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Indian Health Food Consumers: Characteristics and Preferences

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Abstract: ***Higher per capita income, increased health awareness has shifted the focus fromcurative to preventive approach towards food amongst educated Indians. This study was exploratory in nature to characterize the health Food consumers in India, their understanding and perception of the health food label. 319 health food consumers who purchase health food were enrolled from residential colonies (150) and selected super market (169). Consumers in the age bracket of 25-34 comprised 48.6% of the total subjects preferring breakfast cereals and health drinks. 42% of the consumers claimed they always refer Food labels. Price of the product had no major impact on buying choice.Nutrition knowledge assessment indicated good awareness regarding food groups. Category bought was significantly dependant on Age and Gender. Age, gender, marital status, Children were positively correlated with buying of health foods.***

Keywords: Health Food, Package Food, Food Label, Consumer Understanding, Food Preference

1. Introduction

India's economic growth and spending capacity has increased significantly over the past two decades. Income levels are projected to be almost triple and India will become the 5th largest consumer market by 2025. A consumer survey (2010) conducted by Data monitor stated nearly 50% of all Indian adults in the 25-34 age group and 60% of those in the 35-44 age group "make conscious attempts to eat healthy"[1].

Global rise in chronic diseases, lifestyle changes and escalating epidemics of non-communicable diseases mostly due to over-nutrition is forcing the population to mend their eating and lifestyle habits. There is a major shift from curative to preventive approach towards food and a new group of food, commonly identified as Health food, has flooded the market. Health foods provide diverse health benefits beyond basic nutrition, boost physical and mental abilities, decrease long-term health care expenses, and prolong healthy and active life [2].

Asian countries along with economic and demographic transition have already shown dramatic changes in food consumption patterns[3]. The rapid quantitative and qualitative changes in dietary intake indicate an increase in per capita availability of food[4, 5].

Packaged and processed health food has taken the front space as it's coming up as a promising vertical. Indian urban affluent consumers are increasingly getting interested in diverse variety of packaged health foods, claiming health benefits and are buying anything and everything that is labelled as healthy.

Consumers gather information about the foods they purchase from a wide variety of sources, product label being one of them. From a health standpoint, the information on thefood labels about the nutritional content and health benefits is particularlyimportant. Two types of such information appearing on food products are "nutrition labels" and "health claims"

Labelling provides consumers with information about the nutritional properties of a food and health claims (statements connecting a food, food component or a nutrient to a state of desired health) to provide information to consumersabout the nutritional and health advantages of particular foods or nutrients.

Health food purchase is consumer specific and is influenced by multiple factors such as geographic location, culture, education, regular dietary habit etc.

These Factors can be Consumer Driven: Personal beliefs, Personal relevance, Familiarity, Nutrition knowledge **or** Product Driven: Format: Ingredient, Function, Benefit, Functional ingredient as reflected on product labels.

Characterization of these consumers has been done mainly on western population with higher degree of exposure, more no of health foods in the market and with more regularized food labels.

2. Methodology

The present study was exploratory in nature. Purposive sampling with specific inclusion and exclusion criteria, was used on consumers who made a purchase at the supermarket and consumers responding from home.Pre-tested standard questionnaires with India specific modifications were used for data collection.

2.1 Sample Size

Using 90% as proportion of health food consumers, who carefully select the health food by reading the food label[6], sample size was calculated to be 280[7]. In the present study, we enrolled 319 consumers of which 169 were health food purchasers from selected super markets selling the identified health food categories and 150 from residential colonies who purchase health food regularly.

2.2 Categories Selected for health foods

Observations were made for the products in selected category of health foods.

- Breakfast cereals
- Supplements: Fish Oil capsule, Vit C, Vit E. OTC supplements
- Health drinks
- Everyday Health: Millets, Multi grain atta, Healthy cooking oils, apple cider vinegar
- Ayurvedic Products
- Snacks
- Protein Supplements
- Baby and child health: Horlicks, Pediasure, Bornvita, nestum, Lactogen
- Weight loss/weight gain
- Milk and probiotics: Yakult, Dairy, Kombucha, Nut milk
- Whole grain and organic
- Nuts and oilseeds
- Energy bars

2.3 Data Collection Procedures

Questionnaire

The questionnaire consisted of multiple-choice questions with few open-ended questions which helped knowing consumer perception towards buying pattern of health foods. It also included the information on health consciousness, concern over food safety, quality, ethical issues, values, price premium and trust in labelling & other factors which may affect the behavioural intentions of Indian consumers. Understanding and perception of health food labels was assessed using the standardized questionnaire of Mackison, Wrieden and Anderson 2010 [8] with Indian specific modification. General Nutrition Knowledge and understanding of nutritional label information was assessed using the questionnaire designed by K Parmenter and J Wardle [9] with suitable modification for Indian scenario.

