



A STUDY OF ORGANIC FOOD AND ITS BENEFITS

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Abstract

To cultivate crops and livestock in an organic way, it needs more than just deciding not to use pesticides, fertilisers, genetically modified organisms, antibiotics, and growth hormones. Increased productivity and fitness of various agroecosystem populations, including soil organisms, plants, animals, and people, are the primary goals of organic farming. The development of sustainable, environmentally friendly businesses is the main objective of organic production. The use of crop rotations and cover crops is encouraged by organic farming in addition to promoting balanced host/predator relationships. In order to preserve the organic matter and fertility of the soil, cover crops and composted manure are used. Examples of proactive pest and disease management strategies include crop rotation, improved genetics, and resistant strains.

Keywords: Agroecosystem, Crop rotation, Disease management, Proactive pest, Productivity

Introduction

Choosing to produce crops and livestock without the use of pesticides, fertilisers, genetically modified organisms, antibiotics, or growth hormones is just one aspect of organic farming. In order to maximise the productivity and fitness of various groups within the agroecosystem, including soil organisms, plants, livestock, and people, organic production is a comprehensive system.

Organic farming promotes host/predator relationships, crop rotation, and cover crops. Organic waste and nutrients generated on the farm are recycled back into the soil. Cover crops and composted manure are utilised to maintain the soil's fertility and organic content. Among the preventative methods used to fight insects and diseases include crop rotation, improved genetics, and resistant cultivars. Organic farms can benefit from integrated pest and weed management programmes and soil conservation systems.

Some of the practical chemical instruments that are readily available to other farmers are chosen not to be used by organic farmers. The design and administration of the production system will determine how well the farm does. To avoid or lessen crop difficulties, agricultural rotation and tillage techniques should be adopted, as well as complementary companies. The output of each organic crop varies according to how well the management functions. Production yields are lower while moving from conventional to organic, but following a three- to five-year transition period, organic yields normally rise. Cereal and pasture crops require little in the way of nutrient requirements and pest pressure, making them very simple to farm organically.

Organic farmers typically operate smaller farms than conventional farmers, thus they do not benefit from the same economies of scale as larger growers. There is currently no conclusive research to back up this claim. It is highly difficult to conduct studies that take into account all of the various variables that may affect nutrients, including seeds, soil type, climate, post-harvest treatment, and crop variety. Recent research published in peer-reviewed journals has shown that organic foods are more nutrient-dense, though.

Keywords

Organic farming, crop rotation, fertilisers, agroecosystem, organic production.

Literature review

Hyun – JooLee (2015) The current study investigates how consumers perceive organic food attributes, which in turn influence their utilitarian and hedonic attitudes and intentions to purchase organic food. Specifically, consumers' perceptions of nutritional content, ecological welfare, and price attributes of organic food have strong effects on utilitarian attitudes as well as hedonic attitudes toward buying organic food, while perceptions of the sensory appeal attribute have a strong effect on hedonic attitudes. Interestingly, consumers' perceptions of the natural content attribute of organic food are not a significant determinant of the two dimensions of attitude. Lastly, utilitarian and hedonic attitudes play an important and influential role in determining behavioural intentions to purchase organic food. This study raises questions about the lack of a theoretical framework in previous organic food studies. Therefore, a modified S–O–R model is applied to provide theoretical support for organic food research. In addition, this study employs a bi-dimensional approach to attitudes (i.e., utilitarian and hedonic attitudes), contributing to a better understanding of consumers' expectations and perceptions in their behaviours regarding organic food.

Sarah Hemmerling (2015) many publications are focusing on diverse aspects of marketing research for organic products. However, so far there have been very few attempts to provide an overall synthesis of current knowledge. The present study, therefore, gives an overview of marketing research for organic food consumption, enabling the identification of research strengths and deficits. The review analyses a total of 277 research studies published between January 2000 and December 2011. The structure of this review was derived from the concept of the consumer-oriented marketing mix (4Cs), taking into account consumer value and benefits, the cost to the consumer, communication and information needs and convenience and distribution. The results of this qualitative analysis revealed a high density of publications, especially for the period from 2008 to 2011. The most investigated topics are cost to the consumer and consumer value and benefits. Nevertheless, there are still many

aspects within these research areas that have not yet been addressed, such as ecological packaging, price knowledge and price processing. The research areas of communication and information need and convenience and distribution are also less intensively researched.

