

## **“Consumer Behavior towards Functional Foods in India- A Study of Market Drivers & Challenges”**

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**Abstract:-** To promote public health and to realize the impact of functional foods on health, understanding consumer behavior is important. In addition, assessment of consumers' attitudes, norms and knowledge regarding functional foods in relation to actual dietary patterns and health risk profiles is necessary. For this a research was being carried out with the objective of evaluating consumer behavior and attitudes regarding the consumption of functional foods; and to measure consumers' willingness to pay for functional foods containing specific health claims.

Data was collected using both secondary and primary sources. For secondary sources this research primarily relied on the existing research work on the research questions and theoretical framework on consumer behavior. Primary data was collected using a structured Questionnaire and In-depth Interview. A sample of 100 respondents was randomly selected for the study.

Our results indicated that beliefs about the nutrition and health link, current purchasing and consumption patterns; and positive attitude towards functional foods significantly affected willingness to pay. Overall, this study has contributed to understanding of the market drivers & challenges for functional food.

### **I. INTRODUCTION**

“Functional foods” are food products that consist of vital nutrients that go beyond simply nurturing usual growth and development of an individual. Fortified with nutritional and disease-preventing qualities, consumption of such food is with an intention towards improved wellbeing, prolonged existence and prevention of chronic diseases. Food Safety and Standards Authority of India (FSSAI 2006) definition of functional food is relevant in Indian context -

*Broadly “Functional food” may be defined as a food which influences specific functions in the body that may provide added health benefits or remedy from some diseased condition following the addition/concentration of a beneficial ingredient, or removal/substitution of an ineffective or harmful ingredient. Foods might inherently possess these supposedly beneficial qualities, or they may be functional/modified and/or genetically altered.*

Functional foods let consumers eat augmented foods close to their natural state, instead of consuming dietary supplements manufactured in liquid or capsule form. Functional foods are either enriched or fortified which restores the nutrient content in a food back to similar levels from before the food was processed. Health Canada defines functional foods as “ordinary food that has components or ingredients added to give it a specific medical or physiological benefit, other than a purely nutritional effect.

Progress in food and medical science and altering demographics and lifestyle are growth triggers for these products. Public sensitivity and acceptance, however, determines whether this new food concept is to become the next thriving step forward in nutritional science or just another marketing device put together by food manufacturers. Understanding consumer behavior in this regard, hence, is important to promote public health and to realize the impact of functional foods on health. In addition, consideration of consumers' outlook and knowledge regarding functional foods in relation to actual dietary patterns is essential.

A watchful contemplation of the competitive market space and buyer dynamics will help sift legitimate strategic opportunities from developments that may eventually sputter. The goal of this research study is to

assess to study the functional food market in India and understand reasons and patterns behind consumers' decision to buy foods that could enhance their health.

