



## Consumption Pattern of Nutraceutical Products among Consumers in Delhi

### KEYWORDS

Consumption Pattern, Nutraceutical ingredients, nutraceutical market, pharmaceuticals.

**Abdullah Bin Junaid**

PhD Scholar, Department of Management, Jamia Hamdard

**Waqar Ahmed**

Consultant Therapy Specialist, Pfizer Limited, India

**ABSTRACT** In today's world the nutraceutical market is an emerging market. Indian nutraceutical market is also booming with a good growth rate. The study tries to find out various determinants that affect the nutraceutical market and are important to be considered while making the strategies for this market. However this study also tries to examine the various key determinants involved in the purchasing behaviour of consumers while purchasing their nutraceutical product. The target sample was above 15 years. The study was carried in Delhi, India and the data was collected from 120 respondents who are using the nutraceutical products. The sampling method used is the random sampling method. The instrument used to collect primary data is the questionnaire. The data is finally analyzed through analytical software named SPSS version 16. The study also helps various nutraceutical companies to make their strategies for retention in this market.

### INTRODUCTION

The term Nutraceutical itself explains its meaning that is a product having nutrient along with a medicinal property. It can be said as a purified form of food which is available in medicinal form. Dr. Stephen L. Defelice first coined the term Nutraceutical. These nutraceutical products are the health products having medicinal benefits which can be used for the prevention and treatment of various diseases. Two most dominating categories of nutraceutical products are phytochemicals and antioxidants. Nutraceutical products having phytochemicals are helpful in the protection of disease while nutraceutical products having antioxidants helps in the prevention of the disease. There is a boom in this market and the reason may be due to the increased popularity of these products. This boom in the nutraceutical market may be due to the following reasons:

1. Self medication is easy in case of nutraceutical products.
2. Due to less adverse effects

### The global nutraceutical market

We can define the global nutraceutical market as the collective sales beverages, supplements and functional foods having bioactive ingredients that include proteins, fibers, peptide, vitamins, minerals etc. There is a need of a blockbuster model for the nutraceutical market that dominates. Today the food industry is moving towards the premiumisation and low pricing this may be due to the pressure of performing well with reducing margins and rising costs. The BCC research carried out in 2007 gives a picture of various trends in the nutraceutical industry through 2007, and makes market projections over a 5-year period, from 2008 to the end of 2013. This report contains a detailed assessment of seven bioactive ingredients, 18 food product categories, eight application areas, and four geographic areas, thereby providing comprehensive market estimates for more than 1,200 market sub segments. In a recent comprehensive global report on the nutraceuticals market (September 2010), Global Industry Analysts, Inc. reported that the global nutraceuticals market is projected to exceed \$243 billion by 2015. The U.S., Europe and Japan dominate the global market and account for more than 85 percent market share.



Figure: 1

- The global market for nutraceutical products increased from \$117.3 billion in 2007 to an estimated \$123.9 billion in 2008. It should reach \$176.7 billion in 2013, a compound annual growth rate (CAGR) of 7.4%.
- Nutraceutical foods currently have the largest share of the market and were worth \$39.9 billion in 2007. This is expected to increase to \$40.6 billion in 2008 and \$56.7 billion in 2013, for a CAGR of 6.9%.
- Nutraceutical beverages generated \$38.4 billion in 2007 and an estimated \$42.8 billion in 2008. This segment is expected to dominate the market in 2013 with revenues of \$71.3 billion, for a CAGR of 10.8%.

### The Indian nutraceutical market

Among the various markets in India nutraceutical market is one of the booming markets. The boom in this segment of market leads to the diversification of various industry players into this market. The growth of the nutraceutical market in India is 21 percent annually. Some other factors which lead to the growth of this market are support from the government bodies and increasing demand from the consumers. The country's demand for these compounds will increase 8.0 percent annually to \$1.1 billion in 2013 (Freedonia, 2009). The Indian market is one of the largest food, beverages and pharmaceutical market in spite of its underdeveloped primary health care system and developing economic status. There are many big firms in this industry in India among which the leading ones are Britannia Industries (baked goods and dairy products), Nestle India (milk, nutritionals, functional drinks, prepared dishes and confectionery products), and Tata Tea (conventional and specialty teas). Spurred by trends in the domestic production of end-use products, demand for herbal and non-herbal extracts in India is forecast to advance 7.5 percent annually to \$128 million in 2013. (Freedonia, 2009)