Rambalak Yadav (2016) The present study attempts to investigate the consumer's intention to purchase organic food in the context of a developing nation (India) using the Theory of Planned Behaviour (TPB). Further, the study has incorporated additional constructs (moral attitude, health consciousness and environmental concern) in the TPB and measured its appropriateness. Responses were collected from 220 young consumers adopting the convenience sampling approach. Data were analysed using Structural Equation Modeling (SEM) to evaluate the strength of the relationship between the constructs. The findings reported that the TPB partially supported the organic food purchase intention. Among the additional constructs incorporated, moral attitude and health consciousness positively influenced the consumer's intention to purchase organic food. The study has supported the inclusion of new constructs in the TPB as it has improved the predictive power of the proposed framework in determining consumers' intention to purchase organic food.

Bayad Jamal Ali (2016) There has been increasing awareness of the benefits of healthy and organic food products as more knowledge has been gained on their effects on health, environment, social convenience and sustainable development. Acquiring insight into consumer attitudes is essential for the industry to grow. Compared with the rest of the world, the Kurdistan region of Iraq is still in the early stages of understanding the importance of healthy and organic food products. The study aimed to investigate the attitudes of Kurdish consumers concerning healthy and organic food. I administered an online survey to 452 respondents, and their responses were analysed by using descriptive statistics and performing correlation, linear regression and factor analysis. The findings indicated that health concerns were the main reason for healthy and organic food consumption. I also found that quality and taste were important factors in purchasing decisions and that consumers were willing to pay a premium price if these foods were available. However, there was a general lack of concern about food production's effects on the environment and animal welfare. This research provides new insight into the attitudes of Kurdish consumers in Iraq towards healthy and organic food. This population has not been covered before, which in turn will add to the literature on this subject.

Giovanni Sogari (2018) Overweightness and obesity rates have increased dramatically over the past few decades and they represent a health epidemic in the United States (US). Unhealthy dietary habits are among the factors that can have adverse effects on weight status in young adulthood. The purpose of this explorative study was to use a qualitative research design to analyse the factors (barriers and enablers) that US college students perceived as influencing healthy eating behaviours. A group of Cornell University students (n = 35) participated in six semi-structured focus groups. A qualitative software, CAQDAS Nvivo11 Plus, was used to create codes that categorised the group discussions while using an Ecological Model. Common barriers to healthy eating were time constraints, unhealthy snacking, the convenience of high-calorie food, stress, high prices of healthy food, and easy access to junk food. Conversely, enablers of healthy behaviour were improved food knowledge and education, meal planning, involvement in food preparation, and being physically active. Parental food behaviour and friends' social pressure were considered to have both positive and negative influences on individual eating

habits. The study highlighted the importance of consulting college students when developing healthy eating interventions across the campus (e.g., labelling healthy food options and information campaigns) and considering individual-level factors and socio-ecological aspects in the analysis.

Farah AyuniShafie (2018) Food safety, human health and environmental concerns along with sensory attributes such as nutritive value, taste, freshness and appearance influence organic food consumer preferences. Demographic variables may define organic consumers but the correlation is not very significant. Consumers also associate organic food with natural processes, care for the environment and animal welfare and the non-use of pesticides and fertilisers. Premium price continues to suppress organic food consumption. Understanding the grounds for increasing the level of organic food consumption such as motivation is most critical in understanding the potential of organic food to become a genuinely mainstream market.

Sara Hurtado-Barroso (2018): In the last decade, the production and consumption of organic food have increased steadily worldwide, despite the lower productivity of organic crops. Indeed, the population attributes healthier properties to organic food. Although scientific evidence is still scarce, organic agriculture seems to contribute to maintaining an optimal health status and decreasing the risk of developing chronic diseases. This may be due to the higher content of bioactive compounds and lower content of unhealthy substances such as cadmium and synthetic fertilizers and pesticides in organic foods of plant origin compared to conventional agricultural products. Thus, large long-term intervention studies are needed to determine whether an organic diet is healthier than a diet including conventionally grown food products. This review provides an update on the present knowledge of the impact of an organic versus a conventional food diet on health.

