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HOUSEHOLD PREFERENCES FOR ORGANIC AGRICULTURAL PRODUCTS- A STUDY IN THE URBAN CONTEXT

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[doi: 10.33472/AFJBS.6.11.2024.1668-1679](https://doi.org/10.33472/AFJBS.6.11.2024.1668-1679)**ABSTRACT:**

This study explores the preferences of urban households for organic agricultural products. The research investigates the factors influencing household choices, including perceived health benefits, environmental concerns, taste, price sensitivity, and accessibility. The study will be conducted within a specific urban context, considering the unique characteristics and challenges of the urban environment in relation to organic product consumption. This study was based on a primary survey of 200 respondents living in places Thiruvananthapuram, Ernakulam, Malappuram. Customers were approached randomly using a structured questionnaire. The questionnaire was designed to record the responses on food safety concerns, frequency of buying behaviour, from where they buy the products, awareness, attitude, factors effecting buying behaviour, price effect on purchasing, behaviours towards organic food and effectiveness of sources for organic information. The investigation utilized a structured questionnaire to gather insights from participants randomly selected for the study. By analysing the data collected, the study seeks to understand the drivers behind urban households' decisions to opt for organic agricultural products. Through this exploration, the study aims to provide valuable information for businesses and organic food manufacturers looking to cater to the preferences of urban consumers. Overall, this research contributes to the growing interest in organic goods among urban populations and highlights the importance of considering various factors that influence consumer behaviour in the context of organic agriculture. This study will help to create awareness amongst consumers about organic food by organic companies.

Keywords: Organic agriculture, consumer preferences, urban context, food systems, sustainability.

1. INTRODUCTION

Growing consumer interest in organic goods and willingness to pay for organic characteristics has sparked business interest in organic marketing, resulting in significant improvements and developments.[1] Organic products are gaining popularity among consumers due to increased awareness and consideration. Organic products are becoming increasingly popular, as customers strive to understand their benefits before making a purchase.

When India had a small population, agriculture was practically organic and closer to nature. The conventional agricultural system, passed down through generations, is insufficient to sustain the growing population. During the "green revolution," farmers used technology to increase agricultural productivity and fulfil the growing population's food needs. The green revolution led to significant increases in food grain production. However, this has led to an increase in the usage of artificial fertilizers and pesticides, which are harmful to both the environment and humans.[2]

According to Minton and Rose (1997), individuals should be aware of the impact of products, processes, and brands on the environment. Consumers are more aware of the impact of environmental deterioration, leading to a preference for organic products and services from

environmentally conscientious enterprises (Laroche et al., 2001). The existing environmental circumstances pose a significant threat to consumer health and well-being.[3]

This study aims to identify the elements that influence customers' purchasing decisions. Understanding these variables is crucial for developing an efficient marketing plan to grow India's domestic organic market.

2. What is organic food?

The term "organic food" embodies a philosophy and set of practices that extend far beyond just "chemical-free" fruits and vegetables. It's about creating a holistic food system that prioritizes the health of the planet, the farmer, and ultimately, the consumer. At its core, organic farming principles revolve around fostering a natural, interconnected ecosystem on the farm. This means avoiding synthetic fertilizers and pesticides that can harm beneficial insects and pollute waterways, opting instead for natural pest control methods like crop rotation and attracting beneficial predators. Similarly, organic livestock are raised with their natural behaviors in mind, enjoying access to pasture and organic feed, without the routine use of antibiotics or growth hormones.[4]

The benefits of opting for organic extend beyond simply avoiding potential chemical residues. Research suggests that organic foods, on average, have higher levels of antioxidants and certain nutrients compared to their conventionally grown counterparts. Additionally, organic farming practices foster healthier soil by promoting biodiversity and building organic matter content, leading to more resilient and productive farming systems in the long run.

3. Benefits of Eating Organic Food

Consumers who pick organic products may be confident that they are more nutrient-dense and may help them live longer. It also improves people's life and prevents diseases. Organic goods fulfil strict criteria. Organic food tastes fantastic. It also lowers health hazards. It promotes healthy soil and utilises water resources. It works in harmony with nature and does new research. The producing process contributes to the overall health of the rural community. A research by the European Union found that organic vegetables and fruits are high in antioxidants, which can lower the risk of cancer and heart disease. Organic foods can boost immunity and enhance sleep quality.

It reduces the risk of obesity compared to normal diets. Organic foods are more flavourful and pure than regular meals. Organic food reduces synthetic fertilisers and pesticides, benefits the environment, and improves animal welfare. This also results in reduced waste. Conventional food production uses more chemicals, fertilisers, and pesticides, causing long-term harm to the soil and making it less fruitful, compared to organic food production.[5]

4. Organic food farming in India

India is a fertile ground for organic farming, boasting the highest number of organic farmers in the world and ranking 5th in terms of organic land. This vibrant sector is fueled by a commitment to sustainability, rich local traditions, and growing consumer demand for healthier food. Traditional knowledge of composting, crop rotation, and natural pest control blends seamlessly with modern organic practices, creating a unique tapestry of farming methods. While challenges like fragmented landholdings and limited market access remain, several government initiatives and private collaborations are actively supporting organic farmers through certification programs, training workshops, and market linkages. With a thriving domestic market and increasing exports, the future of organic food farming in India appears bright, promising not only delicious, chemical-free produce but also a more sustainable and equitable food system for all.

