cinnamomum zeylanicum</i> , <i>C. bejolghota</i>
AAN22	Coriander, seed	<i>Coriandrum sativum</i>
AAN24	Cumin, seed	<i>Cuminum cyminum</i>
AAN34	Galangal	<i>Alpinia galanga</i>
AAN35	Garlic, fresh	<i>Allium sativum</i>
AAN36	Ginger, root, fresh	<i>Zingiber officinale</i>
AAN39	Holy basil, leaf, fresh	<i>Ocimum sanctum</i>

Appendix 1. Scientific name index

Food ID	English name and description	Scientific name
N	Spices and Condiments (continued)	
AAN84	Kra-chai (Kaempfer/ Chinese deys)	<i>Kaempferia pandurata./ Boesenbergia pandurata</i>
AAN45	Leech lime, leaf	<i>Citrus hystrix</i>
AAN42	Lemon grass	<i>Cymbopogon citratus</i>
AAN46	Lime, pickled	<i>Citrus aurantifolia, Citrus medica</i>
AAN47	Mace	<i>Myristica fragrans</i>
AAN48	Mint, leaf	<i>Mentha arvensis, M. piperita</i>
AAN52	Onion, large	<i>Allium cepa</i>
AAN6	Pepper, black, powder	<i>Piper nigrum</i>
AAN7	Pepper, black, whole, fresh	<i>Piper nigrum</i>
AAN15	Pepper, green, hot, fresh	<i>Capsicum frutescen</i>
AAN40	Pepper, hot, dried	<i>Capsicum frutescen</i>
AAN17	Pepper, red, hot, fresh	<i>Capsicum frutescen</i>
AAN54	Pepper, white, powder	<i>Piper nigrum, L.</i>
AAN16	Pepper, yellow, hot, fresh	<i>Capsicum frutescen</i>
AAN51	Shallot, bulb	<i>Allium fistulosum, A. ascalonicum</i>
AAN71	Sweet basil, leaf	<i>Ocimum basilicum</i>
AAN81	Turmeric, rhizome, fresh	<i>Curcuma zedoeria, Curcuma longa</i>
AAN82	Turmeric, white, fresh	<i>Curcuma longa</i>

Q	Beverages, nonalcoholic	
AAQ5	Juice, coconut, immature kernel, per 100 g	<i>Cocos nucifera</i>

U	Miscellaneous	
AAU21	Bamboo caterpillar, bamboo worm	<i>Omphisa fuscidentalis</i>
AAU22	Bamboo caterpillar, deep fried	<i>Omphisa fuscidentalis</i>
AAU23	Buffalo dung beetle	<i>Onitis sp, Copris sp.</i>
AAU24	June beetle	<i>Anomala antigua</i>
AAU25	True water beetle	<i>Cybister limbatus</i>
AAU33	Cricket	<i>Gryllus bimarculatus</i>
AAU35	Giant water bug	<i>Lethocerus indicus</i>
AAU36	Hornet, young	<i>Vespa sp.</i>
AAU37	Locust	<i>Locusta migratoria manillensis</i>
AAU39	Mole cricket	<i>Gryllotalpa africana</i>
AAU43	Red ant	<i>Oecophylla smaragdina</i>
AAU44	Red ant, egg	<i>Oecophylla smaragdina</i>
AAU45	Red ant, young female	<i>Oecophylla smaragdina</i>
AAU48	Silk worm, pupae	<i>Bombyx mori</i>
AAU50	Spirulina, dried	<i>Spirulina sp</i>
AAU51	Spirulina, fresh	<i>Spirulina sp</i>

