



Review on consumer knowledge and buying behaviour towards organic foods

Soniya Khinchi¹ and Dr. Sarla Lakhawat²

¹Research Scholar, ²Professor

¹Department of Food Science and Nutrition,

¹College of Community and Applied Sciences, MPUAT, Udaipur, Rajasthan, India.

Abstract

Natural fertilizers, pesticides, growth hormones, and genetically modified organisms are not used in the production of organic food. The market for organic foods in India was valued at USD 1238 million in 2022, and between 2022 and 2028, it is expected to increase at a CAGR of almost 22%, reaching a value of around USD 4082 million. Due to rising health consciousness, the popularity of organic food is rising in India. Some antioxidants and flavonoids, which have antioxidant characteristics, might be present in higher concentrations in organic foods. The risk of cancer and heart disease is decreased along with other health hazards. As opposed to the regular diet, it is also less prone to result in obesity. This study primary goal is to gauge consumer awareness of and purchasing patterns for organic food items. Consumer behaviour analysis can be used to determine the factors influencing customers choices to buy organic food. Secondary sources were used for the following study. Consumers are more influenced by factors such as perceived health, product attributes, social welfare, product attributes and the ability to purchase organic food. A strong relationship between perceived health and product attributes, customers believe that organic food is good for their lives. Since perceived health has the least influence of all variables, it is important to focus on the warranty certificate and product price which must be maintained to a minimum.

Keywords: Organic foods, Knowledge, Health benefits, Purchase behaviour, Factors

Introduction

The organic product market is currently one of the fastest-expanding industries. Products from a farm that don't use synthetic fertilizers, pesticides, growth hormones or genetically modified organisms are considered organic foods. An increasing amount of food adulteration has made people switch to organic foods. India's

economy is based on organic farming. Because of chemical contamination, consumers are turning to nature. Food that has been farmed without the use of chemicals from seed to harvest is referred to as "organic food." Organic cuisine has been more popular recently. The Department for Agriculture and Rural Affairs (DEFRA) states that "organic food is the product of a farming system which avoids the use of man-made fertilizers, pesticides, growth regulators and livestock feed additives". People are gradually moving toward organic food products that have not undergone any form of chemical processing or treatment as they become more aware of the negative impacts of inorganic crops and food goods and the positive advantages of organic food items. "The first stage in creating demand for organic products is raising consumer awareness of organic foods". The modern consumer is more concerned about quality than pricing. "Environmental concerns, health and lifestyle concerns, product quality, and subjective norms are some of the key drivers that drive people to buy organic foods." According to the study of the European Union organic produce may have more of certain antioxidants and types of flavonoids, which have antioxidant properties. It reduces health risks and also helps to reduce cancer and heart disease risks. Organic food also helps to improve resistance system, better sleeping habits and gives real comfort. It is also less likely to be overweight than consuming conventional food. The report states that the market for organic foods in India was valued at USD 1238 million in 2022, and between 2022 and 2028, it is expected to increase at a CAGR of almost 22%, reaching a value of around USD 4082 million. The growing levels of health consciousness in the nation are a major element influencing the demand for organic foods in India. Indian consumers have begun to pay attention to the nutrients and quality of the food they consume, which has increased the demand for organic food. In India, organic products are certified by including National Program for Organic Production (NPOP), Participatory Guarantee System (PGS) and Javik Bharat (for organic food products). Madhya Pradesh, followed by Rajasthan, Maharashtra, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, and Karnataka has certified the most land among all the states as organic. Sikkim has attained the impressive distinction of converting all of its arable land (more than 75000 acres) to organic certification in 2016. A total of 3496800.34 MT (2020–2021) of certified organic products were produced in India, including processed foods, oil seeds, fiber, sugar cane, cereals and millets, cotton, pulses, aromatic and medicinal plants, tea, coffee, fruits, spices, dry fruits, vegetables, and coffee. In addition to producing functional food items and organic cotton fiber, the production is not just restricted to the edible sector. The top five states for production are Madhya Pradesh, Maharashtra, Karnataka, Rajasthan, and Uttar Pradesh. The single greatest category of commodities is oil seeds, which are then followed by sugar crops, cereals and millets, tea and coffee, fibre crops, fodder, pulses, medicinal/herbal and aromatic plants, and spices and condiments.

Health Benefits of Eating Organic Food

- 1. Antioxidant content:** Numerous scientific studies have demonstrated the positive effects of antioxidant content, especially that found in organic foods, which are free of foreign chemicals that frequently interact with vitamins, minerals, and organic compounds and thus decrease the necessary significant impact of antioxidants in food.

Organic food's natural antioxidants are beneficial for preventing heart disease, cancer, vision issues, early ageing, and cognitive dysfunction.

Organic crops have higher antioxidant activity, with concentrations of a variety of different antioxidants that range between 18 and 69 percent higher. This is already associated with a lower risk of illnesses like cardiovascular and neurodegenerative as well as certain types of cancer.

