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Functional Foods: Marketing 'Health' To Modern India

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Abstract:

- *Purpose – The paper provides an overview of the impact of urbanization on the health of Indians and the dynamic market of Functional Foods mapping the competitive landscape and the firm's marketing effort.*
- *Design/methodology/approach – The study involves exhaustive desk research to explore, assimilate and analyse data to derive relevant information on market and marketing of Functional Foods in India. A variety of sources including the company sources, government agencies, consulting reports, scholarly papers and expert opinions have been explored.*
- *Findings – The functional food market in India is growing at a rapid pace as health as a value has percolated in the Indian society undergoing dramatic demographic shifts. The functional food market is innovation driven and dominated by Multinational companies. Ayurveda forms the basis of many Functional Food products sold in the Indian market and has been tapped predominantly by the domestic firms. Edible oil and dairy are two most important functional foods categories.*
- *Research limitations/implications – The research is based on the data from secondary sources and does not involve primary data collection. The research also suffers from a limitation of not having scholarly papers on Functional Foods market in the Indian context. To overcome this limitation the sources from industry, consulting reports and expert opinions have been referred.*
- *Originality/value – To the authors' knowledge, this is the first paper that provides insights on the Functional Foods market in India and may form the basis for further empirical research to gain consumer insights.*

Keywords: *Functional Foods, Marketing, Health, India, Probiotics, Ayurveda*

1.Introduction

The Indian food industry is no different from the western counterparts in its response to the growing need for healthy food. With the fast changing socio-economic indicators, the Indian consumer is now looking for the food products that provide value beyond nutrition. This value may be the specific health benefits, the disease risk reduction ability, the general well being or the cosmetic benefit associated with the foods. The functional foods are particularly targeted with such value propositions and are now increasingly been accepted by the consumers across the food categories. But still the functional foods in India have a long way to before establishing as a mature market offering. This paper provides an overview of the Functional Food market in India along with the nuances related to the marketing of these products.

1.1.Urbanization And Demographic Changes In India

Post liberalization in 1991, the Indian economy has witnessed a major shift from an agriculture based economy to a knowledge based economy harnessing the advances in Information Technology. India opened its gate for the multinational companies (MNCs) to participate in the Indian market and vice versa. Today, India is home to millions of skilled personnel working in Information Technology; Business Process Outsourcing (BPOs), Financial and other service sector companies. Most of these companies are located in the big cities like Delhi, Mumbai, Chennai, Bangalore, Hyderabad, Kolkata and Pune with very high population ranging from 5 million to 20 million. Census of India indicates that the level of urbanization has increased from 27.81% in 2001 to 31.16% in 2011[1]. The share of the service sector has increased from 30 per cent of GDP in 1950 to 55 per cent in 2007-08, rising at an accelerating pace as the period progressed (Eichengreen and Gupta, 2010). Owing to this tremendous growth opportunity, the last decade has witnessed dramatic shift in the demographics of the country along with the robust economic growth and given rise to a big base of middle class which could be anything from 100 to 250 million (Sridharan, 2004). This middle class today faces different set of health issues and seeks access to lifestyle products to prioritize healthy living. The food industry views the Functional Foods as a business opportunity to cater to this burgeoning segment of consumers.

1.2 Impact Of Urbanization On Health

Industrialization, urbanization and market globalization have had a strong impact on Indian life-styles and diets, and the nutritional status of the population. Fragmented growth of urban areas in select pockets of the country has led to two pronged nutritional problems; one emerging from excesses and the other from the deficiency.

The lifestyle in India, particularly in urban areas is westernizing rapidly and has been associated to alarming increase in the incidence of lifestyle related health problems such as cardiovascular diseases, diabetes, obesity and hypertension (Lajolo, 2002). The work has become more technological, strenuous, involves limited physical activity and odd working hours (Ayyagari et al., 2011; Kinman and Jones, 2005). Major shifts are happening in the diet structure, physical activity in jobs and related disease patterns. Major dietary change includes a large increase in the consumption of fat and added sugar in the diet, often a marked increase in animal food products contrasted with a fall in total cereal intake and fiber (Popkin, 2001). Another reason that can be attributed to rise in obesity and other health issues amongst the Indians is the increased dependence on the fast foods (Barker, 2006). The dependence on the fast foods is manifested in the contemporary busy urban lifestyle.

Decrease in activity, whether someone is working or not, combined with access to processed food high in calories and low in nutrition, contribute to the burgeoning epidemic of obesity and diabetes worldwide (McMichael, 2000). Urbanization is affecting the health of entire gamut of population especially the vulnerable sections of society - elderly, children and adolescents, and women (Trivedi et al., 2008). The working class is exposed to a lot of work related stress and thereby is prone to hypertension and cardio vascular diseases (Das et al., 2005). The children do not involve themselves in the physical play activities and frequently eat fat rich fast foods. They spend their time at leisure on play stations, computers or television instead of going to the playgrounds, as cities are usually crowded, noisy, and busy with limited areas for exercise and games (Gracey, 2002). Sedentary lifestyles have been associated with the urban living environment in India, and also with increased probability of women being overweight and obese (Griffiths and Bentley, 2001).