Study Location

Data was gathered from organized retail supermarketsand hypermarkets which typically is multiple outlet chain run by professional management[10]. The data collected for the present study was from BigBazaar, More, Natures Basket and Hypercity.

Exit interviews using structured questionnaire were carried out once the respondents had finished shopping of health foods in the aforesaid categories.

A large Residential colony was identified to approach consumer for Home Interview.

Data Analysis:

SPSS 20.0.0 statistical software was used to analyse frequency and chi square to correlate different variables among the collected response

3. Results and Discussion

3.1 Consumer Profile

The consumers were profiled basis their demographic profile, nutrition knowledge, food preferences and understanding of the food label.

- **Gender.** In the present study, out of 319 subjects interviewed, majority [68%] were women (Fig 1). Male genderwas found to be more prevalent in the group of purchasersinterviewedon the shop floor. Out of 102 male subjects, 62.7% were from the shop floor. The enrolled subjects for the present study indicate that the sample characteristic for health food buyers was more female centric. Similar observation was reported for Mexican population by Kiefer et al. 2005[11], suggesting women tend to be more aware and concerned about eating healthy. They are the primary decision makers for grocery and eating habits.

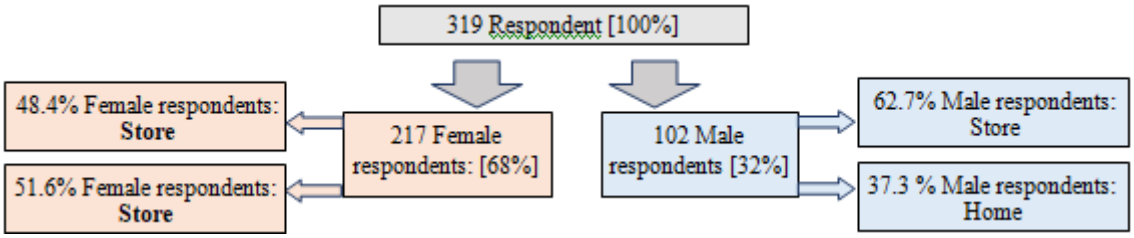

Figure 1: Gender-wise distribution of the Respondents N=319

- **Socio Economic Status**. Socio economic status is not affecting the purchase pattern of health food. A majority of the sample (62.7%) was from the income bracket of 10 lakhs and underindicating that the buying intent of the consumer is not affected by their economic status.
- **Age**.Maximum participants (48.6%) were from the age bracket of 25-34 year of age.Young and elders are Economically dependent hence low numbers seen in respondents
- **Marital Status.**77% of the participants were married which also might indicate that the institution of marriage brings a fair amount of consciousness and responsibility towards self and family as a unit.
- **Children in the family.** 64.9% of the respondent- family had children indicating that buying patterns may get impacted to a large extent by the presence of children.
- **Self -reported health condition.** In spite of having no health issues 76.5% still follow healthy eating habits indicating Preventive approach (Table 1).It can be stated that the educated urban population is becoming proactive rather than reactive.

Table 1: Self-reported health condition

Reported health condition	consumer
Suffer from some health condition	**24%**
No health issues	**76.50%**

- **The family history of illness:** Family history of illness with or without any known illness of the consumer was reported to be a dominant factor in adapting a preventive approach through health food (Table 2).

Table 2: Cross-tabulation of Family history of illness with self-reported health history

Self-Illness	Family history of illness	
	No	Yes
No	50.0%	**50.0%**
Yes	28.0%	72.0%

3.2 Consumer's choice with respect to health food choices:

Category preference: The top categories preferred by the enrolled consumers were health drinks (18.9%), Nutritional Supplements (13.8%) and breakfast cereal (12.2%) (Figure 2). Breakfast cereal was most preferred by floor respondents whereas consumers from home reported to be more inclined to buy milk and probiotics, child health products and nuts and oilseeds.Regular purchase of breakfast cereal may be the reason as it's aninstant fix for a healthy choice of food for nuclear and working families.