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Moisture	oven drying, 100-105°C (vacuum oven for samples with high sugar or fat content)	oven drying, 100-105°C till constant weight	vacuum oven, 60-70°C	air-oven method	air oven at 100-102°C for most foods; vacuum oven at 89-100°C for meat and meat products; vacuum oven at 70°C for samples with high fat and/or sugar; spices and condiment, distillation with organic solvent	vacuum oven at 95-100°C
Protein	Kjeldahl: digestion with sulphuric acid + pot sulphate + mercuric oxide; trap N in boric acid + indicator; titrate with HCl; different factors for N conversion (FAO/WHO, 1973)	Kjeldahl: digestion with sulphuric acid + pot sulphate + mercuric oxide; trap N in boric acid + Tashiro; titrate with HCl; different factors for N conversion (FAO/WHO, 1973)	Kjeltec method: digestion with sulphuric acid + Kjeltab tablet + peroxide; trap in boric acid; titrate with HCl;	Kjeldahl method	Kjeldahl: digestion with sulphuric acid + pot sulphate + Cu sulphate; trap N in boric acid + indicator; titrate with sulphuric acid; colorimetric method: feedstuff; Kjeldahl-type oxidation; digest reacted with Nessler's; OD @ 500 nm	Kjeldahl method, AOAC 15 th ed, 1990; different factors for N conversion
Total carbohydrate	sugars in sample extracted with 85% ethanol, analysed by HPLC; residue hydrolysed with amyloglucosidase, sugars released analysed by HPLC	by difference: 100g – (total g of water + protein + fat + fibre + ash)	by difference: 100g – (total g of water + protein + fat + ash)	sum values of starch and total sugars	by difference: 100g – (total g of water + protein + fat + ash)	-

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾ (continued)

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Total dietary fibre	dry sample, remove fat by extraction with pet ether if necessary; incubate with α -amylase, protease & amyloglucosidase; fibre precipitated with alcohol; residue washed with alcohol and acetone, dried; subtract weight of protein and ash	dry sample, remove fat by extraction with pet ether if necessary; incubate with α -amylase, protease & amyloglucosidase; fibre precipitated with alcohol; residue washed with alcohol and acetone, dried; subtract weight of protein and ash	-	enzymatic-gravimetric	-	-
Fat	Soxhlet method: sample hydrolysed with HCl, fat extracted with diethylether in Soxhlet apparatus; ether evaporated off	Soxhlet method: use dried sample from moisture analysis; extract ground sample with pet ether in Soxhlet apparatus; evaporate solvent; Soxtec method also described: same solvent; milk products: Roese-Gottlieb method for milk products	Soxhlet method for all raw, cooked and processed foods or food combinations, except expanded and baked products and milk products: use dried sample from moisture analysis; extract sample with ether in Soxhlet apparatus; evaporate solvent; use Mojonnier acid hydrolysis method for baked and/or expanded foods; Roese-Gottlieb method for milk and milk products	Soxhlet method with direct solvent extraction	Mojonnier acid hydrolysis method; Soxhlet method with prior acid hydrolysis; Roese Gottlieb method for milk and milk products	Ether, acetone extraction, Soxhlet method; AOAC, 15 th ed, 1990 (p 871)

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾ (continued)

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Ash	char sample, ash in furnace at 500-550°C	dry sample; char sample and ash in furnace at 500-550°C	dry sample; char sample and ash in furnace at 500-550°C	not specified	char sample, ash in furnace at 500-550°C	ash in furnace at 550°C
Calcium	calcium precipitated as Ca oxalate, dissolved in H ₂ SO ₄ , titrate with KMnO ₄ ; also AAS method: nitrous oxide-acetylene, 422.7 nm	calcium precipitated as Ca oxalate, dissolved in H ₂ SO ₄ , titrate with KMnO ₄ ; also AAS method: nitrous oxide-acetylene, 422.7 nm	calcium precipitated as Ca oxalate, dissolved in H ₂ SO ₄ , titrate with KMnO ₄	AAS method	calcium precipitated as Ca oxalate, dissolved in H ₂ SO ₄ , titrate with KMnO ₄ ; also AAS method, air-acetylene/ nitrous oxide-acetylene, 422.7 nm	titrimetric, AOAC 1990
Phosphorus	colorimetric method: react with vanadate-molybdate, OD @ 400 nm; titrimetric method: P precipitated as ammonium phosphomolybdate, dissolved in NaOH, excess alkali titrated with HCl	react with vanadate-molybdate, OD @ 420 nm	react with ammoniummolybdate, OD @ 660 nm	-	gravimetric method: react with ammonium molybdate, weight residue colorimetric method: react with vanadate-molybdate, OD @ 420 nm	gravimetric method, AOAC 1990
Iron	react with bipyridyl, OD @ 520 nm (in presence of added ascorbic acid)	react with phenanthroline or bipyridyl, OD @ 510 nm; also AAS method: air-acetylene; 248.3 nm	react with bipyridyl, OD @ 520 nm	AAS method	react with phenanthroline or bipyridyl, OD @ 510 nm; also AAS method (see multi-minerals); also AAS method, air-acetylene, 248.3 nm	colorimetric, titrimetric, AOAC 1990
Zinc, copper		AAS method: Zn & Cu by air-acetylene flame at 213.9 & 324.7 nm, Mg nitrous oxide-acetylene, 202.6 nm.			AAS method; air nitrous oxide-acetylene, Zn 213.9, Cu, 324.7	