2.Functional Foods – A healthier substitute

The deteriorating state of health in urban India raises questions about the adequacy of the conventional food products to address to gasping issue. The problem, although multi-

dimensional in nature, may partially be addressed by the "so-called" functional foods, newly introduced in the Indian market.

2.1.Functional Foods - Global perspectives

Functional food cannot be a single well-defined/well characterized entity (Roberfroid, 2002). The concept of Functional Foods has been adopted differently by the countries across the globe. The differences lay in the definition and thereby the scope and the regulatory framework that governs the market. The concept of functional food was first promoted in 1984 by Japanese scientists who studied the relationships between nutrition, sensory satisfaction, fortification and modulation of physiological systems (István et al., 2008). There it referred to the food products fortified with special constituents that possess advantageous physiological effects (Hardy, 2000; Stanton et al., 2005). Functional foods also offer the perception that the food industry is removing less desirable elements in foods (fats, sugars, sodium, etc.) and adding more sought-after ingredients (Mulry, 2002). Another research says that a functional food is, or appears similar to, a conventional food. It is part of a standard diet and is consumed on a regular basis, in normal quantities. It has proven health benefits that reduce the risk of specific chronic diseases or ill states in addition to its basic nutritional functions (Doyon and Labrecque, 2008).

In Europe, Functional Food Science in Europe (FuFoSE) defines functional food as ''a food product can only be considered functional if together with the basic nutritional impact it has beneficial effects on one or more functions of the human organism thus either improving the general and physical conditions or/and decreasing the risk of the evolution of diseases. The amount of intake and form of the functional food should be as it is normally expected for dietary purposes. Therefore, it could not be in the form of pill or capsule just as normal food form'' (Diplock et al., 1999).

Where as in India the Food Safety and Standards Act, 2006 (FSSA) defines the functional foods [2] as "foods which are specially processed or formulated to satisfy particular dietary requirements which exist because of a particular physical or physiological condition or specific diseases and disorders and which are presented as such, wherein the composition of these foodstuffs must differ significantly from the composition of ordinary foods of comparable nature if such ordinary foods exist, and may contain one or more of the following ingredients, namely:-

- plants or botanicals or their parts in the form of powder, concentrate or extract in water, ethyl alcohol or hydro alcoholic extract, single or in combination;
- minerals or vitamins or proteins or metals or their compounds or amino acids (in amounts not exceeding the Recommended Daily Allowance for Indians) or enzymes (within permissible limits);
- substances from animal origin;
- a dietary substance for use by human beings to supplement the diet by increasing the total dietary intake".

The FSSA definition is a broad spectrum definition that clubs the foods for special dietary uses, the functional foods, the nutraceuticals and the health supplements together. Unlike the FuFoSE definition, the FSSA includes the products in the form of powders, granules, tablets, capsules in its broad spectrum definition of Functional Foods. These definitional differences give rise to ambiguity in the predictive and comparative studies for the world markets of functional foods.

3.Functional Foods Market

The food industry in India has perceived the deteriorating urban lifestyle and has launched products with specific targeted health benefits. Expecting the long term profitability, the companies are ready to experiment despite the high product failure rates at present in the market.

3.1.Market Size & Growth

Tata Strategic Management Group, largest Indian owned management consulting firm in South Asia, estimates the Health & Wellness (H&W) foods market in India at INR 101billion in 2012 and forecast it to grow at a CAGR of 33% to INR 550 billion by fiscal year 2015 with advances in product development and Government mandated fortification (Deccan Herald, 2012).

The Indian functional food market, apart from the dietary supplements, is estimated by Ernst & Young study to be about INR 30 billion in 2008 as illustrated in Figure I and has grown at a CAGR of 18% as compared to a world average of 7% [3]. The functional foods in the Indian market include products like fruits, vegetables, energy drinks, fortified juices with or without preservatives, breakfast cereals, fresh dairy products, confectionary, and fiber rich foods - all imparting the desired health benefits and

physiological changes. These products contain functional ingredients such as prebiotics, probiotics, omega fatty acids fortified foods, phytoestrogens, tocopherols, xylitol, soy, gluten and whey proteins.