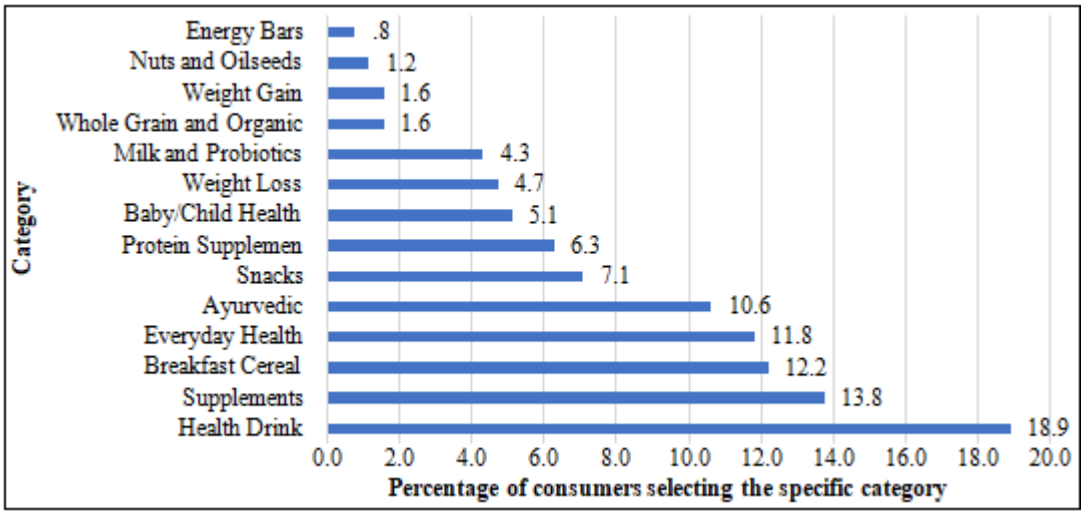

Figure 2: Percentage of consumer selecting the specific category of health foods

- Age is an important and significant factor for food choice. Age group of 25-34 yrs(Fig 4) are purchasing health food in the range of breakfast cereals, health drinks, supplements, everyday health, protein supplements, snack, weight loss, whole wheat and organic, baby/child health and nuts and oilseeds, 35-44 yrs. focusing on milk, probiotics and ayurvedic products. Under the age group of 18-24 yrs. subjects were more interested in snacks, Milk and probiotics and weight gain supplements.

- Gender was significantly correlated with product category bought. (Table 3) It was found that majority of males were focussing on health drinks (26.7%), Ayurvedic products (15.1%) and for baby/child health (7.0%).As usually ladies take care of the daily meal for the whole family, they select product categories like breakfast cereals, supplements, snacks, milk and probiotics.Whole grain and organic were more common for females.

Table 3: Gender and Product category Cross-relation

Product Category	Gender	
	Male	Female
Breakfast Cereal	5.8%	15.5%
Health Drink	26.7%	14.9%
Supplements	11.6%	14.9%
Everyday Health	8.1%	13.7%
Snacks	3.5%	8.9%
Milk and Probiotics	2.3%	5.4%
Weight Loss	4.7%	4.8%
Ayurvedic	15.1%	8.3%
Whole Grain and Organic	0	2.4%
Baby/Child Health	7.0%	4.2%
Weight Gain	4.7%	0
Protein Supplement	7.0%	6.0%
Energy Bars	1.2%	0.6%
Nuts and Oilseeds	2.3%	0.6%

Preference for Organic foods was seen only in female population as reported by Govidnasamy and Italia, 1990[12]; Van Doorn and Verhoef, 2011[13] and Dettmann and Dimitri 2007[14] that these females were in the age group of 30-45 years with children, who like to include organic food in their purchase list, though having higher cost.

Health claims and doctor's and nutritionist recommendations were the main buying triggers. Health benefits and claims, nutritional composition was primary interest factors for respondents at shop floor.

3.3 Consumers perception of a food label:

The food label is the main tool of communication between the consumer and the product.

- 55% subjects reported that nutritional label is very important for them, which has a great impact on their buying behaviour and they read the label before buying a new product.
- The percentage of consumers who reported to view the Nutrition label was higher for home respondents. (Table 4)

Table 4: Label reference by the consumer

Referred the label		Locale	
		Store	home
	Yes	42.7%	57.3%
	No	68.6%	31.4%

- Amongst the different components of a food label Macronutrients were reported to be the most sorted information at the shop level whereas home respondents were more concerned about claims and micro-nutrients.(Table 5)

Table 5: Priority Area on a food label

Interest Areas	Store	home
Calories	83.9%	16.1%
Sugar & Fat	72.0%	28.0%
Macronutrients	62.5%	37.5%
Micronutrients	50.0%	50.0%
Overall Label	43.1%	56.9%
Nutrients & Ingredients	65.4%	34.6%
Brand	71.4%	28.6%
Claim	70.0%	30.0%
Other	31.2%	68.8%
Ingredients	50.0%	50.0%

57.7% population reported that they believe there is enough information on the nutrition label and only 25.5% respondents reported its very easy for them to understand the nutrition label.

3.4 Understanding of nutrition label:

To assess the awareness level of the consumer, a dummy food label was given to quantify the fat content, serving size and sugar content of the product.