### LITERATURE REVIEW

Nutraceuticals are commonly defined as any substance that is considered a food, a part of a food, a vitamin, a mineral, or an herb that provides health benefits, including disease prevention and/or treatment, and they were first identified in 1989 (Kalra, 2003). In Indian market most of the nutraceuticals which are available are from the traditional Indian Ayurvedic Medicines and these are marketed under different brand names (Patwardhan et al., 2005). In terms of marketing these nutraceutical products from natural origin such as herb, tree species etc, there is not much of competition in India (Datta Banik & Basu, 2002; Patwardhan et al., 2005). We have also seen that there are no strict pharmaceutical regulations meant for these nutraceutical products in India. In India

a range of these nutraceutical products is available as over the counter i.e. without the medical prescription (Patwardhan et al., 2005). India's major export destination is the USA and Japan (Patwardhan et al., 2005). Even today no strict labelling and branding is required for these products. In addition cost of production typically is low, making this produce highly competitive in Asian and African markets (World Nutraceuticals, 2006). Estimated value of the industry is \$10 billion per annum with exports of \$1.1 billion per annum making a significant contribution to the export market (Singh, Singh & Khanuja, 2003).

The United States of America (USA) currently possesses the largest and most rapidly expanding functional food and nutraceutical market in the world (World Nutraceuticals, 2006). Its strong domestic market supports major imports from Japan, North and South Korea, China, India, Brazil, the European Union (EU), Australia, New Zealand and other parts of the world (World Nutraceuticals 2006). For the USA it has been suggested that about 50% of its multi-billion dollar food market can be related to use of nutraceuticals and functional food products (Belem, 1999). In 2003 Canadian trade in nutraceuticals and functional foods represented 3% of the global market compared to the USA (35%) and EU (32%) (D'Innocenzo, 2006).

**OBJECTIVES OF THE STUDY**

To find out the most preferred group which are using these nutraceutical products.

To find out the role of influencers in the marketing aspects of these nutraceutical products.

To find out the least preferred attribute and most preferred attribute related to the nutraceutical product.

**RESEARCH METHODOLOGY**

**Sources of Data**

To analyse the consumer's preferences on nutraceutical products both primary and secondary data were used. Primary data was collected from the respondents through questionnaire by face to face interaction. Secondary data was collected from various books, journals and websites.

**Sampling technique and sample size**

A convenience sampling technique was adopted and a total of 120 sample size of respondent if taken from Delhi.

**Data Collection tool**

A well structured questionnaire was prepared for the purpose of collecting the data.

**Limitations of the study**

The study is limited to Delhi only. Because of this reason the study cannot be generalized to whole of India.

**FINDINGS**

Q8		
	Frequency	Percent
Vitamin/Minerals	49	40.8
Antioxidants	17	14.2
Fibers	16	13.3
Fatty Acids and Herbs	12	10.0
Herbal Extract	12	10.0
Immunity Performance Enhancers	10	8.3
Pro-Biotic	4	3.3
Total	120	100.0

According to table 1 the most preferred category of nutraceutical product ingredient is the vitamin which is followed by antioxidants.

Q13		
	Frequency	Percent
None	88	73.3
Dizziness	12	10.0
Allergy	7	5.8
Others	5	4.2
Nausea	4	3.3
Vomiting	4	3.3
Total	120	100.0

Table 2 indicated the adverse effects/side effects of the nutraceutical products. Here we came to know that 73.3 percent people feel that there are no side effects of nutraceutical products but 10 percent people say that they have dizziness.

Q15		
	Frequency	Percent
Seen advertisement a lot	49	40.8
Read the benefits in magazine	26	21.7
Doctor prescription	20	16.7
Friends reference	20	16.7
I want to try the product	5	4.2
Total	120	100.0

Q10		
	Frequency	Percent
To improving body function	70	58.3
To improve mental performance	27	22.5
For general well being	14	11.7
For medical purpose	5	4.2
To reduce weight	4	3.3
Total	120	100.0

Table 4 shows that 40.8 percent people are influenced by the advertisement to buy a nutraceutical product. Hence we can say that mostly people are influenced by the advertisements to buy these products.

When it comes to the purpose of using the nutraceutical products then as per table 4 we say that 58.3 percent people are using the nutraceutical products to improve their body function. The next major reason is to improve the mental performance.