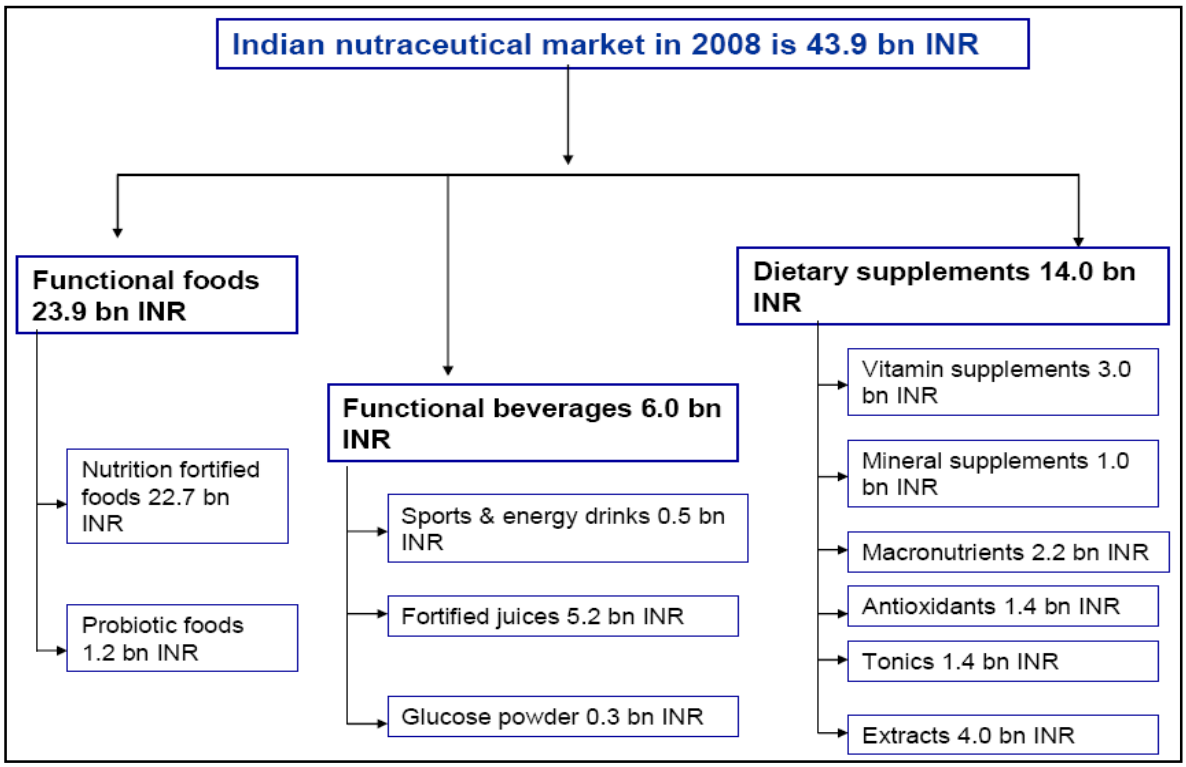

Figure 1: Indian Nutraceutical market

Functional Food products are not homogeneously distributed across all segments of the food and drinks market. Mintel, the London-based market research firm has analyzed the distribution of newly launched products in the Indian market. It observes that 116 new functional foods products were launched in India in 2010[4]. Out of these new launches, 80 products were targeted at enhancing the cardio vascular functioning and the rest 36 at promoting the immunity. Functional products have been launched mainly in the edible oil, confectionery, dairy, bakery and baby food categories as illustrated in Figure II.

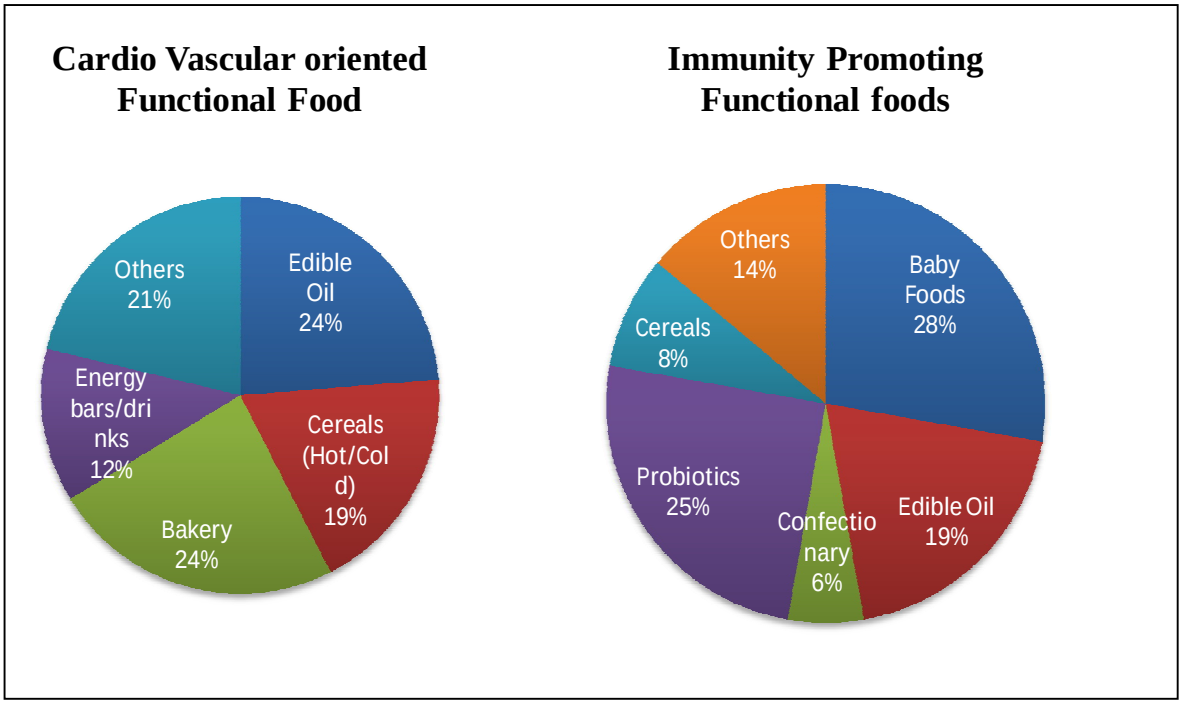

Figure 2: New Functional Foods launches in India, 2010

Edible oil is one of the most important categories consumed in India as it is the chief cooking medium. Low cholesterol and reduced trans fat products are becoming popular among the Indian consumers to counter the cardio vascular problems. Dairy products particularly the baby foods and probiotics are the other fast growing categories accomplishing immunity enhancing function.