### Research Objectives

This research study attempted to -

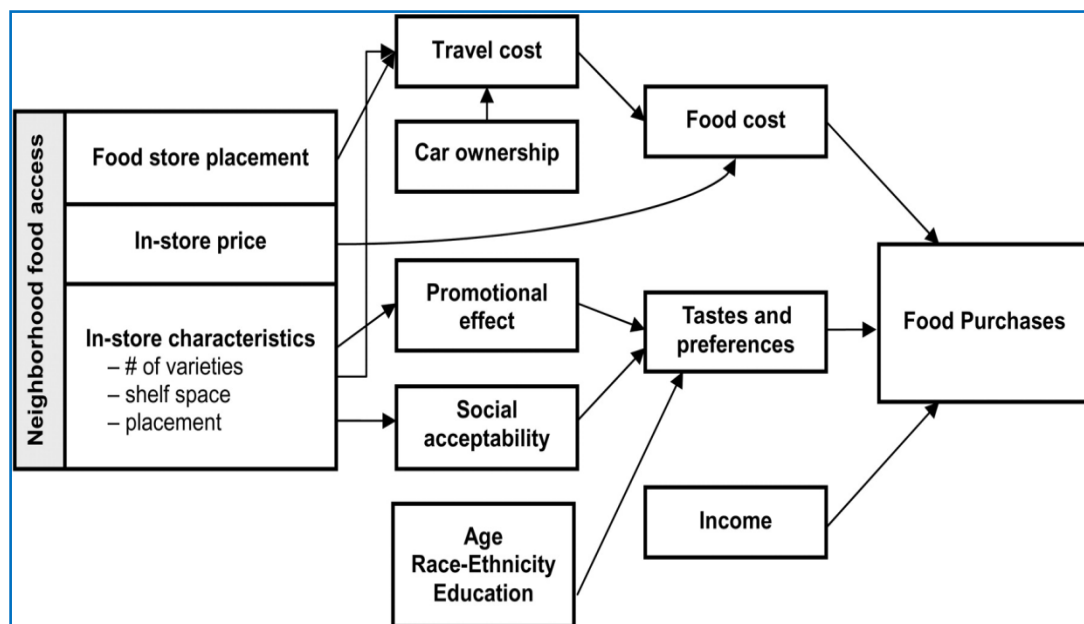
1. Study Functional Food market in India and outline current trends
2. Know about consumers' consciousness of food components, ingestions, nutrition and health
3. Understand consumers' outlook and insight regarding Functional Food
4. Identify basis and stimulus for buying Functional Food

The research further explores the dependence of the research variables on buyer age, gender, social category and education.

### Theoretical Backdrop

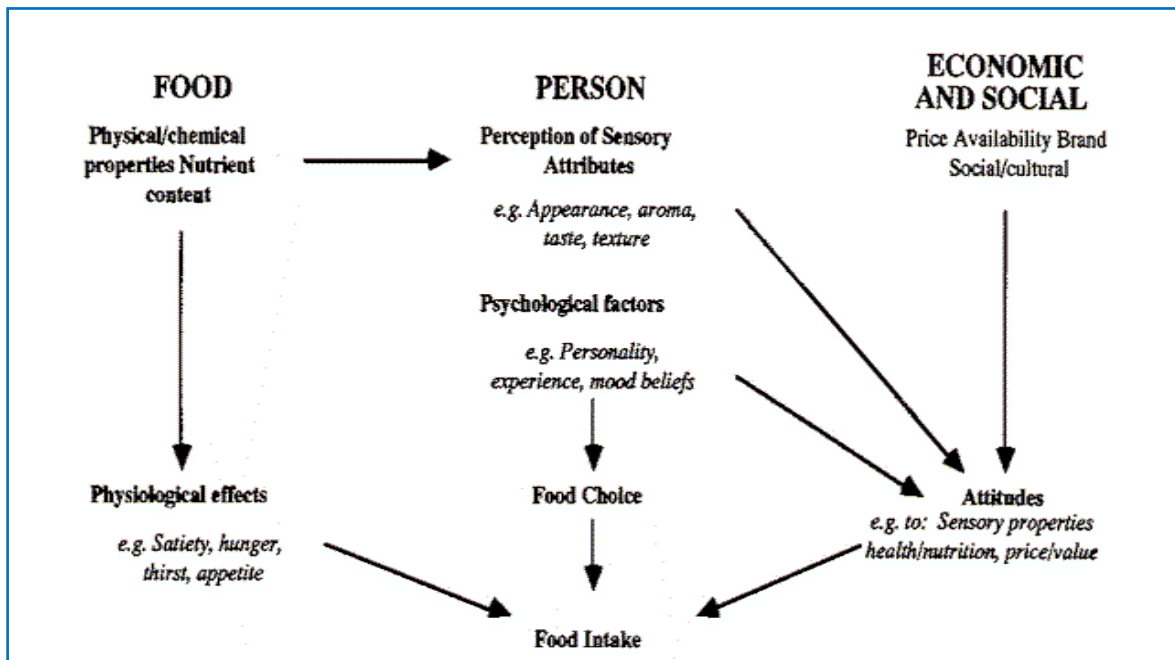
Food preference is determined by both nutrition and pleasure derived from food consumption. However, food choice is not one-dimensional, but a complex human behavior influenced by many interrelating factors. This study derives conjectural support from two theoretical models – The Economic Model of Food Consumption and The Theory of Planned Behavior to Consumer Food Choice. This section describes the basic tenets of the two models that have been used as groundwork for describing consumer behavior towards functional food.

