

An Exploratory Study of Consumer Decision Making with Reference to Nutraceuticals with Special Reference to Consumers of Aurangabad & Jalna District

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Abstract:

The nutraceuticals market in India holds a lot of potential and is expected to double in the next five years and by almost five-folds between 2010 and 2020. The Indian nutraceuticals market has grown from \$1 billion in 2008 to \$1.820 billion. In this study researcher examined Consumer demographics such as gender, age, education, occupation, annual household income and place where the respondent is staying currently have no association with consumer decision making for nutraceuticals.

Keywords: Nutrition, Pharmaceutical, Consumer, decision making.

INTRODUCTION:

The term nutraceutical was originally defined by Dr. Stephen L. DeFelice, founder and chairman of the Foundation of Innovation Medicine (FIM), Crawford, New Jersey. Nutraceutical foods are not subject to the same testing and regulations as pharmaceutical drugs. While no commonly accepted definitions of the terms 'functional food' and 'nutraceutical' exist, it suffices for the present purpose to adopt the definition furnished by the 2002 Merriam- Webster Medical Dictionary: 'any foodstuff enhanced by additives and marketed as beneficial to health and longevity; also called nutraceutical that is held to provide health or medical benefits in addition to its basic nutritional value).

The Global Nutraceutical market is estimated to have a growth rate of 6.6% during period of 2012-2017 in protein and peptides segment of dietary supplement market. The non herbal segment of dietary supplement market will have a growth rate of 6.3% from 2012 to 2017. The omega fatty acid fortified food segment of functional food market will have a growth rate of 6.7% during the forecasted period. The North America and Asia Pacific nutraceutical market is expected to have a market share of 39.2% and 30.4% respectively in 2017. The dietary supplement market will be the fastest growing market from 2012 to 2017 as it helps in improving the body ability to heal and protect itself. The Indian nutraceuticals market has grown from \$1 billion in 2008 to \$1.820 billion in 2013. With the passage of time and due to many international and local players in this segment the percentage share rose with a steady speed. The market is expected to cross \$2 billion by 2014.

The Indian nutraceuticals market valued at \$1,480 million in 2011 is expected to grow to \$2,731 million in 2016. "The nutraceutical market in India is estimated to grow to \$2,731 million in 2016 at a CAGR

of 13%” according to Frost & Sullivan 2012 report.

The Indian market current holds a two per cent market share of the global nutraceutical market and is expected to increase by manifold in the years to come. Clearly, the nutraceuticals market in India holds a lot of potential and is expected to double in the next five years and by almost five-folds between 2010 and 2020.

Review of Literature:

Siew Li Teoh, Surachat Ngorsuraches, Nai Ming Lai, Mukdarut Bangpan & Nathorn Chaiyakunapruk, (2019) This study aims to systematically review and critically appraise all available evidence to identify the factors affecting consumers’ decisions in taking nutraceuticals. Questionnaire, interview or focus group studies which directly reported factors affecting consumers’ decisions in using nutraceuticals were included. A thematic synthesis method was employed to synthesis the findings from the included studies. Out of the 76 studies included, the key factors identified as the most important factors motivating consumers to take nutraceuticals were the perceived health benefits and safety of nutraceuticals, as well as the advice from healthcare professionals, friends and family. **Jeffrey K. Aronson (2016)**, There are widespread inconsistencies and contradictions in the many published definitions of ‘nutraceuticals’ and ‘functional foods’, demonstrating wholesale uncertainty about what they actually are. Furthermore, in a 2014 lecture, the inventor of the term ‘nutraceutical’, confessing that nutraceuticals do not work, said that ‘the quest to demonstrate whether ... long-term supplementation [with nutraceuticals] can prevent serious diseases ... has come to an end’. Definitions of ‘nutraceuticals’ and related terms, still widely used, should therefore be explored systematically. There are no internationally agreed definitions of ‘nutraceuticals’ and ‘functional foods’, or of similar terms, such as ‘health foods’, or of terms related to herbal products, which are sometimes referred to as ‘nutraceuticals’, compounding the confusion. ‘Nutraceuticals’ and ‘functional foods’ are vague, nondiscriminatory, unhelpful terms; the evidence suggests that they should be abandoned in favour of more precise terms. **Lexicographic (Fishburn P.C. 1974)** In this rule, attributes are ranked according to their importance. The product offering best attribute level on the most important attribute is selected. If there is more than one product remaining, the procedure is repeated with the next most important attribute, and so on.

