

A Study On Health Food: Demand, Supply & Acceptance In Pune City

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1 st	Hemraj N. Patil	Assistant Professor AISSM'S College of Hotel Management & Catering Technology, Shivajinagar, Pune(Maharashtra)
2 nd	Ashish Johnson	Student AISSM'S College of Hotel Management & Catering Technology, Shivajinagar, Pune(Maharashtra)

Abstract

The main objective of the present study was to find out demand, supply and acceptance in the Pune city. The research design was descriptive in nature. Data was collected from different sections of the society. Questionnaire were prepared & distributed among doctors, engineers, professors, dieticians, workers & housewives. Pune city from Maharashtra state of India was selected for study. Seventy nine feedbacks were collected. Random sampling technique was used for collection of data. Health food was categorized in natural foods, organic food & whole food. The demand of the health food is increasing day by day because of its health benefits. Respondents were aware of health food items and health food vendors in city. Health food has better qualities than regular food. It is widely accepted by the people in Pune city. Natural food is more consumed by the people as compared to the organic food, whole food & less fatty food .

1. INTRODUCTION

Food is necessary for any organism live alive. Without food none of the living things can survive. Humans have understood the importance of the food & have done lots of researches in the field of food. Researches have been carried out from the micro level to macro level. It starts with cultivation to the harvesting of the crops. The important aspect of food is nutritional content. All nutrients are required to remain healthy. All the varieties of the food should be included in the regular meals. In market all type of convenience food are also available which are ready to eat or ready to cook food.

But all the food is not healthy to eat. There are some food which tastes very good but that is bad for health & there are some food which does not taste good but are very good for health. So it becomes necessary to understand the meaning of healthy food. Firstly, food should be

blemish free & in good condition. Secondly, naturally it should be grown, without using chemical fertilizers. Hybrid varieties give more yields but nutritional content is not really good. Naturally grown crops sometimes are not attractive but are healthier. Health food is food considered beneficial to human health in different ways that go beyond a regular healthy diet required for human nutrition. Foods considered healthy are natural foods, organic foods, whole foods, vegetarian and dietary supplements. These products are sold in health food stores and in the health/organic sections of supermarkets.

In this research paper researcher has covered four dimensions of health food. The study has been carried out in Pune city of India. Researcher has tried to find out meaning of health food. Second aspect is demand of health food items. How many people are aware of health food? Is health food easily available for people to buy? How many vendors or stores are selling health food? People who are already consuming health food are satisfied with the taste, appearance or nutritional content of health food.

2. OBJECTIVES OF THE RESEARCH

To study demand for health food

To examine supply of health food items available in the market

To find out acceptance level of people for health food

3. LITERATURE REVIEW

➤ **Dacina Crina Petrescu, and Ruxandra Malina Petrescu-Mag (2015)**, explored consumers' perceptions of organic food and examine whether organic food products are perceived in the North-West Region of Romania as offering health and environmental benefits or as simply another sine quanon condition to be integrated into the luxurious yuppie lifestyle. The inspiration for our study came from witnessing the stereotypical image of organic food consumers as "stylish, trendy, fancy consumers" in the last three to five years. Scientific evidence on the perceptions of organic food is based on a probabilistic survey. The results indicate an environmental consciousness of organic food consumers in North-Western Region of Romania in terms of organic food: a high percentage of consumers believe that organic food is healthier than conventional food (87%) and that it contributes to environmental protection more than conventional food (75%). A statistically significant difference ($p < 0.05$) was observed between people with higher education and those without higher education concerning the following beliefs: belief that most people consume organic products because they are in fashion, and belief that organic food contributes to environmental protection.