The Economic model of food consumption views individuals as attempting to maximize their utility from goods given their tastes and preferences and subject to a budget constraint, determined by their income, food prices, and prices of other goods. The theory postulates that food demand, or purchases, is a function of income and prices, as well as tastes and preferences.



Source: Donald Rose , J. Nicholas Bodor, Paul L. Hutchinson, and Chris M. Swalm, "The Importance of a Multi-Dimensional Approach for Studying the Links between Food Access and Consumption", The American Institute of Nutrition

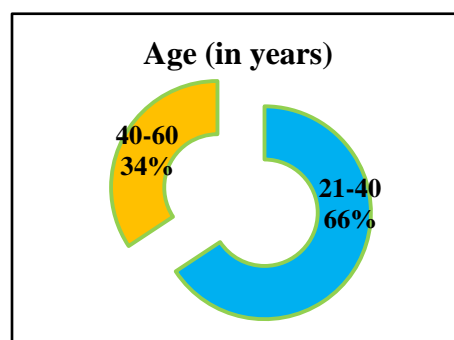
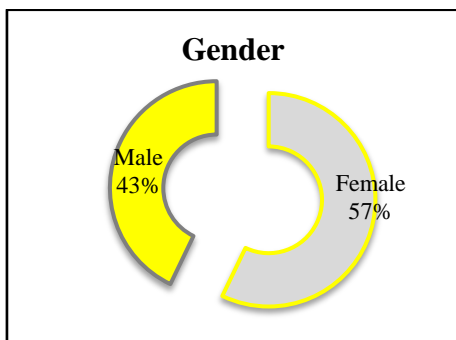
The Theory of Planned Behavior to Consumer Food Choice postulates that human food choice is a complex phenomenon influenced by a wide range of factors. A lot of the determinants of food choice are expected to be interceded by the beliefs and attitudes apprehended by an individual. Beliefs about the dietary value and health effects of a food, perhaps is more significant than actual nutritional quality and health consequences in shaping a person's choice. Similarly diverse marketing, economic, social, cultural, religious or demographic factors will operate in the course of the attitudes and beliefs apprehended by the person.