Q16		
	Frequency	Percent
100 - 150	82	68.3
50 - 100	20	16.7
150- 200	15	12.5
200- 250	3	2.5
Total	120	100.0

Table 5 shows that 68.3percent people prefer to buy their nutraceutical product at a cost of rupees 100 to rupees 150.

**Q17**

	Frequency	Percent
Advertisement	58	48.3
Magazine	28	23.3
Referral	20	16.7
Trade show	9	7.5
Company website	3	2.5
Newspaper	2	1.7
<b>Total</b>	<b>120</b>	<b>100.0</b>

According to table 6 about 48.3 percent people under the study become aware about these nutraceutical products

**Q12**

	Frequency	Percent
0 to 3 months	87	72.5
3 to 6 months	22	18.3
6 to 9 months	8	6.7
9 to 12 months	3	2.5
<b>Total</b>	<b>120</b>	<b>100.0</b>

though the advertisement. Hence we can say that advertisement plays a vital role in the awareness of people about these products and hence increases the sales of these products.

When asked about the time period in which they feel the action of these products then get to know from table 7 that 72.5 percent people are benefited by these products within 3 months.

**Q18**

	Frequency	Percent
Horlics	51	42.5
Bournvita	30	25.0
Complain	24	20.0
Boost	12	10.0
Maltova	3	2.5
<b>Total</b>	<b>120</b>	<b>100.0</b>

Table 8 shows the most preferred nutraceutical product by consumers and we can say that 42.5 percent people prefer to use Horlics over other nutraceutical products. The second most preferred nutraceutical product comes out to be Bournvita.

**Q19**

		Taste	Reliability	Brand loyalty	Quality	Price	Total
Q18	Horlics	5	22	4	18	2	51
	Bournvita	1	13	3	12	1	30
	Boost	0	6	1	4	1	12
	Complain	3	9	3	7	2	24
	Maltova	1	1	0	1	0	3
<b>Total</b>		<b>10</b>	<b>51</b>	<b>11</b>	<b>42</b>	<b>6</b>	<b>120</b>

When we do crosstabulation between the products and its most preferred attributes then we came to know from table 9 that reliability is the most preferred attribute for consumers related to nutraceutical products.

**Q20**

		Price	Quality	Taste	Packing	Total
Q18	Horlics	38	2	6	7	51
	Bournvita	21	3	2	4	30
	Boost	7	2	0	3	12
	Complain	15	2	3	4	24
	Maltova	3	0	0	0	3
<b>Total</b>		<b>82</b>	<b>9</b>	<b>11</b>	<b>18</b>	<b>120</b>

When we do crosstabulation between the products and its least preferred attributes then we came to know from table 10 that price is the least preferred attribute for consumers related to nutraceutical products. That means that for consumers price is not an important factor. They want their product should be reliable and is of high quality.

**Q1**

		Student	Athlete	Service Person	Housewife	Body Builder	Unemployed	Self Employed	Total
Q18	Horlics	5	13	4	7	20	0	4	51
	Bournvita	5	5	4	4	5	1	4	30
	Boost	0	2	2	5	2	0	0	12
	Complain	2	13	2	8	8	0	0	24
	Maltova	0	1	0	0	1	1	0	3
<b>Total</b>		<b>14</b>	<b>28</b>	<b>12</b>	<b>22</b>	<b>33</b>	<b>2</b>	<b>9</b>	<b>120</b>

Table 11 shows crosstabulation between the occupation of the person and the product type. Here we came to know that mostly athletes and body builder are using these nutraceutical products.

**Q18**

		Horlics	Bournvita	Boost	Complain	Maltova	Total
Q1	15-20	3	2	0	2	0	7
	20-25	9	6	1	4	1	21
	25-30	21	8	5	10	2	46
	30-35	15	8	5	6	0	34
	35-40	3	4	1	2	0	10
	Above 40	0	2	0	0	0	2
<b>Total</b>		<b>51</b>	<b>30</b>	<b>12</b>	<b>24</b>	<b>3</b>	<b>120</b>

When we did crosstabulation between age group and the product type as shown in table 12 we came to know that the age group which is using these products is between 25 years to 35 years which can either be athletes or body builders.