Kia Ditlevsen (2019) There is increasing demand for organic food products throughout the Western world. Health concerns have frequently been found to be the main motivation of consumers purchasing organic products, but the literature on consumer preferences and behaviour is less clear about what 'health' means to consumers of these products, and because of this it remains unclear what exactly drives consumers to choose organic products. This article investigates health from the perspective of consumers, and analyses negotiations of, and justifications behind, their consumption preferences. The analysis is based on a focus group study conducted in Denmark in 2016. Three different understandings of health can be found when consumers explain their preferences for organic products: Health as purity; Health as pleasure, and a Holistic perspective on health. The first two are familiar from the literature on food. The third, which reflects principles behind organic agriculture, is less documented in the context of consumption. Health as purity was the dominant understanding of health used by the participants when explaining why they purchased organic food products. When participants discussed healthy eating in general, detached from a specific context, most employed a purely nutritional perspective as a definitive argument in supporting claims about healthy eating. The paper's findings have implications for future research on organic consumption. They also have practical implications for organic food producers and manufacturers.

Thu Huong PhamGreen (2019): Promoting consumer purchase behaviour of eco-friendly products is key to environmental sustainability. This research aims to investigate how different factors may enhance or impede young consumers' intentions to purchase a specific type of eco-friendly product, i.e. organic food. Data were obtained from 289 respondents in an emerging market economy, i.e. Vietnam. Multivariate data analysis using

structural equation modelling revealed that food safety concerns, health consciousness and media exposure to food messages played integral roles in the formation of attitudes towards organic food. Interestingly, consumers' environmental concerns and food taste were of little value in predicting their attitudes. Notably, perceived barriers (i.e. high price, inadequate availability, poor labelling and extra time required) significantly impeded both attitude and purchase intention towards organic food. The insights gained from this research extend current knowledge about pro-environmental behaviour in developing countries and they have important practical implications for marketers and other key stakeholders.

Jyoti Rana (2020) There are many empirically determined influential factors known to control organic food purchase behaviour. Of these known factors- health, product quality and concern for natural environmental degradation are seen as the major motives behind organic food purchase. We, therefore, attempted to investigate the most prominent reason(s) for buying organic food, using the meta-analyses of studies published during the last 25 years as our basis for conviction. Multilevel meta-analyses were applied to the studies in the review, to find the major reason(s) for the purchase of organic groceries, milk, fruits and vegetables. Although the three motivational factors mentioned above have been echoed throughout the history of organic food purchase research, the health factor has always topped the priority chart. The study in its overall empirical scale contributes to managerial implications and sets an agenda for future research.

Michael Siegrist (2020) Novel food technologies are important for food security, safety and sustainability. Consumers, however, are often hesitant to accept them. In this narrative Review, we organize the research describing how heuristics and individual differences among consumers influence the acceptance of agri-food technologies. Associations evoked by a food technology, its perceived naturalness and trust in the industry using it influence consumer acceptance. Food neophobia, disgust sensitivity and cultural values are crucial personality factors for explaining individual differences. Using gene technology, nanotechnology, cultured meat and food irradiation as cases, we explore factors that may explain consumers' acceptance or lack of acceptance. Climate change, food supply shocks caused by crises such as pandemics and population growth are imminent threats to the food system. Therefore, disruptive food technologies will be needed to progress towards a more resilient food system. Taking into account the factors influencing consumers' perceptions of novel food technologies during the early stage of development and introduction will hopefully result in a higher acceptance of such technologies.

SandileMkhize (2020) The change from conventional to organic foods has been found to have benefits for environmental sustainability and consumers' health. Although a market for organic fresh produce has been found to exist in South Africa, consumption levels are low and there is an incomplete understanding of the barriers to organic consumption. In this qualitative research, interviews were conducted with participants who were aware of organic products but were not regular consumers of organic products. Snowball sampling was used to recruit participants to the study to better understand barriers to organic purchases. Qualitative data obtained from interviews were transcribed and thematic analysis was conducted. Generally, participants appeared to be concerned about the environment, however, their concern for the environment does not lead to organic consumption. Furthermore, participants had positive attitudes toward organic products, and are not influenced by friends and family but are deterred by issues such as price, availability and labelling of organic products. The

recommendations include initiatives that will assist marketers with communicating organic benefits to consumers thereby explaining the reasons for higher prices and leading to consumer trust. Creative communication strategies present an opportunity to overcome barriers to consumption.