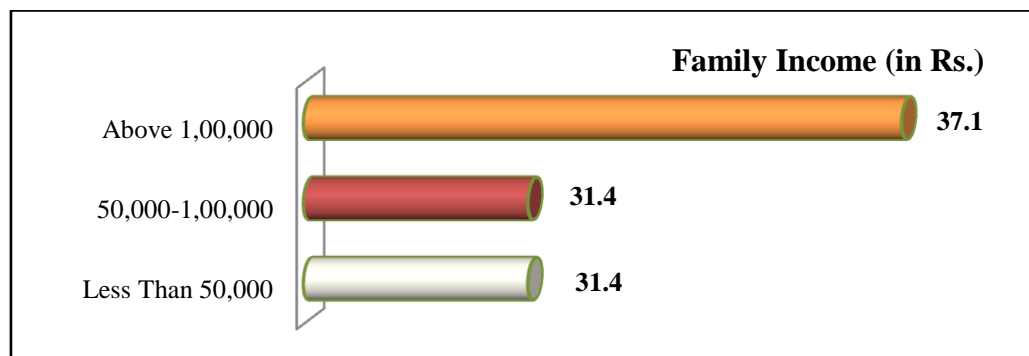
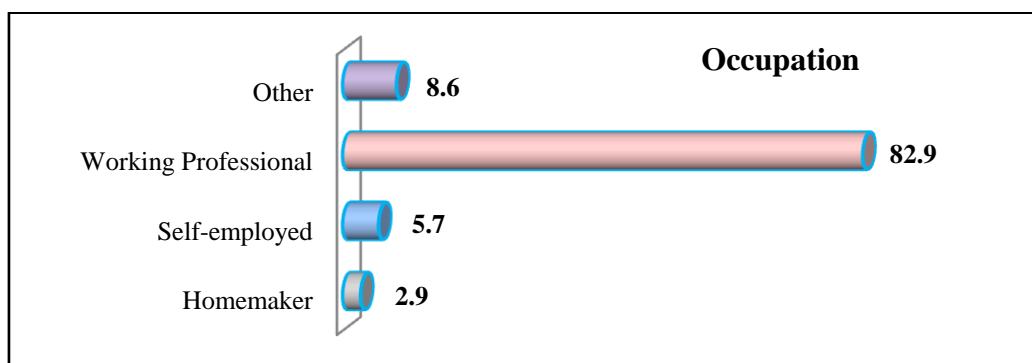
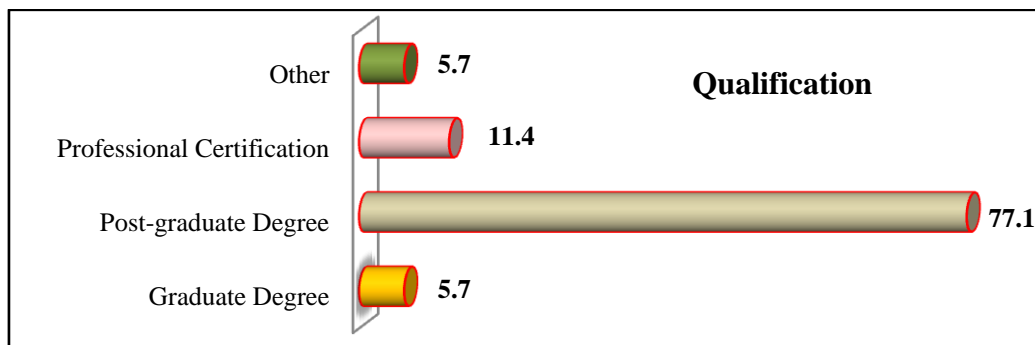


Source: R. Shepherd, P. Sparks, and C.A. Guthrie (1995), "The Application of the Theory of Planned Behavior to Consumer Food Choice", in E - European Advances in Consumer Research Volume 2, eds. Flemming Hansen, Provo, Association for Consumer Research

## II. RESEARCH METHODOLOGY

A Descriptive Research Design was deliberated as most suitable for this research. This is because descriptive studies also referred to as observational studies, enabled examination of the units of analysis or subjects without otherwise intervening. Data was collected using both secondary and primary sources. For secondary sources this research primarily relied on the existing research work on the research questions and theoretical framework on consumer behavior. Primary data was collected using a structured Questionnaire and In-depth Interview. A sample of 100 respondents was randomly selected for the study. Following figures display profile of respondents in terms of gender, age, qualification, occupation and family income.