- Majority of the consumers gave correct answers for fat content(52.4%), sugar per serving(68.6%)and serving size(85.2%) indicating a good mathematical acumen along with good nutritional knowledge regarding food moderation, important food groups and healthy food alternates. Of those who answered correctly majority were store respondents.(Table 6)

Table 6: Correct responses for nutrition label understanding questions

SUGAR/Serving	Store	Home	Total
CORRECT	73.7%	26.3%	100%
Fat in half the pack			
CORRECT	54.1%	45.9%	100%
Serving size			
CORRECT	73.7%	26.3%	100%

- Consumers had a fair knowledge on nutrients, food groups and healthy substitutes for a regular food. (Table 7)

Table 7: Correct response for general nutrition knowledge questions

Nutrition Knowledge	Correct Response
MUFA/PUFA Nutrient Category	68%
GHEE Is high in saturated fats	90.60%
Healthy Desert alternate: Banana with plain yogurt	61.90%

One important point noted from the present study was almost 60% (Fig 4) said priceis not important or influence there buying decision. The selected subjects were upwardly mobile; proactive towards health and wellbeing therefore it might be a possibility that price sensitivity was secondary and not the primary concern. Yet in the food category selection only 1.6% subjects responded positively towards the use of organic and whole food indicating that unlike the west awareness towards a holistic healthy lifestyle is still in a nascent stage for the Indian health food consumer and authenticity of the organic product is still a concern.

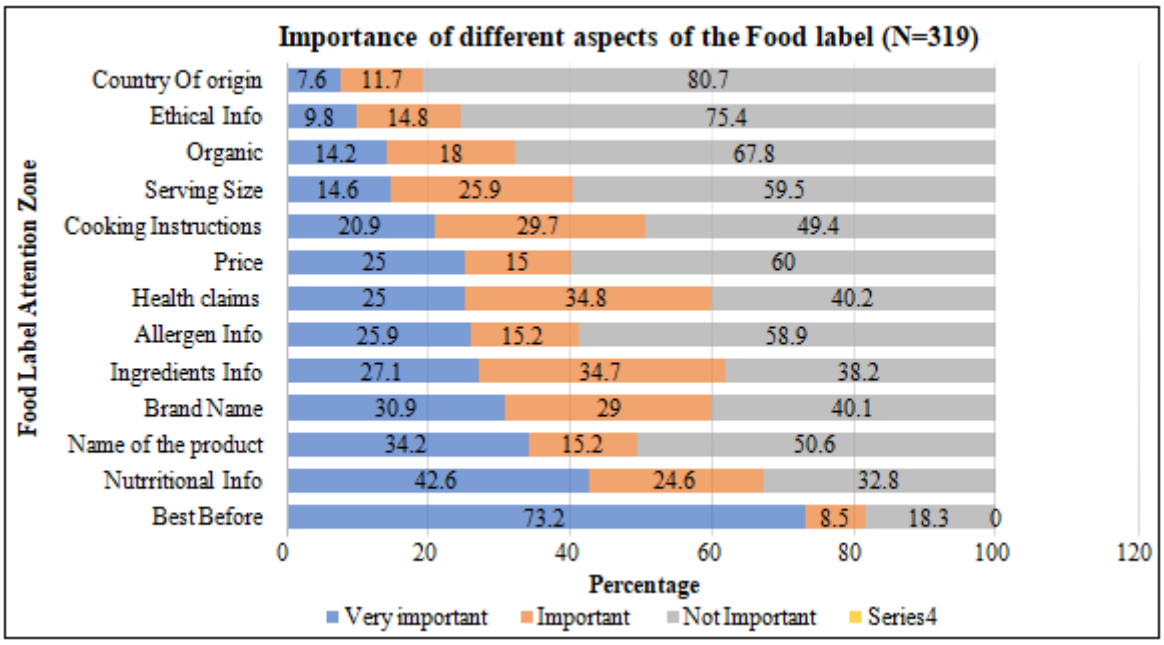

Figure 4: Importance of different aspects of the Food label (N=319)

75.4 % consumers reported that ethical information has little or no value for them. There is a need to create a lot of awareness on issues equally important like this to which our mind-set is still very rudimentary. People with specific beliefs will seek the information conducive to their belief system for e.g. Halal certification or Kosher certified.

4. Conclusion

Women may be the primary decision makers for grocery and eating habits. 25 to 44 yrs of age bracket constitute the maximum buyer population. Educated consumers made healthy choices for family health and self, irrespective of the socio-economic status. Age and Gender of the consumer is significantly responsible for the category of health food they chose. Health drinks and breakfast cereal were most preferred categories. Price did not seem to have an impact on the buying choice.

In processed food also, people look for natural products like fruits, nuts, fibre or nutritious grains as healthier choice indicating that natural products as healthier option and sugars as unhealthy option.

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