3.2.Suppliers Of The Functional Foods

Since the functional foods falls on the thin line dividing the conventional foods and the medicinal products, the interest in this product segment is undivided between the food and pharmaceutical companies. The Indian functional food "market" is fragmented and consists of six major actors as presented in Table 1

Main Actors	**Companies**	**Functional Products/Ingredients**
Multinational food companies with a broad product range.	Nestle, Danone, Unilever, Kellogg, Pepsico, Yakult, Danone, Perfetti van Melle	Probiotic Yoghurt/Dahi, Snacks, Energy Drinks, Breakfast Cereals, Confectionary
Pharmaceutical and/or dietary products producing companies.	GSK, Amway, Ranbaxy	Malted Food, Supplements, Fortified products.
National ‘‘category leaders’’.	Amul, Dabur, ITC, Britannia, Parle	Dairy Products, Fruits & Vegetable Juices, Biscuits
Small and medium-sized companies (SMEs) of the food industry.	Heritage Foods, Ruchi Soya, Mother Dairy	Soya Milk, Dairy, Oils
Retail companies.	Reliance Wellness, Apollo Pharmacy, Patanjali	Sweetners, Cereals, Energy Drinks, Ayurvedic & Herbal Products
Supplier of ‘‘functional ingredients’’.	Chr Hansen, Orana, Danisco	Cultures, Enzymes, Phytonutrients, Natural Colors

Table 1: Major Functional Foods Segments (Adapted from Menrad, 2003)

Since the mid of new millennium, there is a new wave engulfing the Indian Food industry – ‘Health Consciousness’. The food and related industry players are adapting to the health, nutrition, safety and wellness positioning so as to have a competitive edge by providing a healthier alternative. Several multinational food companies (like Nestle, Unilever, Kellogg, and PepsiCo) have introduced Functional Food products in the Indian market. Nestle, the market leader in the infant food, instant coffee, noodles and condensed milk categories, has launched several healthy brand extensions (MAGGI Vegetable Multigrainz Noodles for MAGGI Noodles; NAN® Probiotic for NAN®, ACTIPLUS Probiotic Dahi and Slim Dahi for Dahi). Kellogg, which enjoys a healthy 60 per cent share in the INR 4 billion cereal market in India, has also introduced functional breakfast cereals like Kellogg’s Special K to reduce weight and Extra Muesli Nut,

Almond & Honey variants. Since the product development and marketing of functional food requires proven R&D capability and market acumen, multinational companies with dedicated R&D budgets have a competitive advantage over the domestic players. Most of the multinational food companies offering Functional Food products have their own R&D departments and specific in-house resources and expertise in nutritional and food technology research (Menrad, 2003). Most of these companies spend up to 1-2% of their turnover for R&D activities. Also the multinational companies are more capable to establish the specific health claim related to the functional food products with the scientific verification of the efficacy of functional food based on statistically validated data from different model systems, from retrospective and prospective epidemiological studies, as well as from intervention studies on humans (István et al., 2008).

The functional foods have attracted the interest of the pharmaceutical companies as well owing to relatively shorter product development time and limited budget requirement as compared to that for drug development. Since the functional foods lie on the thin line between medicinal and food products, the pharmaceutical industry view this segment as a natural extension of their existing product portfolio (Mollet & Rowland, 2002). Contrary to this research also suggests that pharmaceutical companies generally failed to gain foothold in the functional foods market due to the incompetence of developing and marketing a high-quality food product (Bech-Larsen and Scholderer, 2007). In India several pharmaceutical companies have launched functional foods through their Consumer Healthcare divisions. GSK Consumer Healthcare enjoys the leadership position in the health drink market through its brands like Horlicks, Maltova, Boost and Viva targeted at the growing children. Similarly Raxbany, a leading Indian pharmaceuticals company, with its brand Revital is the market leader in the daily food supplement market. Other brands along with the pharmaceutical companies are Supractiv (Piramal), Nutralite (Amway), Well AM-PM, Well multivitamin (Modicare) and GNC (Guardian Lifecare Pvt. Ltd), Actival – Z – (Taj Pharmaceuticals) and Seven Seas Multispectrum (Merck).

The National ‘‘category leaders’’ have a strong hold in the Indian food market and are in leadership positions in many food categories. Over the years, they have developed novel and reverse engineering R&D capability utilizing which they are able to roll out new and modified product variants to ward off the competition. For example AMUL entered the ice cream market in 1996 and by 2001 it achieved the leadership position, primarily because of its wide distribution network, value for money pricing and reverse

engineering based R&D capability to replicate the existing Hindustan Unilever, an Indian subsidiary of Unilever, brand like Kwality Walls. Today Amul Ice Cream has achieved 38% share against 9% market share of Hindustan Unilever making it 4 times larger than its closest competitor and is only company to have launched probiotic ice cream in the Indian market (Sodhi, 2004). Similarly the biscuit market is dominated by the Indian players like Britannia, Parle and ITC who are building the portfolio of functional biscuits like Britannia Nutrichoice; ITC's Sunfeast Marie Light Oats; Parle Actifit Digestive Marie.