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾ (continued)

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Sodium, potassium	-	AAS method for Na, K, Fe & Ca: Na, K and Fe - air-acetylene; Ca - Nitrous oxide-acetylene; 589.6 (330.4), 769.9, 422.7, 248.3 nm	-	AAS method	AAS method : air-acetylene, 559.0, 766.5 nm; also atomic emission method	Flame photometric, gravimetric, uranyl acetate method, AOAC 1990
Vitamin A	HPLC method: hydrolysis and extraction as given for vit A and carotenes; separation using C18, m.p. of methanol + water (95:5), UV detector @ 328 nm	HPLC method: hydrolysis & extraction as given for vit A & carotenes; separation using C18, m.p. of acetonitrile + MeOH + ethyl acetate (88+10+2), UV detector @ 325 nm	-	HPLC	-	HPLC or colorimetric ? AOAC 1990 (p 1045-1047)
Vitamin A & carotene	hydrolysis with alkali, extract with hexane, chromatographed on alumina column, carotenes eluted with 4% acetone in hexane, read at 450 nm; retinol eluted with 15% acetone in hexane, react with TFA & CHCl ₃ , OD @ 620 nm; correct for presence of carotene if necessary; retinol can also be read @ 325 nm	hydrolysis with alkali, extract with hexane, chromatographed on alumina column, carotenes eluted with 4% acetone in hexane, read at 450 nm; retinol eluted with 15% acetone in hexane, OD @ 325 nm; correct for presence of carotene if necessary;	hydrolysis with alkali, extract with hexane, chromatographed on alumina column, carotenes eluted with 4% acetone in hexane, (discarded ?); retinol eluted with 15% acetone in hexane, react with SbCl ₃ & CHCl ₃ , OD @ 620 nm; correct for presence of carotene if necessary	-	hydrolysis with alkali, extract with ether, chromatographed on alumina column, carotenes eluted with 4% acetone in hexane, read at 450 nm; retinol eluted with 15% acetone in hexane, react with SbCl ₃ & CHCl ₃ , OD @ 620 nm	-

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾ (continued)

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
α- and β-carotenes	-	-	hydrolysis with alkali, extract with hexane & acetone, chromatographed on column of magnesium oxide-hyflo super cel, α-carotenes eluted with 1% acetone in hexane, read at 444 nm; β-carotene eluted with 4% acetone in hexane, OD @ 453 nm	-	-	-
β-carotene	-	-	-	HPLC	-	-
Carotenes	extract sample with acetone in hexane, chromatographed on column of magnesium oxide + hyflo super cel, carotenes eluted with 10% acetone in hexane, read at 450 nm; HPLC method: C18 column, m.p. of acetonitrile + methanol (75+25), detector @ 450 nm	hydrolysis with alkali, extract with hexane, chromatographed on column of magnesium oxide + hyflo super cel, carotenes eluted with 10% acetone in hexane, read at 450 nm	-	-	-	Spectrophotometric or HPLC ? AOAC 1990, p 1048-1049
Vitamin A and individual carotenoids	-	hydrolysis with alkali, extract with hexane, filter through membrane, separate on C18, m.p. of AcN + MeOH + EA (88+10+2), detectors in series @ 325 & 436 nm	-	-	-	-