Satisficing (Simon H.A. 1955). Decision-maker specifies thresholds for every attribute. Product alternatives are eliminated if they have one or more attribute levels that are below the corresponding thresholds.

Need and Significance of the Research:

Nutraceuticals has seen an immense growth in India. The Indian nutraceuticals market valued at \$1,480 million in 2011 is expected to grow to \$2,731 million in 2016. “The nutraceutical market in India is estimated to grow to \$2,731 million in 2016 at a CAGR of 13%” according to Frost & Sullivan 2012 report. There has been a dearth of studies pertaining to nutraceuticals, specially relating to the decision process among consumers. The consumption of Nutraceuticals is a fairly recent phenomenon – a trend that is growing rapidly. The science of Nutraceuticals is evolving every day and therefore there is need to understand the Nutraceuticals purchase. Marketers need to understand the consumption pattern and the decision making that is undertaken by any consumer before the indulges in purchase of a nutraceuticals. The significance of the present study is also to ascertain the psychology of individuals which drives them towards Nutraceuticals. The aim is to help marketers design their marketing mix

elements effectively for getting a higher market share for their range of products.

Objectives of the Study:

The objectives of the present study are as follows:

1. To assess the relationship between demographics such as age, income, city, education, lifestyle and gender play on the consumer decision making
2. To study the effect of health consciousness scale on the consumer decision making.

Hypothesis of the study:

The first hypothesis: - assessed the relationship between the demographics and consumer decision making of nutraceuticals. The six demographics include the gender, age, education, occupation, annual household income and place where the respondent lives currently.

H0: Consumer demographics such as gender, age, education, occupation, annual household income and place where the respondent is staying currently have no association with consumer decision making for nutraceuticals.

H1: Consumer demographics such as gender, age, education, occupation, annual household income and place where the respondent is staying currently have association with consumer decision making for nutraceuticals.

Consumer decision making: The scale developed by Engel, Blackheart, &Kollat, 1978; Engel, Blackwell, &Miniard, 1995. We have used the Five stage model of consumer decision making. The Reliability of the Scale was measured through Cronbach's Alpha. The consumer decision making showed a reliability score of Cronbach's Alpha –which signifies that the scale is reliable and satisfactory.

Methodology:

Primary Data: Primary data was collected from structural questionnaire developed which included various attributes which play a role in influencing the purchase decision towards nutraceuticals.

Secondary Data: Secondary data was collected from books, Research journals, Articles in mangzines and news papers, reports of different organizations were also taken up for review.

Tools & Techniques of Analysis: Data collected was analysed with the help of SPSS 12 version. Graph/ Charts drawn with the help of MS Excel.

Sample Size:

- Convenience Sampling Method is applied as there was no data related to Universe of Study. The sample which is collected and studied by using the convenient sampling technique.
- Since the universe is infinite.
- Researcher decided to apply Taro Yamane (1969) formula for estimating optimum sample size.
- Assuming that there is more than one lakh customers in Aurangabad and Jalna District the optimum size according to the formula is

$$n = \frac{N}{(1+N(e)^2)}$$

$$n = \frac{1,00,000}{1 + 1,00,000 (0.05)^2}$$

n = 400

Since there are two progressive districts of Aurangabad and Jalna I have decided to give balanced representation and adequate sample size for both districts amounting to 500 each totaling 1000 respondents from both the districts as optimum sample size which is more than 400 as per Tara Yamane formula.

Scope of The Study:

Nutraceutical provides health and medical benefits including the prevention & treatment of Disease although India a country where 40% live in BPL category and a progressive Maharashtra State where earners and spenders are in large majority in Aurangabad and Jalna district. Which has a sizeable population which in-sighted me to investigate the position of Nutraceutical consumption.

Limitation of the study:

A study of Maharashtra relating to Nutraceutical Consumption is more reliable but due to time, Money and Constraints study is limited to Aurangabad and Jalna District only.

Result & Discussion

Hypothesis testing:

The ANOVA output of the model herein is significant with F Value of 5.199. But when we look at the explained vs unexplained variance then we observe that the Errors are explaining the Dependent variable Purchase, more that the Regression on account of independent variables.