2. **Boost Immune System:** Increased amounts of vitamins and minerals found in organic food help to support a stronger immune system in humans.
3. **Improved Heart Condition:** When animals feed on natural grass, the amount of CLA (conjugated linoleic acid) found in their products increases. Through photosynthesis, natural grass collects solar energy, which is later converted into organic CLA by herbivorous feed. Animal meats and dairy products have higher concentrations of CLA, a cardiac fatty acid that can help to protect the circulatory system.
4. **Environment Protection:** Since no synthetic chemicals are used in the production of organic food, the soil and water are not contaminated. On the other hand, commercial non-organic farming uses a lot of chemical fertilizers and pesticides, which contaminate the soil and water less. Clinical studies have shown that artificial fertilizers and pesticides are seriously detrimental to both human health and the environment. Chemical pesticides and fertilizers not only kill beneficial mammals and birds but also cause harm to pests and the ecosystem.

Environmental studies have shown that organic farming is less harmful to the environment than conventional farming methods. Various phrases, such as ecological, free of pesticides, biological, eco-friendly, natural, and differently produced, are used interchangeably to refer to organic foods. Per unit of productivity or area, organic farms use less energy and generate less garbage.

5. **Nutrient content:** According to studies, organic foods like potatoes and cabbage have higher vitamin contents, particularly vitamin C, whereas chokeberries have the greatest vitamin content of any fruit. Aronia is defined by the presence of beneficial elements such as dietary fiber, pectin, vitamins (including vitamin C and B-group vitamins), and minerals like copper and manganese.

It is well recognized that vitamins, particularly vitamins C and B, fulfill crucial protective roles by ensuring the immune system is operating normally, suppressing carcinogenic alterations, etc. Beneficial levels of these nutrients can therefore contribute to balanced meals and, as a result, better health.

Additionally, studies have revealed that as compared to conventional diets, organic foods contain more mineral components examples are:

- Iron (cherries, spinach, blackcurrant)
- Magnesium (carrot, potatoes, savoy cabbage)
- Phosphorus (potatoes, leek, lettuce, spinach, cherries)
- Potassium (carrot, potato, spinach)

Methodology

The English-language review papers, research papers and online writings about organic foods that have been published between 2011 and 2022 were examined. The publications relevant to the study were searched using a variety of data-gathering tools and web browsers, including Research Gate, Academia, Shodganga,

Krishikosh, and Google Scholar. The references given in the printed article were also carefully examined in order to find the most relevant research publications. When looking for relevant research publications, search terms such as "organic foods", "knowledge", "health benefits", "purchase behaviour" and "factors" were most frequently used.

Discussion

Bartels and Hoogendam (2011) examined that effect of social identification with certain green consumer groups on brand knowledge, brand attitude and buying behavior. An online panel study result shows that people who are aware of their social identity concerning environmentally friendly consumer groups also seem to feel more attached to consumers who buy organic food products. In addition, brand knowledge and brand attitudes concerning specific organic brands have an effect on buying behaviors of organic foods products. Moreover, the influence of brand knowledge on buying behavior seems to be mediated by brand attitude. He concludes, that consumers awareness of social environment plays an important role in green consumerism.

Dumea (2012) observed the factors that influence purchase decisions and barriers that are faced by consumers in buying organic food in Romania. The research method used was an online survey. A convenience sample was used for the research and sample size was 110. The result found that most of the respondents have a positive attitude towards organic food. People who have a greater concern for health and the environment and people who have a higher level of knowledge about organic food have a higher purchase frequency. High prices, low availability and poor appearance are viewed as general barriers to the consumption of organic food products.

Chiew *et al.* (2014) studied that how consumers perceive organic food goods, their intentions to buy them, and their actual behavior while making purchases. The outcome was in line with the consumers goal and primary driving force to buy organic products. It was highly influenced by customer perceptions of the items social, environmental and animal welfare elements as well as their health and safety. The benefits of eating organic food and their overall impact on our lifestyle are also revealed by the study.

Kumar and Chandrashekar (2015) observed that customer perceptions of organic products and marketing in the city of Mysore. The findings showed that the majority of consumers, especially in big cities, choose organic food items. The study area does not do a good enough job of promoting organic food products, thus demand for them is rising but supply is very low.

Ramesh and Divya (2015) determined consumers believe that buying organic food goods assures their health and the environment, and these two reasons are what is driving up demand for organic food items. It has been found that people are more likely to purchase organic food goods when they are educated. Education and liking for organic food have a significant correlation, while age and education also have a favorable correlation. But the primary obstacle to raising the share of the organic sector is a general lack of knowledge.

Misra and Singh (2016) assessed that customers are affected by a variety of factors, including safety, health, certification, trust, and lifestyle, all of which have led to the rise in the popularity of organic food items. The

survey has also noted certain obstacles in the way of these food products, including product cost, a lack of knowledge, and consumers who continue to have doubts about the certification procedure that certifies a food as organic.