In general, SMEs lack the know-how and resources for own intensive R&D activities and cannot afford to spend high sums in specific information or advertising activities. These companies mostly produce functional products for market niches or offer ''me-too'' products following the pioneering products of the multinational companies (Menrad, 2003). For example, Hatsun Agro, a dairy based company in South India has witnessed the sales growth from INR 0.19 billion in 1997-98 to INR 13.5 billion in 2010-11 but has not been able to introduce any functional food products despite the competition doing so.

Post 2008, the retailers have opened "Health and Wellness" oriented specialty stores in major metros of the country. Reliance retail opened Reliance Wellness, a format that stocks categories such as Nutrition, Sports Nutrition, Personal care & beauty, Cosmetics, Opticals, OTC, Health Foods, Self Help Medical & Fitness Equipment. Another popular concept based on Yoga and Ayurveda (means "the knowledge for long life") run by Patanjali Trust is Divya Pharmacy that offers Ayurveda based functional foods. Although no exact figure for its turnover are available but its significance is apparent from nationwide distribution and the millions of people attending the yoga camps organized by the promoter, Baba Ramdev.

The suppliers of food ingredients play a significant role as the source of innovation in the Functional Food segment and provide the necessary R&D support to most of the food companies There are more than 50 significant market players in the Indian food ingredients market, including globally prominent ingredient companies such as Danisco, DSM, The Solae Company, Chr Hansen and BASF, which have an entire portfolio of functional ingredients like the dairy cultures, enzymes, phytonutrients and probiotics. The food ingredient market is fairly concentrated, with the leading players occupying nearly 60-70% of the market.

3.3.Functional Food Brands

Some of the popular functional food products and brands marketed in the Indian market are listed in Table 2.

Company	**Core Function**	**Product Description**	**Functional Foods Brands**
AMUL	Dairy	Fortified Energy Drinks	Stamina; Nutramul
		Probiotic Yohurts and drinks	Prolife; Flaavyo
		Health Drinks	Amul PRO
		Frozen Ice-cream with probiotics	Sugar Free Probiotic; Prolife
Nestle	Dairy & Food	Probiotic Yohurts and drinks	Junior Daheez; ActiPlus
		Infant Foods with probiotics	NAN® Pro
		Noodles with multi grains	MAGGI Vegetable Multigrainz Noodles
Pepsico	Food	Breakfast Cereals	Quaker Oats
		Healthy Snacks	Aliva
		Fortified Energy Drinks	Gatorade
Britannia	Dairy & Food	Fortified Energy Drinks	Actimind; TigerZor
		High Fibre Biscuits	NutriChoice range
Dabur	Food & Wellness	Fruit and Vegetable Juices	Real Activ Range
		Ayurvedic Products	ChyawanPrakash; Honey; NUTRIGO
Perfetti van Melle	Confectionary	Ayurvedic functional gum	Happydent
Yakult Danone	Food	Probiotic drinks	Yakult
GSK Consumer Healthcare	Pharma & Nutraceuticals	Health Drinks	Horlicks; Boost; Maltova; Viva
Godrej-Hershey's	Food	Soya based Health drink	Sofit
Patanjali (owned by a religious trust)	Retail	Fruit and Vegetable Juices	Amla; Aloe Vera; Khus Sharbat
		Herbal Products	Methi Pachak; Ajwain Pachak
		Ayurvedic functional candies	Divya Amla;

Table 2: An indicative list of Functional Foods in Indian market

3.4.Fast Growing Categories

3.4.1.Probiotics

Indian probiotics market is valued at $2 million as per 2010 estimates and it is poised to quadruple by 2015 due to the advent of Indian and multinational companies coming in to the fray (Raja and Arunachalam, 2011). Some commercial examples of probiotics in the Indian market are listed in Table 3. Many small dairy and food product manufacturers like JK Dairy are also planning to launch new products in this segment.

S.No	Probiotic Products	Company
1	Probiotic curd	Heritage Foods (India) Ltd.
2	'b-Activ' probiotic curd (L. acidophilus and B. lactis strain BB12)	Mother Dairy
3	'Nesvita' probiotic yoghurt	Nestle
4	Probiotic ice creams, 'Amul Prolife' 'Prolite' and 'Amul Sugarfree'	Amul (Brand of Gujarat Cooperative Milk Marketing Federation Ltd.)
5	Yakult, Probiotic curd with L. casei strain Shirota	Yakult Danone India (YDI) Private Limited

Table 3: Probiotics products marketed in India (Bhadoria and Mahapatra, 2011)

3.4.2.Other Dairy Products

Operation Flood has transformed the face of Indian dairy industry and has set the path to becoming the leading milk producer in the world. Also recently launched INR 22.42 billion National Dairy Plan [5] aimed at connecting the small scale milk producers to the processing units would further strengthen the share of dairy in the food market. Healthy variants of dairy products like Ice cream, butter, yoghurts/dahi, flavoured milks, market milk, milk powders/infant milk substitutes and fermented drinks are being introduced in the market. Products with fortified calcium, reduced cholesterol, Omega-3 fatty acids, low fat and sugar are being introduced.