<u>Correlations</u>								
		Gender	Age Group	Income	Educ- ation	Occup -ation	City	PM
Gender	Pearson Correlation	1	-.165**	-.091**	-.017	.078*	.098**	.032
	Sig. (2-tailed)		.000	.004	.586	.013	.002	.309
	N	1000	1000	1000	1000	1000	1000	1000
Age Group	Pearson Correlation	-.165**	1	.471**	.105**	-.043	.145**	.058
	Sig. (2-tailed)	.000		.000	.001	.174	.000	.065
	N	1000	1000	1000	1000	1000	1000	1000

Income	Pearson Correlation	-.091**	.471**	1	.242**	-.096**	-.083**	.176**
	Sig. (2-tailed)	.004	.000		.000	.002	.008	.000
	N	1000	1000	1000	1000	1000	1000	1000
Education	Pearson Correlation	-.017	.105**	.242**	1	-.070*	-.238**	-.005
	Sig. (2-tailed)	.586	.001	.000		.026	.000	.878
	N	1000	1000	1000	1000	1000	1000	1000
Occupation	Pearson Correlation	.078*	-.043	-.096**	-.070*	1	.096**	-.057
	Sig. (2-tailed)	.013	.174	.002	.026		.002	.072
	N	1000	1000	1000	1000	1000	1000	1000
City	Pearson Correlation	.098**	.145**	-.083**	-.238**	.096**	1	-.092**
	Sig. (2-tailed)	.002	.000	.008	.000	.002		.003
	N	1000	1000	1000	1000	1000	1000	1000
PM	Pearson Correlation	.032	.058	.176**	-.005	-.057	-.092**	1
	Sig. (2-tailed)	.309	.065	.000	.878	.072	.003	
	N	1000	1000	1000	1000	1000	1000	1000
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Correlations							
		PR-HC	PR-Status	PR-FNF	IS-Dr	IS-Gym	PM
PR-HC	Pearson Correlation	1	.417**	.334**	.418**	.401**	.574**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	1000	1000	1000	1000	1000	1000
PR-Status	Pearson Correlation	.417**	1	.524**	.454**	.594**	.281**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	1000	1000	1000	1000	1000	1000

PR-FNF	Pearson Correlation	.334**	.524**	1	.521**	.485**	.334**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	1000	1000	1000	1000	1000	1000
IS-Dr	Pearson Correlation	.418**	.454**	.521**	1	.499**	.432**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	1000	1000	1000	1000	1000	1000
IS-Gym	Pearson Correlation	.401**	.594**	.485**	.499**	1	.361**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	1000	1000	1000	1000	1000	1000
PM	Pearson Correlation	.574**	.281**	.334**	.432**	.361**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	1000	1000	1000	1000	1000	1000
**. Correlation is significant at the 0.01 level (2-tailed).							

Positive correlation seen between Health Consciousness and Purchase. Positive correlation is also seen between Status, recommendation of Family and Friend, Doctor and Gym instructor and Purchase which are all significant.

Conclusion:

Natural source is preferred by consumers. As 33.6% respondent preferred Ayurvedic and 19.5% preferred Herbal. Hence total of 53.1 % of the respondents stated to prefer natural source of nutraceuticals. Solid dosage form is preferred with 60.5% of the respondent preferring it and within that tablets are the most preferred dosage form probably due to convenience and availability. 33.5% of the respondents did not associate nutraceuticals with health. Hence there is need for companies to engage in market development activities and increase awareness. Moreover only 18.3% of the respondents stated to be consuming nutraceuticals on daily basis. 56.8% of the respondents choose nutraceuticals based on brand name. Hence advertising can help in improving acceptance of the brand. 46.7% of the respondents agree that they are influenced by packing, 57.3% of respondents agreed or strongly agreed that they choose nutraceuticals based on price. 73.2% of the respondents stated that they choose nutraceuticals based on quality. High scores on health awareness indicates that respondents are more likely to accept nutraceuticals. Strong positive correlation of 0.821 between Information Search and Problem Recognition was seen which is statistically significant. Hence nutraceutical companies need to build web presence and share information about their brands. They also need to provide answers to the queries posted by prospective or existing customers.

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