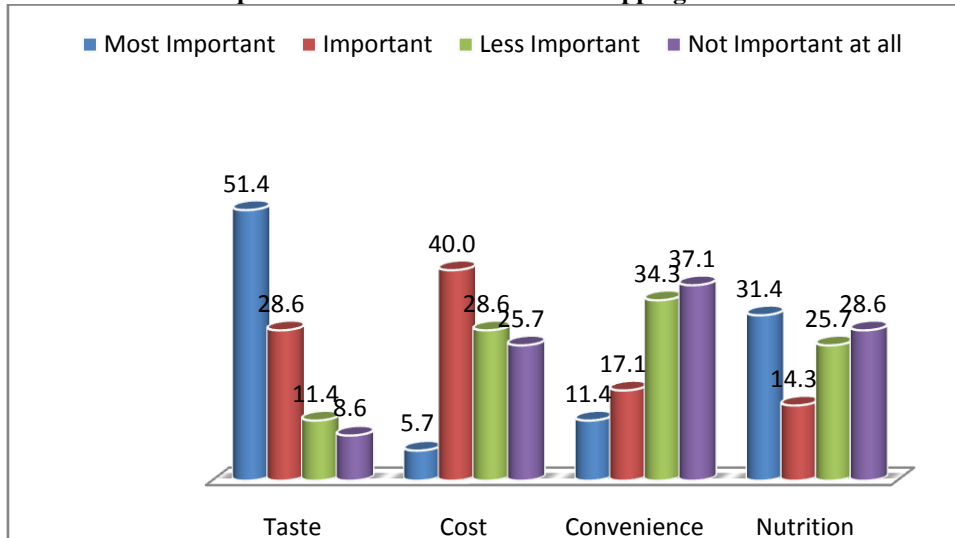
### III. DATA ANALYSIS AND INTERPRETATION

The study of factors considered while shopping for food provide relevant practical implications for food industry and retailers, who wish to succeed in food category in Pune. They would do well if they understand these factors and strengthen the food products, which they are offering to their customers. According to survey conducted, for large section of respondents, taste and nutrition are the most important factors while shopping for food. 40% of the respondents consider cost of food important. While purchase food, people are not keen about convenience of purchasing it.

**Table 1 Factors considered while shopping for food**

Parameters	Most Important	Important	Less Important	Not Important at all
<b>Taste</b>	51.4	28.6	11.4	8.6
<b>Cost</b>	5.7	40.0	28.6	25.7
<b>Convenience</b>	11.4	17.1	34.3	37.1
<b>Nutrition</b>	31.4	14.3	25.7	28.6

**Graph 1 Factors considered while shopping for food**

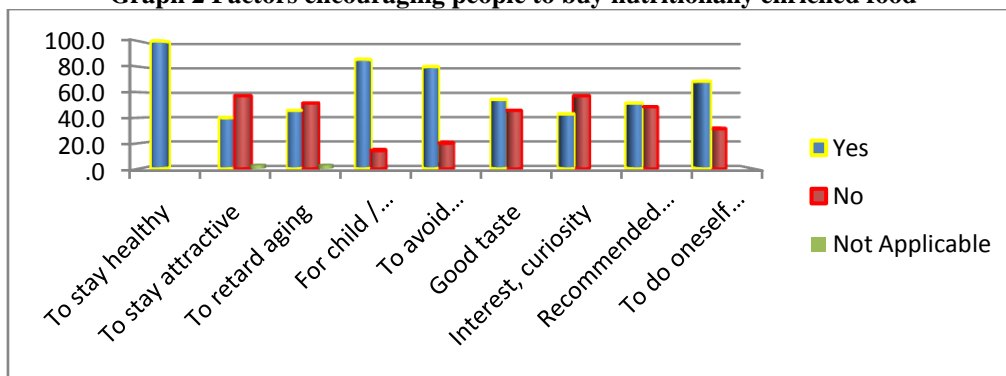


The study throws up interesting insight into what factors motivate customers to buy nutritionally enriched food. It is seen that 100% of respondents buy nutritionally enriched food to stay healthy whereas other important reasons are for children and to avoid medical treatment. Factors such as maintaining attractiveness, interest, curiosity, retarding age are not encouraging them to buy nutritionally enriched food. In the survey, a correlation was found between the lifestyle changes to increase nutritionally enriched food in the diet with the gender, age & qualification of the respondents. Hence, cross tabulations were used to show this correlation as under:

**Table 2 Factors encouraging people to buy nutritionally enriched food**

Parameters	Yes	No	Not Applicable
To stay healthy	100.0		
To stay attractive	40.0	57.1	2.9
To retard aging	45.7	51.4	2.9
For child / children	85.7	14.3	
To avoid medical treatment	80.0	20.0	
Good taste	54.3	45.7	
Interest, curiosity	42.9	57.1	
Recommended by medical doctor or nutritional consultant	51.4	48.6	
To do oneself good	68.6	31.4	

**Graph 2 Factors encouraging people to buy nutritionally enriched food**

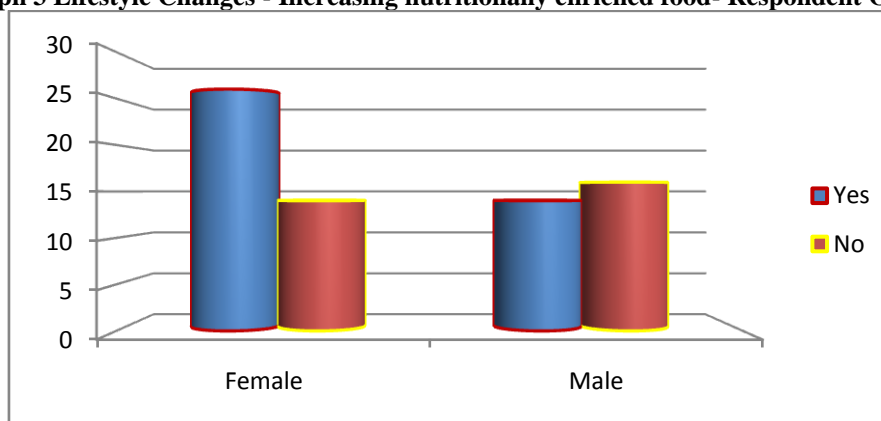


We've known for several years that healthy lifestyle can help people maintain their physical health and live longer. One cannot change his diagnosis but can change aspects of his life to improve the quality of life. In the study, it is found that female respondents are ready to change their lifestyle by increasing consumption of nutritionally enriched food, whereas males are reluctant to this change.

**Table 3 Lifestyle Changes - Increasing nutritionally enriched food- Respondent Gender**

Responses	Respondent Gender		Total
	Female	Male	
Yes	26	14	40
No	14	16	30
<b>Total</b>	40	30	70

**Graph 3 Lifestyle Changes - Increasing nutritionally enriched food- Respondent Gender**

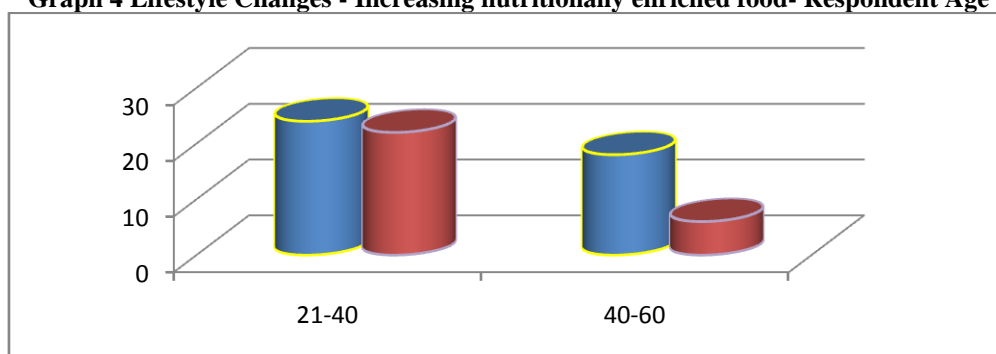


There is a growing concern that many Indians are going through an unbalanced diet due to lifestyle changes which has led to health problems with increasing age. Respondents are ready to change their lifestyle by increasing consumption of nutritionally enriched food, irrespective of their age. However, the acceptance of lifestyle change is found to be more in the age group of 40-60 than 21-40.