3.4.3.Ayurveda

Indians relate healthy food to traditional 2,000-year-old Ayurvedic practices (Alagiakrishnan and Chopra, 2001), which are ingrained in everyday Indian culinary practice. Some Indian spices and herbs are thought to boost energy and provide health benefits because they have phytochemical and antioxidant properties that help suppress multiple myeloma and cancers (Krishnaswamy, 1996). Companies like Dabur, Himalya, Amway and Patanjali (Yoga trust) have launched a range of functional foods promoting healthy living. Table 4 shows the leading brands of ayurveda based functional foods and dietary supplements available in the Indian market.

Ayurvedic Food Brands	**Company**	**Ingredients**	**Health Claims**
Happydent	Perfetti van Melle	Neem, Pudina extract, pudina oil (M.Spiceta), Eucalyptus oil and Baking soda	Helps promote oral hygiene (Halitosis)/gum & teeth diseases
Hajmola	Dabur	Black Pepper, Black Salt, Cummin Seeds and Ginger	Ayurvedic digestive medicine
Chaywanprash	Dabur	Age-old formulation of a number of herbs like Amla, known to be one of the best antioxidants, Giloy (Guduchi) known to have immuno modulatory properties, and has more than 40 other natural ingredients.	Strengthens body's internal defense mechanism
Shilajit Gold	Dabur	Shilajit, Gold, Saffron, Alkushi, Ashwagandha, Safed Mushali	A powerful rejuvenator that helps increase stamina, vigour and vitality.
Diges Tea	Himalaya Herbal	Black Pepper, Mint, Cardamom, Fennel and Ginger	Aids digestion and relieves flatulence

Table 4: Ayurveda based functional food brands

4.Permitted Nutraceutical Ingredients

There are host of nutraceutical ingredients permissibly used by the food and nutraceutical companies. Some of the popular ingredients used in the Indian market are carotenoids, dietary fibers, fatty acids, flavonoids, isothiocyanates, phenolic acids, plant stanols/sterols and polyols. Table V shows some of the food ingredients approved by Food Safety and Standards Authority of India (FSSAI) in India.

Ingredient	Industry Usage	Health Claims
Omega 3 & 6	Functional foods (fortified foods): e.g. omega fortified malted beverages	Prevention from inflammatory and autoimmune diseases, also reducing cholesterol, and hence, various heart risks.
Probiotics	Functional foods: e.g. probiotic Yogurt/dahi	Improve intestinal microflora and aid better digestive health.
Beta glucan	Functional foods: e.g. oat enriched foods	Soluble fibre that soaks up the cholesterol.
Phytoestrogens	Functional beverages: e.g. soya milk drinks	Reduce the risk of many kinds of cancers, cholesterol and risk of coronary heart disease.
Tocopherols	Functional foods: e.g. rice bran fortifies oil	Cholesterol lowering potential. Prevent or delay heart disease and related complications, cataracts, macular degeneration, prostrate and other cancers.
Ginseng	Dietary supplements: e.g. Tonics and stimulants	Cures lethargy, arthritis, impotence, senility, and has anti-aging properties.
Beta-carotene	Dietary supplements: e.g. Beta-carotene in antioxidants	Prevent night blindness, skin problem, enhance immunity, protect toxins and cancers

Table 5: An indicative list of approved Functional Foods ingredients

5.Marketing Of Functional Foods

India as a market is highly diversified in terms of varied socio-cultural values, regional economic prosperity and education. This situation presents the food companies with a

stiff challenge to market the functional foods to various segments of consumers who are geographically, culturally, economically different.

5.1.Segmenting, Targeting And Positioning

The food companies have adopted various basis of segmenting the consumers including the geography, level of urbanization, age, socio-economic classification (SEC) and are targeting them with various health oriented messaging. For example, Yakult DANONE sells its Yakult probiotics drink in more than 2000 retail stores, supermarkets and chemists in Delhi, NCR, Punjab, Jaipur , Chandigarh, Mumbai, Pune, Hyderabad and Bangalore only. These are metro cities of the country and are home to millions of educated health conscious middle and affluent class consumers. Also, GSK Consumer Healthcare with its malted food brands like Horlicks, Maltova, Boost and Viva account for around 70% market share. It derives most of its sales from south India only. South India being milk deficient consumes these products as a substitute of milk where as in north these products are consumed as taste enhancers and are added in the milk. Nestle also sells its functional food brands like Junior Daheez and ActiPlus in selected cities only targeting the educated middle class customers.

Due to the limited consumers' knowledge and awareness of the health effects of newly developed functional ingredients, there are strong needs for specific information and communication activities to consumers in this respect (Menrad, 2003). The positioning of functional food products is predominantly based on the health benefits of the products and the ingredients. For example, advertisements like Kollogg's Special K weight management, Happydent's Shiny teeth, Horlicks's child growth and Yakult's family drink for health focus on the health benefits of the products and the novel ingredients. The ad campaigns typically feature celebrity endorsements, children/family and animations. In 2008, GlaxoSmithKline Consumer Healthcare (GSK) and Heinz India came out with advertisements that directly compared their health drinks brands Horlicks and Complan respectively using the competitor brand's trademarks. It raised issues about the ethical considerations in advertising, particularly in stiffly competitive product segments such as health drinks in India.