Baladhandapani and Sivalingam (2017) determined how consumers tended to purchase organic food items (120 organic food consumers and 120 non-organic food consumers). According to the survey, consumers of organic and non-organic food products differ according to criteria including gender, family income, education level, and occupational status. In addition, psychological elements including attitude, perception, belief, and purpose have produced favorable outcomes for Tirupur district's organic food customers.

Pandurangarao *et al.* (2017) examined characteristics that influence customers' decisions to purchase organic food goods. To study the major reasons encouraging consumers to choose organic food, a sample of 500 customers was questioned using standardized questionnaires. The findings showed that there are 10 elements, including labeling, health concerns, environmental concerns, brand advertising, safety concerns, accessibility concerns, price concerns, freshness concerns, and store location concerns, that influence consumers to purchase organic food. There is a strong correlation between consumer behavior and environmental concern.

Singh and Rachna (2017) studied that the demand for organic products is growing steadily and is very high in the current market. Due to health concerns and many detrimental consequences of chemical products included in traditional food, organic products are consumed. The superior quality of organic foods influences and raises consumer demand for organic goods. It is anticipated that it will benefit everyone and improve human health. The most important reason for people to buy organic food is for its health benefits, which are followed by its advantages for the environment, making it more alluring than other types of produce.

Loura *et al.* (2018) discovered the variables affecting how organic products affect people and the environment. Primary data for the study was gathered from 200 respondents in the Hisar region of Haryana using a semi-structured questionnaire. The factor analysis identifies six factors: manufacturing, perception, obstacles, impediments, and environmental friendliness. To expand the market for organic products, businesses must concentrate on elements such as environmental friendliness, perception, and barriers.

Parmar *et al.* (2019) determined a connection between the types of organic products consumers purchase and the advantages of using them, as well as a substantial connection between the factors that influence their decision to buy organic products and those advantages. Results of the research found that consumers agree that organic products help them live healthier lives. buyers believed that organic products were favored for reasons of health.

Pham (2020) studied that the origins of organic food (OF) production in Vietnam as well as the motivations and actions of consumers. A suitable sample of 222 consumers from Ho Chi Minh City, Vietnam, provided the data. In the world of organic produce, the idea of food security has received minimal study attention. The association of participants with ethical issues affects their views and ultimately their choices of consumption, it is seen that moral personality-identity influences both perceptions and willingness to purchase organic food.

Matharu *et al.* (2021) described the aims to develop and empirically test an extended model based on the theory of planned behavior that captures the critical variables influencing young Indian consumers attitudes and how these attitudes influence their actual purchasing behavior, as well as the moderating impact of cultural values. For green marketers and policymakers, the study will be a great resource for understanding the difficulties and problems involved in developing successful marketing strategies.

Raji (2021) studied that how consumers perceive organic products, was conducted using a sample size of 150 respondents who are familiar with organic products. Descriptive statistics were used to analyze the data that had been obtained. If organic agriculture were to be consumed in the same amounts as conventionally grown agriculture is currently consumed, organically produced food would likely have better nutritional qualities and lead to higher levels of public health.

Adawiyah *et al.* (2021) determined that how customer preferences and awareness affect interest in organic veggies. 100 customers from five major retailers in the Indonesian city of Bogor served as the responders for the data collection. Consumer preferences and awareness have a big, beneficial impact on consumers desire to purchase organic vegetables. Vegetables grown organically are still thought to be highly unpopular with consumers.

Roy *et al.* (2022) examined the elements that have an impact on customers opinions about and attitudes toward buying organic food. The results show that customers behavioral elements, together with other aspects including customer viewpoint, supply and demand, health aspect, cost-effectiveness, standard, and dependability, are significant in encouraging them to purchase organic products. The writers also make clear that, of the variables highlighted, the absence of an organic supply chain market is the main cause of product unavailability.

Malissiova and Manouras (2022) studied the perception of Greek consumers' attitudes toward organic food. A survey was carried out, and a total of 1945 questionnaires from the general population were collected. According to the findings, there is an average degree of awareness and the cost of organic food is regarded as being too high for regular consumption.

Conclusion

The primary objective of this study was to look into consumer knowledge about and purchasing patterns for organic food items. There have been many studies done to assess consumer awareness, knowledge, perception, attitudes, beliefs, and purchasing patterns about organic food items. The production of organic food is one of the most established, well-liked, and highly valued aspects of organic farming. The promotion of organic products and consumer education are both essential. The necessary efforts should be made by the government, farmers, and health organizations to enhance public awareness of organic food items. Consumer behaviour analysis can be used to determine the factors influencing customers' decisions to buy organic food. Perceived health, product characteristic, social welfare, product feature, and the availability of organic foods are some of the elements that have the biggest impact on consumers. Some indirect intentions to purchase organic food include its nutritional content, natural components, food safety and awareness of its availability.

Because there is a strong association between perceived health and product attributes, customers believe that organic food is beneficial to their life. Since perceived health has the least impact on all the variables, it is important to focus on guarantee certification and the product's price, which should be kept to a minimum.

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