➤ **Sarah O. Rodman, Anne M. Palmer, Drew A. Zachary, Laura C. Hopkins, and Pamela J. Surkan (2014)**, discovered how organic food factors into low-income consumers' overall understanding of healthy eating, we analyzed 36 in-depth interviews with adults in Baltimore, Maryland. We asked participants to discuss their understanding of healthy eating. Unprompted, many participants discussed organic food or attributes commonly understood to define organic food. Some participants believed health issues

including cancer, weight gain, and allergies can arise from consuming nonorganic foods. Participants expressed that organic competes with other food attributes such as nutrient content in informing their perception of whether a food is healthy. Several voiced concern that nonorganic foods are responsible for weight gain and abnormal development. Our results show that despite limited access, organic is an important factor in some consumers' understanding of healthy food. Consumers' perceptions of organic can swamp or compete with other messages about healthy eating. Therefore, consumers' understanding of organic should be considered in developing diet-related messages and programs. [Food, organic, nutrition, diet, qualitative research, Baltimore]

- **Kristina Nelson, Lily Stojanovska, Todor Vasiljevic, and Michael Mathai (2013)**, stated that grains are global dietary staples that when consumed in whole grain form, offer considerable health benefits compared with milled grain foods, including reduced body weight gain and reduced cardiovascular and diabetes risks. Dietary patterns, functional foods, and other lifestyle factors play a fundamental role in the development and management of epidemic lifestyle diseases that share risks of developing adverse metabolic outcomes, including hyperglycaemia, hypertension, dyslipidaemia, oxidative stress, and inflammation. Whole grains provide energy, nutrients, fibres, and bioactive compounds that may synergistically contribute to their protective effects. Despite their benefits, the intake of grains appears to be lower than recommended in many countries. Of emerging interest is the application of germination processes, which may significantly enhance the nutritional and bioactive content of grains, as well as improve palatability. Enhancing grain foods in a natural way using germination techniques may therefore offer a practical, natural, dietary intervention to increase the health benefits and acceptability of whole grains, with potentially widespread effects across populations in attenuating adverse lifestyle disease outcomes. Continuing to build on the growing body of in-vitro studies requires substantiation with extended in-vivo trials so that we may further develop our understanding of the potential of germinated grains as a functional food.
- **Helena Siipi, (2013)**, stated in this paper the healthiness of food as food's accordance with nutritional needs of its eater. The connection of healthiness to the following five food-related senses of the term "natural" is analyzed: naturalness as nutritive suitability, naturalness as moderate need satisfaction, naturalness as lack of human influence, naturalness as authenticity, and naturalness as familiarity. It is concluded that some very common current uses of the term "natural," such as naturalness as lack of human influence, are not conceptually connected to the healthiness of food. Nevertheless, the first two senses of naturalness are strongly conceptually connected to healthiness in the food context and the last one may be indirectly related to it. Thus, desire for natural food is not necessarily mistaken and misguided.
- **Sang-Mook Lee and Naehyun (Paul) Jin, (2013)**, find out relationships among Knowledge of Healthy Food, Health Concern, and Behavioral Intention: Evidence from the United States and South Korea, This study explores the correlations among knowledge of healthy food, health concern, and behavioral intention among college students. This

study also examines the perception of these factors by students in the United States and South Korea. This study employed a distribution of 630 questionnaires, of which 550 (203 from the United States and 347 from South Korea) represent the dataset for analysis. The findings show that knowledge of healthy food had a significant effect on behavioral intention and positively affected health concern among college students in the United States and South Korea. In addition, health concern has a significant impact on college students' behavioral intention. Results also showed that the links among the three constructs were consistently important to the participating college students. Additionally, the moderating effect of culture differences on knowledge of healthy food and behavioral intention were observed