5.2.Striking The Right Marketing Mix

The challenge for the industry is to strike a right marketing mix in order to establish a sustainable demand and market for functional food products. It is the combination of

firm's product innovation capability and the marketing prowess that determines the success of functional foods.

For new functional foods development, the firms shall focus on building internal skills, employing innovative external sourcing, developing new markets, establishing alliances, developing packaging, building strong brands and finding venture capital which may not be the case with conventional foods (Kotilainen et al., 2006; Mark-Herbert, 2004).

To cater to the mass market in India, it is imperative to offer products in various pack sizes including the small sizes (sachet) with lower prices as the lower income groups buy little but more frequently (Dubey & Patel, 2004). For example, Nestle and GlaxoSmithkline Consumer Healthcare (GSK) have launched products that have been exclusively designed for rural markets. GSK's Horlicks Asha is a low-cost variant (40 per cent cheaper than Horlicks) for rural markets only. Asha is priced at Rs 85 for a 500gm pouch pack close to half the price of the original. And Nestle has launched Rs 2 and Rs 4 products Maggi Masala-ae-Magic and Maggi Rasile Chow, meant for rural/semi urban markets to provide low cost, light meal fortified with iron.

For the market success of Functional Foods it is required to serve high-volume distribution channels like e.g. supermarkets, general retail stores or discount retailers (Menrad, 2003). In India, the food companies have developed deep rooted distribution system to reach the consumers not only through large supermarkets but also through millions of Kirana stores (mom & pop stores). Bulk of sales for the FMCG companies comes through 7.5 million stores (Banerjee & Banerjee, 2000). However some companies like Amway and Yakult are also distributing the products through personal selling. Yakult pioneered the "Yakult Ladies System of door-to-door distribution" in 1963 in Japan and in India too, is selling through the same in addition to retail selling from select stores.

The promotion of desired health benefits associated with the products should not be complicated and loaded with scientific information about the ingredients (Menrad, 2003). Rather, a more simplistic messaging conveying the differentiated health benefit would be a more prudent choice. Consumers need to understand the benefits, not the ''science'' behind the product.

5.3.Consumer Acceptance

Knowing the determinants of consumer acceptance is the most important thing for long term success in the market place (Ares and Gámbaro, 2007**).** A consumer behavior study

on Indian consumers based on the "theory of reasoned action" shows that product familiarity had a significant impact on Indian consumers' attitudes, subjective norms, intention to buy, and, ultimately, purchase behavior of the low innovator and high innovator groups. The study also shows that the subjective norms, which looks at the influence of people in one's social environment on his/her behavioral intentions, are found to have direct effects on attitudes, intention to buy, and purchase behavior for new processed food products (Choo et al., 2004). High Product failure rates in functional foods indicate that consumer acceptance is often neglected or not understood (Verbeke, 2005). Marketers should realize the importance of deploying proper communication channels targeted at the purchase decision makers and their reference groups to inform them about the health benefits of the functional foods. The marketers are also faced with a paradox arising from Indian consumer's definite preference for taste and the notion that the better is the inferred taste; the more the food is enjoyed during actual consumption, the less healthy the food is portrayed to be (Raghunathan et al., 2006).

6.Concluding Remarks

Urbanization and globalization are driving the Indian consumer markets and the need for a healthy variant of food is felt by the consumer who is exposed to an unhealthy lifestyle. Functional foods, as one of the solution, are being introduced by the food marketers in various categories like dairy products, edible oils and breakfast cereals. The market is growing at a fast pace and presents a tremendous growth opportunity for food companies. But for achieving consumer acceptance in long run, the marketers would have to focus on studying the consumer expectations, judicious product development, efficient distribution and effective communication.

7.Notes

1. http://censusindia.gov.in/2011-prov-results/paper2/data_files/india/Rural_Urban_2011.pdf
2. http://www.fssai.gov.in/AboutFSSAI/FSSAct.aspx
3. http://ficci-nutraceuticals.com/files/Nutraceuticals_Final_Report.pdf
4. www.gov.mb.ca/agriculture/statistics
5. http://pib.nic.in/newsite/erelease.aspx?relid=82551