Maria L. Marco, (2021) An expert panel was convened in September 2019 by The International Scientific Association for Probiotics and Prebiotics (ISAPP) to develop a definition for fermented foods and to describe their role in the human diet. Although these foods have been consumed for thousands of years, they are receiving increased attention among biologists, nutritionists, technologists, clinicians and consumers. Despite this interest, inconsistencies related to the use of the term ‘fermented’ led the panel to define fermented foods and beverages as “foods made through desired microbial growth and enzymatic conversions of food components”. This definition, encompassing the many varieties of fermented foods, is intended to clarify what is (and is not) a fermented food. The distinction between fermented foods and probiotics is further clarified. The panel also addressed the current state of knowledge on the safety, risks and health benefits, including an assessment of the nutritional attributes and a mechanistic rationale for how fermented foods could improve gastrointestinal and general health. The latest advancements in our understanding of the microbial ecology and systems biology of these foods were discussed. Finally, the panel reviewed how fermented foods are regulated and discussed efforts to include them as a separate category in national dietary guidelines.

Sangeeta Mehroliya (2021) This study aims to empirically measure the distinctive characteristics of customers who did and did not order food through Online Food Delivery services (OFDs) during the COVID-19 outbreak in India. Data are collected from 462 OFDs customers. Binary logistic regression is used to examine the respondents’ characteristics, such as age, patronage frequency before the lockdown, affective and instrumental beliefs, product involvement and the perceived threat, to examine the significant differences between the two categories of OFDs customers. The binary logistic regression concludes that respondents exhibiting high-perceived threat, less product involvement, a less perceived benefit on OFDs and less frequency of online food orders are less likely to order food through OFDs. This study provides specific guidelines to create crisis management strategies.

Malgorzata Hanzl (2021) Recent health issues have raised awareness among the general public and stimulated debate over the future forms of urban living. Those factors which enhance healthier environments are receiving broader recognition in maintaining the health of citizens in times of the pandemic. The current article explores the framework of ecosystem services to examine the temporary interventions introduced in response to the current challenges. These short-term adjustments may indicate possible pathways for the future. Analyses of the impacts of forms of urban settings and particularly of green infrastructure as a primary element which improves citizens’ health is used to support the reflections.

Scope of the study

There is a huge potential in this field now as the awareness has increased and people are more outgoing in switching to organic. In the coming year or so I see tremendous growth in this field and we at Everything Organic already have a road map to go and replicate our Gurgaon model in many other upcoming states. In the international market, organic is an accepted factor and people don’t think twice before buying organic produce. Contrarily, we

still have a long road ahead in this field and the government's outlook towards this as the next big emerging segment needs to be established. We at Everything Organic, intend to approach various ministries to seek a discussion and take it forward with some solutions that financially help the farmers and redistribute as well and there are adequate schemes in place for short-term funding.

It has been a long path from then till now, but the biggest problem was understanding why they had to pay more for something that was essentially identical to what they were purchasing from their neighbourhood sabziwala and why they occasionally found worms in those products.

The major factors driving the demand for organic food in India is the increase in health awareness among the young generation and millennial, high disposable income, rising popularity, and strong economic growth. Indian consumers have started paying attention to the nutrient content and the quality of the food they eat, leading to increased expenditure on organic health and wellness products. Added to this, the growth of the Indian organic food industry is being accelerated by the strong support of the government. The trend of mindful eating is entailing again due to an increased number of consumers who choose to adopt a completely chemical-free lifestyle and have shifted towards eating natural and organic. This shift is witnessed mainly because of the awareness spread by a lot of health specialists, NGOs, and organic food manufacturers. The Indian organic food industry currently sized at 6000 crores is expected to grow at a CAGR of 25%, reaching a value of US\$ 2,091 Million by 2024. With this in mind, a lot of newer organic brands that follow traditional processing techniques are entering the market every day. The organic food industry is expected to grow at a CAGR of over 25 per cent in the next three years. This statistic has given a huge scope and opportunity for new start-ups to enter into the organic food business and work mutually for the growth of the industry.