**CONCLUSION**

The nutraceutical products category is an emerging field and most of the companies are now focusing towards this area. In this study we came to know about the age group which uses these nutraceutical products the most and people of which occupations are using these nutraceutical products. The study also tells us about the source buy which consumers are getting aware about these products and also the purpose for which they are using these nutraceutical products. In today's world there are two most emerging fields in the pharmaceutical industry one is the cosmeceutical products and the other is the nutraceutical products. So this study will help various nutraceutical manufacturing companies to make their strategies regarding the sales and marketing the nutraceutical products and how to improve their nutraceutical products.

## REFERENCE

1. 23.statcan.gc.ca, 2003, Functional Foods and Nutraceuticals Survey, viewed on 224 November 2012, <<http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SurvId=22191&SurvVer=1&Instald=23140&InstaVer=1&SDDS=5038&lang=en&db=imdb&adm=8&dis=2>> | 2. Basu, S Thomas, J Acharya, S 2007, Prospects for Growth in Global Nutraceutical and Functional Food Markets: A Canadian Perspective, Australian Journal of Basic and Applied Sciences, Vol. 1 No. 4. | 3. Bccresearch.com, 2008, Nutraceuticals: Global Markets and Processing Technologies, viewed on 17 November 2012, <<http://www.bccresearch.com/report/nutraceuticals-processing-markets-fod013c.html>> | 4. Chaturvedi, S et. al, 2011, Role of Nutraceuticals in Health Promotion, International Journal of PharmTech Research, Vol. 3 No. 1. | 5. Freedonia.com, World of Nutraceutical Ingredients: Industry Study with Forecasts for 2013 & 2018, viewed on 20 November 2012, <<http://www.freedoniagroup.com/brochure/25xx/2565smwe.pdf>> | 6. Ficci-nutraceuticals.com, 2008, Industry Insight: Indian Nutraceuticals, viewed on 29 November 2012, <[http://ficci-nutraceuticals.com/files/Nutraceuticals\\_Final\\_Report.pdf](http://ficci-nutraceuticals.com/files/Nutraceuticals_Final_Report.pdf)> | 7. Ifssolutions.com, 2011, Best Practices in Nutraceuticals Fulfillment, viewed on 12 November 2012, <[www.ifssolutions.com/Portals/14/.../ifs\\_white\\_paper\\_0911-FINAL.pd...](http://www.ifssolutions.com/Portals/14/.../ifs_white_paper_0911-FINAL.pd...)> | 8. Jose, S 2010, Global Nutraceuticals Market to Cross US\$243 Billion By 2015, According to a New Report by Global Industry Analysts, Inc, Viewed on 25 November 2012, <[http://www.prweb.com/releases/nutraceuticals/dietary\\_supplements/prweb4563164.htm](http://www.prweb.com/releases/nutraceuticals/dietary_supplements/prweb4563164.htm)> | 9. Klimas, M Brethour, C Bucknell, D 2008, International Market Trends Analysis for the Functional Foods and Natural Health Products Industry in the United States, Australia, the United Kingdom and Japan, viewed on 15 November 2012, <[http://admin.nutrinetcanada-nnc.ca/useredits/Image/FFNHP%20International%20Final%20Report%20FINAL%20031708%20MK%20%20CCB\(1\).pdf](http://admin.nutrinetcanada-nnc.ca/useredits/Image/FFNHP%20International%20Final%20Report%20FINAL%20031708%20MK%20%20CCB(1).pdf)> | 10. McDougall, G et. al, 2005, Utility of Nutraceutical Products Marketed for Cognitive and Memory Enhancement, Journal of Holistic Nursing, Vol. 23 No. 4. | 11. Prnewswire.com, 2011, Nutraceuticals Market to 2017 - Food Additives such as Omega-3 Fatty Acids, Probiotics, Soy and Energy Drinks to Perform Strongly, viewed 22 November 2012, <<http://www.prnewswire.com/news-releases/nutraceuticals-market-to-2017---food-additives-such-as-omega-3-fatty-acids-probiotics-soy-and-energy-drinks-to-perform-strongly-129287188.html>> | 12. Pwc.com, 2009, Leveraging growth in the emerging functional foods industry: Trends and market opportunities, viewed on 25 November 2012, <<http://www.pwc.com/us/en/transaction-services/publications/assets/functional-foods.pdf>> | 13. Reports-research.com, 2011, Business Insights: Explosion of opportunities in Nutraceuticals, viewed on 28 November 2012, <<http://www.prlog.org/11358732-business-insights-explosion-of-opportunities-in-nutraceuticals.html>>