- **Sangmook Lee, Deborah Fowler, And Jessica Yuan, (2013)**, determined the characteristics of healthy foods as perceived by college students at a university in the southwestern United States. It was also undertaken in order to provide a more uniform, foundational framework regarding the definitions of terms used by researchers studying healthy foods and behavioral choices regarding healthy food. The results of this study validated the premise that healthy foods could be identified by classifying several features common to them, and that healthy food could then be defined using these characteristics: “low calorie foods” ($\alpha = 0.869$), “low fat foods & healthy drinks” ($\alpha = 0.764$), and “low cholesterol foods” ($\alpha = 0.734$). This study helped to classify the characteristics of healthy foods as perceived by college students, and this information could be used by college foodservice managers to develop healthier menu items, and also by researchers studying this population and/ or related marketplaces.
- **Venkat Raman Ganesh, (2013)**, analyzed life cycle of the processed food versus the whole food (Potato), The following report compares the energy inputs required for the processed food and whole food. The energy values are calculated considering many sectors and obtaining the energy equivalent of the each sector. Total energy is obtained by summing up the energy value of the individual sector. The value obtained is compared to the standard model value of the EIOLCA (d) model. Based on the model and its associated assumptions, the following conclusions can be drawn 1. The processed food consumes 2.3% energy more than natural food production. 2. The major portion of energy consumption is due to electricity and the energy consumption can be reduced by judicious usage of electricity. 3. The study shows the correctness between EIOLCA and analytical model. Answering the question requires spelling out the following: (1) What is meant by the healthiness of food? (2) What different conceptual meanings the term natural has in the context of food? (3) Are some of those meanings connected to the healthiness of food? In this paper the healthiness of food is understood narrowly as food's accordance with nutritional needs of its eater. The connection of healthiness to the following five food-related senses of the term “natural” is analyzed: naturalness as nutritive suitability, naturalness as moderate need satisfaction, naturalness as lack of human influence, naturalness as authenticity, and naturalness as familiarity. It is concluded that some very common current uses of the term “natural,” such as naturalness as lack of human

influence, are not conceptually connected to the healthiness of food. Nevertheless, the first two senses of naturalness are strongly conceptually connected to healthiness in the food context and the last one may be indirectly related to it. Thus, desire for natural food is not necessarily mistaken and misguided.

- **Graeme Sherriff, (2009)**, piloted the Bentley Bulk local food initiative in Manchester in 2003 with the aim of creating a “Healthy Local Food System”. It combined education in food, training in horticulture and work on a local market garden with a food buying co-operative and placed these within the context of a local currency. It is argued that, by operating at the nexus of sustainability and justice, the project can be seen as an example of Just Sustainability in the UK. Just Sustainability provides a framework for a discussion of the issues in taking the project from theory into practice. In particular, the paper looks at the challenge of reaching out to the “non-usual suspects”, making organic food more socially inclusive, linking community projects with larger-scale environmental issues, and the ethics of volunteering.
- **Philip Sloan, Willy Legrand, Joseph S. Chen (2008)**, stated that study seeks to discuss the reasons why the youth make healthy food choices. It presents a conceptual model based on social cognitive theory, stages of change theory, and trans-theoretical theory for understanding factors that influence young people’s dietary and health behavior. This model purports to conceptualize eating behavior as a function of individual and environmental influences.

4. RESEARCH METHODOLOGY

The research design is descriptive in nature. Data was collected from different sections of the society. Questionnaire were prepared & distributed amongst doctors, engineers, professors, dieticians, workers & housewives. Pune city from Maharashtra state of India was selected for study. Seventy nine feedbacks were collected. Radom sampling technique was used for collection of data.