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾ (continued)

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Thiamin	sample extracted with acid and taka-diastase enzyme, chromatographed on decalso or permutit column, B1 oxidised to thiochrome using ferricyanide, measure fluorescence; diazo colorimetric method also used	sample extracted with acid and taka-diastase or mylase enzyme, chromatographed on decalso column, B1 oxidised to thiochrome using ferricyanide, measure fluorescence	sample extracted with acid and clarase enzyme, chromatographed on ion exchange column, B1 oxidised to thiochrome using ferricyanide, measure fluorescence; microbiological method using <i>Lactobacillus fermenti</i> also in use	-	sample extracted with acid and taka-diastase or mylase or clarase enzyme, chromatographed on decalso column, B1 oxidised to thiochrome using ferricyanide, measure fluorescence; microbiological method: using <i>Lactobacillus fermenti</i>	thiochrome method, AOAC 1990 (pp 1049-1052)
Riboflavin	fluorescence method: sample extracted with acid, pH adjusted to 6 & 4.5, KMnO ₄ to remove interfering fluorescence followed by peroxide addition, fluorescence measured; use Na hydrosulphite to determine interfering fluorescence, HPLC method: C18 column, m.p. of methanol + diammonium hydrogen phosphate (350+650) + 10 ml dioxan, fluorescence detector 440 excitation, 525 emission	sample extracted with acid, protein & other subs precipitated @ pH 6 & pH 4.5, KMnO ₄ to remove interfering fluorescence followed by peroxide addition, fluorescence measured; use Na hydrosulphite to determine interfering fluorescence	microbiological method using <i>Lactobacillus casei</i> subsp <i>Rhamnosus</i> as the test organism	-	fluorescence method: sample extracted with acid, pH adjusted to 6 & 4.5, KMnO ₄ to remove interfering fluorescence followed by peroxide addition, fluorescence measured; use Na hydrosulphite to determine interfering fluorescence, microbiological method: using <i>Lactobacillus casei</i>	fluorometric method, AOAC 1990 (pp 1052-1054)

Appendix 2. Summary of the methods used in ASEAN countries⁽¹⁷⁾ (continued)

Nutrient	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Niacin	sample hydrolysed with acid, pH adjusted, added NH4 sulphate, react with CNBr and sulphanilic acid, read colour at 450 nm	sample hydrolysed with acid, pH adjusted, added NH4 sulphate, react with CNBr and sulphanilic acid, read colour at 450 nm	microbiological method using <i>Lactobacillus plantarum</i>	-	microbiological method using <i>Lactobacillus plantarum</i>	colorimetric, AOAC 1990 (pp 1054-1055)
Ascorbic acid	mixblend sample with HPO3 + acetic acid, titrate with indophenol reagent; modification for intensely coloured solutions	mixblend sample with HPO3 + acetic acid, titrate with indophenol reagent; modification for intensely coloured solutions	-	-	titration method: mixblend sample with HPO3 + acetic acid, titrate with indophenol reagent; or add indophenol and read OD @ 520 nm	titrimetric method (indophenol), AOAC 1990, p 1058
Total ascorbic acid	for total AA, treat sample with bromine, for dehydro AA & diketoglutaric acid treat with SnCl and for diketoGA, treat with H2S before reaction with phenylhydrazine	-	determines combination of AA, dehydro AA & diketoglutaric acid: mixblend sample with HPO3 + acetic acid or oxalic acid, oxidise with indophenol, remove excess with oxalic acid-thiourea, couple with phenylhydrazine, OD at 540 nm	-	-	-
Ascorbic and dehydroascorbic acid	fluorometric method:	-	-	-	-	-

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