**Table 4 Lifestyle Changes - Increasing nutritionally enriched food- Respondent Age**

Responses	Respondent Age		Total
	21-40	40-60	
Yes	18	22	40
No	24	6	30
<b>Total</b>	46	24	70

**Graph 4 Lifestyle Changes - Increasing nutritionally enriched food- Respondent Age**

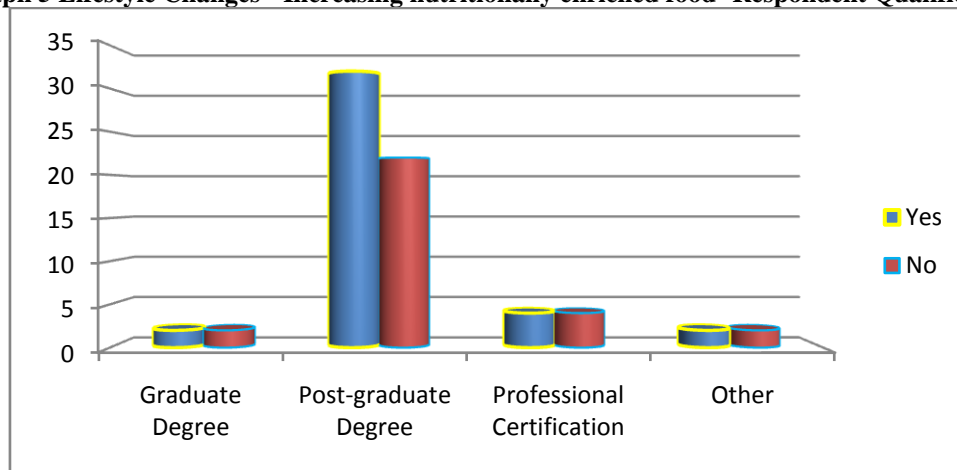


A diet built on nutrient-dense foods can provide a solid foundation for better health. The shift to positive nutrition guidance and education based on a consistently determined standardized nutrient density index or score can help people implement the lifestyle changes. From the study it is also seen that education of respondents affect the decision regarding lifestyle change to increase consumption of nutritionally enriched food. Such acceptance of is found to be more in respondents with post graduate degree.

**Table 5 Lifestyle Changes - Increasing nutritionally enriched food- Respondent Qualification**

Responses	Respondent Qualification				Total
	Graduate Degree	Post-graduate Degree	Professional Certification	Other	
Yes	2	32	4	2	40
No	2	22	4	2	30
Total	4	54	8	4	70

**Graph 5 Lifestyle Changes - Increasing nutritionally enriched food- Respondent Qualification**



#### IV. FINDINGS AND CONCLUSION

Functional food industry is progressing worldwide. Nevertheless, thriving commercialization of functional food products will be a challenge. The foremost underlying factor is how consumers identify functional foods and what issues influence an affirmative attitude in their buying decision.

This study has provided several viewpoints on the multifarious reasoning that consumers endure for the acceptance of functional foods. The outcome of this study is vital to functional food developers and marketers who are involved in crafting effectual health programs. The study indicates that beliefs about the nutrition and health link, current purchasing and consumption patterns, and positive attitude towards functional foods significantly affected willingness to pay. Consuming less fat and eating more vegetables and fruits has increasingly become the food habit of the respondents owing to lifestyle changes. However, availability and expense to purchase functional food effect the decision to pay and the decision of how much to pay. Therefore, we may conclude that there is more to learn about the consumer. Specifically for the functional food marketer there is need to determine what factors significantly influence the decision to pay. Overall, this study has contributed to further understanding of the functional food consumer especially concerning health awareness, lifestyle changes and factors encouraging as well as discouraging people to purchase functional foods. According to Frewer et al. (2003), the assumption that functional foods with specific health advantages are likely to deliver population-wide benefits may not automatically hold. Understanding the consumer is going to be the “key” in determining whether the functional food concept will be sustainable and will achieve the intended results.

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