5. DISCUSSION

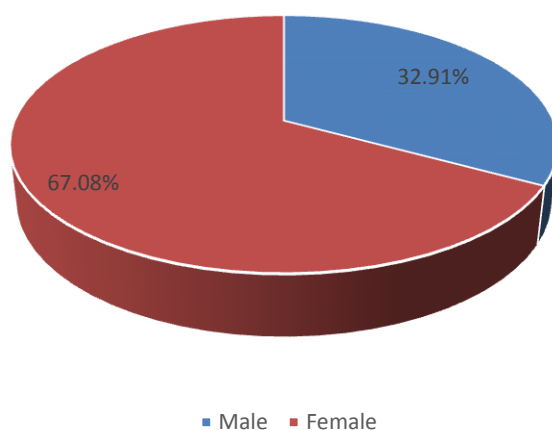
Health food can be categorized in natural foods, organic food & whole food. Natural food is often considered to imply foods that are minimally processed and all of whose ingredients are natural products. No chemical are added & only the form of food is changed without changing the content food. Organic foods are foods produced by organic farming. Organic farming in general features cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Synthetic pesticides and chemical fertilizers are not allowed, although certain approved pesticides may be used. In general, organic foods are also not processed using irradiation, industrial solvents, or synthetic food additives. Foods produced with natural resources are considered to be healthier. Whole foods are foods that are unprocessed and unrefined, or processed and refined as little as possible, before being consumed. Whole foods typically do not contain added salt, carbohydrates, or fat. It includes unpolished grains, beans, fruits,

vegetables, and animal products, including meats and non-homogenized dairy products. Whole Food was defined as ‘Mature produce of field, orchard, or garden without subtraction, addition, or alteration grown from seed without chemical dressing, in fertile soil manure solely with animal and vegetable wastes, and composts and ground, raw rock and without chemical manures, sprays, or insecticides. Diets rich in whole and unrefined foods, like whole grains, dark green and yellow/orange-fleshed vegetables and fruits, legumes, nuts and seeds, contain high concentrations of antioxidant phenolic, fibers and numerous other photochemical that may be protective against chronic diseases. A diet rich in a variety of whole foods has been hypothesized as possibly anti-cancer due to the synergistic effects of antioxidants and phytochemicals common in whole foods.

On one side peoples are becoming more health conscious and on the other side, because of increase in population demand for food is increasing but we have the same resources available for the farming. So many farmers are trying to increase their production & eventually increase in income. Farmers have started using hybrid varieties of crops which gives more yield compared to traditional varieties. Hybrid crops required more nutrition which is not available in our soil. Along with that it is always infected by many diseases. Required nutrition is provided to crops through chemical fertilizers & disease is eradicated by using chemical pesticides. Some consumers are particular about the appearance of the food. They prefer polished cereals & pulses, yellow bananas, big & very green leafy vegetables, fatty meat products etc. These people are really not worried about the content or consequences of such food. The food which looks better sales the most but there is one segment of people who are not bothered about the appearance of the food. They prefer natural food which is not great look wise but is very healthy. There are many places or stores where this kind of health food is available. Comparatively rate of food is bit more. Organic vegetables & fruits are in supermarkets also.

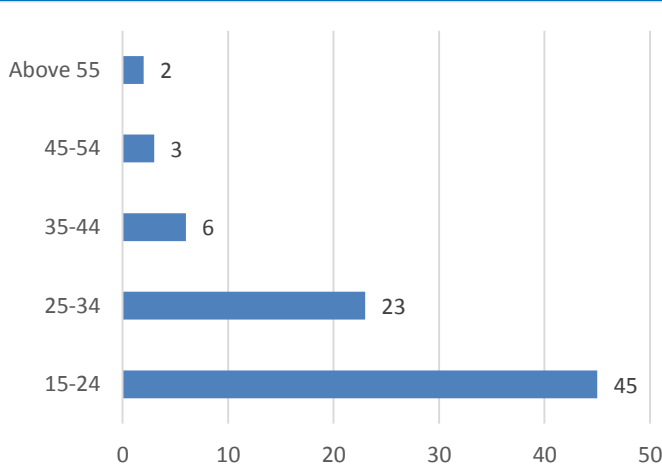
6. RESULTS & ANALYTICAL FINDINGS

1. Gender of respondents:



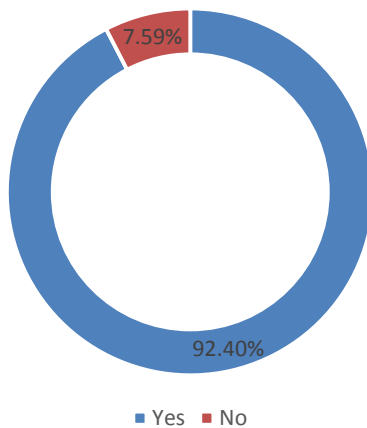
Women are more conscious about their health and familiar with all kind of foodstuff available in the market that is why more feedbacks were taken from the women. Around 67 percentages of the respondents were females.