8.Reference

1. Alagiakrishnan, K. and Chopra, A. (2001). Health and health care of Asian Indian elders. Curriculum in Ethnogeriatrics: Core Curriculum and Ethnic Specific Modules, available at: www.stanford.edu/group/ethnoger/ [accessed on 27 June 2012].
2. Ares, G., and Gámbaro, A. (2007). Influence of gender, age and motives underlying food choice on perceived healthiness and willingness to try functional foods. Appetite, 49, 148–158.
3. Ayyagari, R., Grover V. and Purvis R. (2011). Technostress: Technological Antecendents and Implications. MIS Quarterly, 35(4), 831-858.
4. Banerjee A. and Banerjee B. (2000). Effective Retail Promotion Management: Use of Point of Sales Information Resources. Vikalpa, 25(4), 52-59.
5. Barker, K. (2006). Fast food greases India's way to fat. Available at: http://articles.chicagotribune.com [accessed on 23 May 2012].
6. Bech-Larsen, T. and Scholderer, J. (2007). Functional foods in Europe: Consumer research, market experiences and regulatory aspects. Trends in Food Science & Technology, 18, 231–234.
7. Bhadoria P.B.S and Mahapatra S.C (2011). Prospects, Technological Aspects and Limitations of Probiotics – A Worldwide Review. European Journal of Food Research & Review, 1(2), 23-42.
8. Choo, H., Chung, J. and Pysarchik, D.T. (2004). Antecedents to new food product purchasing behavior among innovator groups in India. European Journal of Marketing, 38(5/6), 608 – 625.
9. Das, S.K., Sanyal, K. and Basu, A. (2005). Study of urban community survey in India: growing trend of high prevalence of hypertension in a developing country. International Journal of Medical Sciences, 2(2), 70–78.
10. Deccan Herald (2012). Tata Strategic pegs wellness foods market at Rs 55K crore. Available at: http://www.deccanherald.com/content/61120/tata-strategic-pegs-wellness-foods.html [accessed 25 June 2012].
11. Diplock, A.T., Aggett, P.J., Ashwell, M., Bornet, F., Fern, E.B., & Roberfroid, M.B. (1999). Scientific concepts of functional foods in Europe: Consensus document. British Journal of Nutrition, 81, S1–S27.
12. Doyon, M. and Labrecque, J. (2008). Functional Foods: A Conceptual Definition. British Food Journal, 110(11), 1133-1149.

13. Dubey J. and Patel R.P. (2004). Small wonders of the Indian market. Journal of Consumer Behaviour, 4(2), 145–151.
14. Eichengreen, B. and Gupta, P. (2010). The Service Sector as India's Road to Economic Growth?. Working paper [249], ICRIER, New Delhi, India, April 20.
15. Gracey, M. (2002). Child health in an urbanizing world. Acta Paediatricia, 91, 1-8.
16. Griffiths, P.L. and Bentley M.E. (2001). The Nutrition Transition Is Underway in India. The Journal of Nutrition, 131(10), 2692-2700.
17. Hardy, G. (2000). Nutraceuticals and functional foods: Introduction and meaning. Nutrition, 16, 688–697.
18. István, S., Emese, K., Beáta, K. and Andrea, L. (2008). Functional food. Product development, marketing and consumer acceptance—A review, Appetite, 51, 456–467.
19. Kinman, G. and Jones, F. (2005). Lay Representations of Workplace Stress: What Do People Really Mean When They Say They Are Stressed?. Work & Stress, 19(2), 101-120.
20. Kotilainen, L., Rajalahti, R., Ragasa, C. and Pehu, E. (2006). Health enhancing foods: Opportunities for strengthening the sector in developing countries. Agriculture and Rural Development Discussion Paper 30, World Bank, Washington, DC.
21. Krishnaswamy, K. (1996). Indian functional foods: role in prevention of cancer. Nutrition Reviews, 54(11), S127.
22. Lajolo, M.F. (2002). Functional foods: Latin American perspectives. British Journal of Nutrition, 88(2), S145–S150.
23. Mark-Herbert, C. (2004). Innovation of a new product category—Functional foods. Technovation, 24, 713–719.
24. McMichael, A.J. (2000). The urban environment and health in a world of increasing globalization: issues for developing countries. Bull World Health Organ, 78, 1117-1126.
25. Menrad, K. (2003). Market and marketing of functional food in Europe. Journal of Food Engineering, 56, 181–188.
26. Mollet, B., and Rowland, I. (2002). Functional foods: At the frontier between food and pharma. Current Opinion in Biotechnology, 13, 483–485.

27. Mulry, M.C. (2002). Functional foods – past, present and future. Natural Foods Merchandiser, 23(3), 82.
28. Popkin, B.M. (2004). The Nutrition Transition: An Overview of World Patterns of Change. Nutrition Reviews, 62(7), S140-S143.
29. Raghunathan, R., Naylor, R.W. and Hoyer, W.D. (2006). The Unhealthy = Tasty Intuition and Its Effects on Taste Inferences, Enjoyment and Choice of Food Products. Journal of Marketing, 70, 170-184.
30. Raja B.R. and Arunachalam K.D. (2011). Market potential for probiotic nutritional supplements in India, African Journal of Business Management, 5(14), 5418-5423.
31. Roberfroid, M.B. (2002). Global view on functional foods: European perspectives. British Journal of Nutrition, 88(2), S133–S138.
32. Sodhi, R.S. (2004). Indian Ice Cream Market: Amul Ice Cream Success Story, Indian Dairymen, 56(6), 66-67.
33. Sridharan, E. (2004). The Growth and Sectoral Composition in India's Middle Class. India Review, 3(4), 405–428.
34. Stanton, C., Ross, R.P., Fitzgerald, G.F., & Van Sinderen, D. (2005). Fermented functional foods based on probiotics and their biogenic metabolites. Current Opinion in Biotechnology, 16, 198–203.
35. Trivedi, J.K., Sarren H., and Dhyani M. (2008). Rapid urbanization - Its impact on mental health: A South Asian perspective. Indian Journal of Psychiatry, 50(3), 161–165.
36. Verbeke, W. (2005). Consumer acceptance of functional foods: Sociodemographic, cognitive and attitudinal determinants, Food Quality and Preference, 16, 45–57.