Conclusion and suggestions:

The results of this study show that more important criteria, such as gender, nationality, and education, as well as income, occupation status, and age, have an impact on people's awareness of organic food. To focus their efforts and expand them in the areas of providing consumers with more information related to the product's characteristics and designing awareness activities about organic food production, consumption, and health benefits, policymakers, researchers, and marketing planners must have an understanding of the significance of the influential factors that influence consumers' decisions to purchase organic food. Such an attempt will aid organic farmers in expanding the market for their goods. Future studies may consider the need for a comprehensive framework to support organic product marketing including policy formulation, research, education, and outreach to support organic food production. Furthermore, future studies may also consider changes in consumers' behaviour in response to expanding use of information through advanced information technology such as social media. The study reflects that the reasons behind choosing organic food for health concerns, are the quality of the product and the texture/taste/feeling. Consumers generally prefer organic products in the form of clothes/fabric, cosmetics and food/drink. Hence it can be concluded that customers were getting organic products in limited variety and very few stocks were there if it got subsidized then more companies would join and organic products become cheaper and more variety would be there. The government's efforts to streamline regulatory mechanisms, such as offering subsidies and awards for improved progress of organic products and local customers' attention

to home consumption would help accelerate the growth of organic farming. Food produced by organic farming is safer and more nutritious. As consumers look for organic foods because they believe they are safer and healthier, the popularity of organic food is rising drastically. So possibly eating organic food ensures food safety from farm to fork. Compared to conventional farming, organic farming is more environmentally friendly. Organic farming promotes consumer health by preserving the purity of the environment and the health of the soil. Additionally, the organic produce market is currently expanding at the fastest rate in the entire world, including India. Holistically, organic farming fosters a nation's consumer health, ecological health, and economic growth through the generation of income.

References

1. Bayad Jamal Ali (2016) Consumer attitudes towards healthy and organic food in the Kurdistan region of Iraq.
2. Farah AyuniShafie (2018) Consumer Perceptions Towards Organic Food
3. Farming Base. (2020, September 23). Organic Farming Types, Importances, Advantages and Benefits. Retrieved from <https://farmingbase.com/organic-farming-types-importancesadvantages-and-benefits/>
4. Farming India, Ashmi, C.I.meena, Owner, F. I., Umbarkar, C. R., C.r., U., . . . Ballzykid. (2020, July 05). Organic Farming in India: Organic Farming Methods and Certification. Retrieved from <https://www.farmingindia.in/organic-farming/>
5. Giovannucci, D. (2007, June 24). Evaluation of Organic Agriculture and Poverty Reduction in Asia. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=996119
6. Greentumble. (2020, August 13). Sustainable Organic Farming: Pros and Cons. Retrieved from <https://greentumble.com/pros-and-cons-of-organic-farming/>
7. Hyun – JooLee (2015) Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food.
8. Introduction to Agriculture and Basic Methods of Organic Farming. Retrieved from <https://byjus.com/biology/agriculture-and-organic-farming/>
9. Jyoti Rana (2020) Health motive and the purchase of organic food: A meta-analytic
10. Kankam, T., Okese, K. A., & Boamah, J. (2020, June 08). Organic Farming: Types, Principles, Methods and Importance. Retrieved from <https://blog.agrihomegh.com/organic-farming-typesprinciples/>
11. Kia Ditlevsen (2019) Healthy food is nutritious, but organic food is healthy because it is pure: The negotiation of healthy food choices by Danish consumers of organic food.
12. Małgorzata Hanzl (2021)-Urban forms and green infrastructure – the implications for public health during the COVID-19 pandemic

13. Mancino, L.; Kinsey, J. Dietary Knowledge Enough? Hunger, Stress, and Other Roadblocks to Healthy Eating 2008; USDA, Economic Research Service: Washington, DC, USA, 2008.

14. Maria L. Marco, (2021) The International Scientific Association for Probiotics and Prebiotics (ISAPP) consensus statement on fermented foods.

15. Michael Siegrist (2020) -Consumer acceptance of novel food technologies

16. Rambalak Yadav (2016) Altruistic or egoistic: Which value promotes organic food consumption among young consumers? A study in the context of a developing nation.

17. Sangeeta Mehroliia (2021) – Customers’ response to online food delivery services during the COVID-19 outbreak using binary logistic regression

18. Sandile Mkhize (2020) Creativity in a marketing communication to overcome barriers to organic produce purchases: The case of a developing nation

19. Sara Hurtado-Barroso-Organic food and the impact on human health

20. Sarah Hemmerling (2015) Consumption behaviour regarding organic food from a marketing perspective—a literature review

21. Thu Huong PhamGreen - Evaluating the purchase behaviour of organic food by young consumers in an emerging market economy