2. Age of respondents:



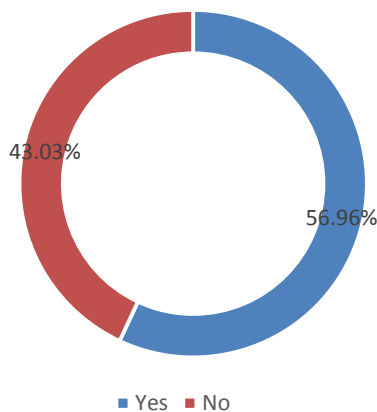
Now a days youngsters are also very particular about the food they eat so more of the feedbacks are taken from the respondents whose age is between 15- 24 years.

3. Knowledge about health food:



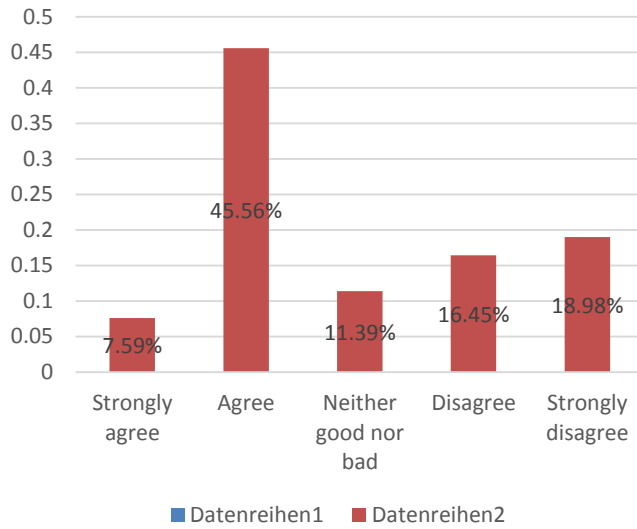
About 92 percent of the people are aware of the concept of the health food. The most of feedback were taken from well educated people. These people have sound knowledge of the healthy food items.

4. Health food stores :



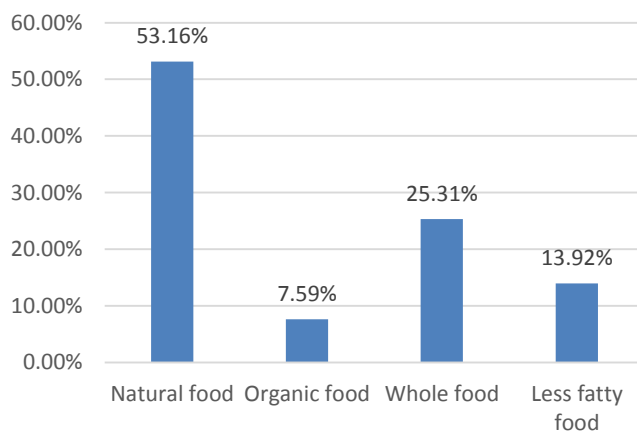
There are enough health food stores in Pune city. According to the responses of the participants, 57 percent people agreed about the existence of the food stores. But still there is more scope for the health stores in the city.

5. Taste of health food:



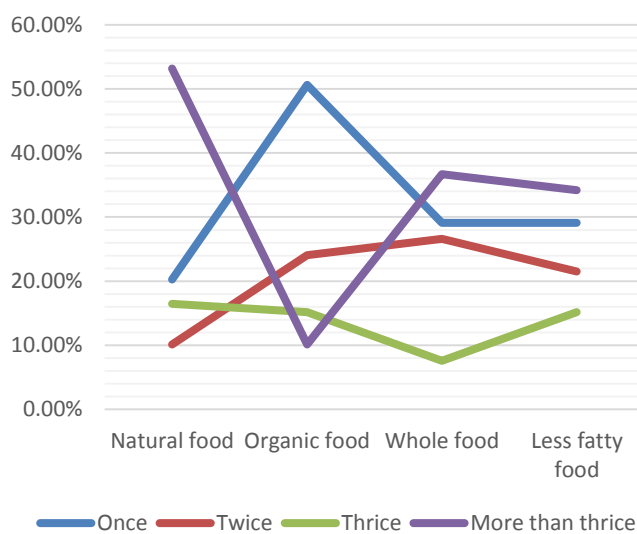
Health food looks same like all other foodstuff. You can't differentiate health food items when it comes to the appearance or texture of the food. But it is slightly different in taste. Most of the people have agreed that health food is tastier than hybrid food stuff.

6. Types of health food:



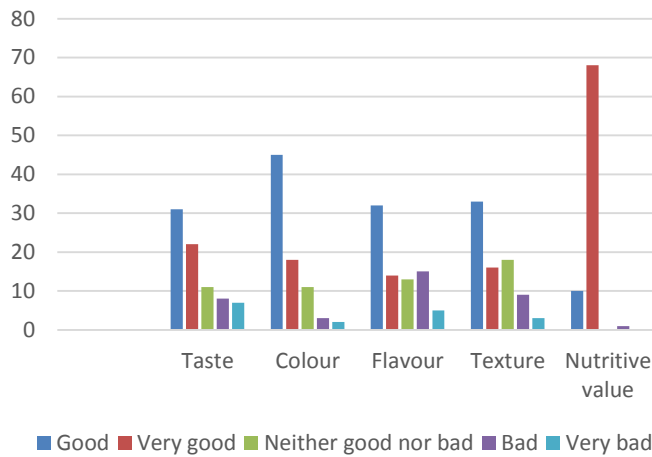
Health food items are categories in four different groups. The question was asked about every type of the health food and more percentage of the people knew about the natural food & very few people know about the organic food.

7. Frequency of buying health food:



When question was asked about the frequency of buying the health food items natural food was bought more than thrice, Organic food once, Whole food twice & less fatty food thrice in a Month. Consumption of natural food is more as compared to other health food.

8. Attributes of health foods:



Question was formulated on different attributes of the health foods like taste, color, flavor, texture and nutritive value. According to the opinion of the respondent health food is very nutritious. Other attributes like color flavor and texture is good of health foods.

7. SUGGESTIONS & RECOMMENDATIONS

- Respondents should be made aware of the concept or types of the health food so that genuine feedback will receive.
- It is suggested to take feedbacks from all cross sections of the society to generalize the popularity of the health food.
- It is suggested to increase awareness about the benefits of consuming health food among the peoples.
- The demand for health food is more so the supply of health food should be increased accordingly to avoid increase cost of food.

8. LIMITATIONS & FUTURE STUDY

- The study is conducted only in Pune city so further study can be carried out in outskirts of Pune/ Maharashtra/other states of India.
- Feedback were collected only from 79 respondents, the number can be increased to generalize for the entire city.
- Classification of the healthfood is done on the bases of the data available, more extensive study should be carried out for detail classification of health foods.
- Limited numbers of the vendors were visited for the purpose of study

9. CONCLUSION

- Peoples have sound knowledge about the health food which is clear from the fact that 92 percent of the respondents concept of health food.
- More than 50 percent people knew health store in Pune city and number of the stores are enough but still there is more scope for increase in number of stores because demand for the health food is increasing.
- Taste wise health food is better than the regular food because of use of natural resources which fosters natural growth of food & enhances the taste.

- Natural food is more consumed by the people as compared to the organic food, whole food & less fatty food.
- People buy natural food more frequently and other health food once, twice or thrice in a Month.
- Health food is liked by the people because of its health aspect. It is more nutritious as compared to the regular foodstuff.

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