India's organic food sector is still in its early stages, with the majority of output transported to industrialized nations (APEDA 2014). Domestic market for organic products.[6]

The market is mostly concentrated in India's major cities and is expected to develop at a 40%-45% rate between 2014 and 2017. The organic agriculture industry has reached ₹2500 crores, with a global commerce valued at USD \$69 billion (about ₹360,000 crores). In India, fruits and vegetables are the most popular organic food categories.

India has the world's biggest number of organic producers, with more than 80% being small and marginal. Smallholder farmers are being excluded from export organic supply networks. Smallholder farmers have few options for selling their goods outside of the domestic market. In India, there are over 15,000 certified organic farms, and the number is steadily increasing. Currently, Bangalore has around 181 organic retail shops. These organic shops are not organized, and the prices of their products vary significantly. Despite this growing potential, one of the barriers for organic consumers is the high cost of organic products.

5. Review of Literature

Prithvi Simha, Cecilia Lalander, 2016 The study in Vellore, South India, revealed that farmers displayed a mix of positive and negative attitudes towards the re-use of human excreta-based fertilizers. Factors such as improved soil quality, potential cost savings, and perceived safety of urine fertilizer motivated positive responses, while concerns about crop die-off, social stigma, and market uncertainty deterred negative attitudes. The findings underscore the importance of addressing farmers' concerns, promoting dialogue, and integrating user stakeholders in nutrient recycling programs to enhance acceptance and adoption of environmentally friendly technologies

K. Kanchana, Dr. V. Kannan, 2023 The findings from the systematic review indicate a growing consumer interest in organic food products driven by health and wellness movements, public awareness campaigns, and changing consumer trends. Consumers value the authenticity and quality assurance provided by stringent certification processes for organic products. Additionally, the study highlights the importance of consumer awareness, availability, cost considerations, and demographic factors in shaping attitudes and preferences towards organic food items, emphasizing the need for further research to understand and meet the evolving demands of organic food consumers.

Salma S, Lalitha Ramakrishnan, 2017 The study found that only educated customers were interested in using organic spices for their health, as they are devoid of chemicals and pesticides. These studies highlight the need for quick action to prevent the loss of traditional knowledge and therapeutic benefits in spices and condiments. Consumer education protects society's health, safety, economic, and legal interests. Raising awareness among young customers about the benefits of organic foods and spices is crucial for both health and the environment.

N.Nithya, R.Kiruthika, S.Dhanaprakash, 2020 The results suggest that educated individuals over 35 years old, conscious of their dietary impact on health, are increasingly interested in organic food due to its non-GMO nature, absence of pesticides, and rich nutritional content.

Anupam Singh, Priyanka Verma, 2015 The findings of the study indicate that health consciousness, knowledge of organic foods, subjective norms, and perceived price positively influence consumer attitudes towards organic food products. Additionally, these factors, along with availability, also impact purchase intention, with attitude mediating the relationship. Furthermore, socio-demographic factors such as age, income, and education significantly influence actual buying behaviour towards organic food products. However, gender does not

have a significant impact on buying behaviour. These findings have implications for organic product companies, retailers, and market regulatory agencies in developing targeted strategies to cater to consumer preferences and increase awareness about organic food products.

Gunjan Gumber & Jyoti Rana, 2021 The study identifies different types of organic food consumers based on their attitudes and preferences. These consumer segments exhibit varying levels of trust in organic food, value factors such as health, sustainability, and social acceptance, and show differences in demographic characteristics such as gender, income level, education, and urban or rural background. Understanding these consumer segments can help businesses tailor their marketing strategies and product offerings to better meet the needs and preferences of different consumer groups in the organic food market .

Su-Huey Quah & Andrew K. G. Tan, 2009 The study found that sociodemographic factors like ethnicity, gender, urban residence, income level, and attitudinal factors such as food-safety concerns, health-supplement usage, price perception, and product availability significantly influence consumer purchase decisions of organic food products in Malaysia. Malays are influenced by factors like gender, urban residence, higher income, health concerns, sick family or friends, and price or availability considerations. Chinese consumers are influenced by age, gender, health concerns, and health-supplement usage. Indian or other ethnicities are primarily motivated by health-supplement usage. The findings suggest the need for strategies to develop the local organic food industry in Malaysia to meet the increasing demand for organic products.

Dr. Geetika Sharma, Dr. Rakhee Dewan, Santosh Bali, 2016 The study on Factors Influencing Consumer Buying Behaviour & Awareness towards Organic Food in Chandigarh & Panchkula revealed that a significant portion of consumers are positively inclined towards organic food. The research highlighted that factors such as income, health consciousness, and environmental concerns play a crucial role in shaping consumer preferences for organic products. Additionally, the study emphasized the importance of creating awareness among consumers about the benefits of organic food and suggested that businesses in the organic food industry should tailor their marketing strategies to meet the evolving needs and preferences of consumers in these regions.

6. Objectives of the study

- To understand the level of awareness of organic agricultural products among urban households.
- To find what are the factors that drives customers to change to organic food products.
- To assess the willingness of urban households to pay a premium for organic agricultural products.
- To identify the challenges and barriers to the adoption of organic agricultural products by urban households.
- To find the barriers for purchasing organic agricultural products in urban areas.

2. METHODOLOGY

A structured questionnaire was utilized to collect empirical data to test the hypotheses. The questionnaire was piloted with 32 organic food buyers to ensure that the question and response forms were comprehensible.

The regression analysis conducted in this study aimed to understand the factors influencing Indian consumers' attitudes, purchase intentions, and actual buying behavior towards organic food products. Multiple linear regression (MLR) analysis was used to predict the impact of health consciousness, knowledge of organic foods, subjective norms, perceived price, and

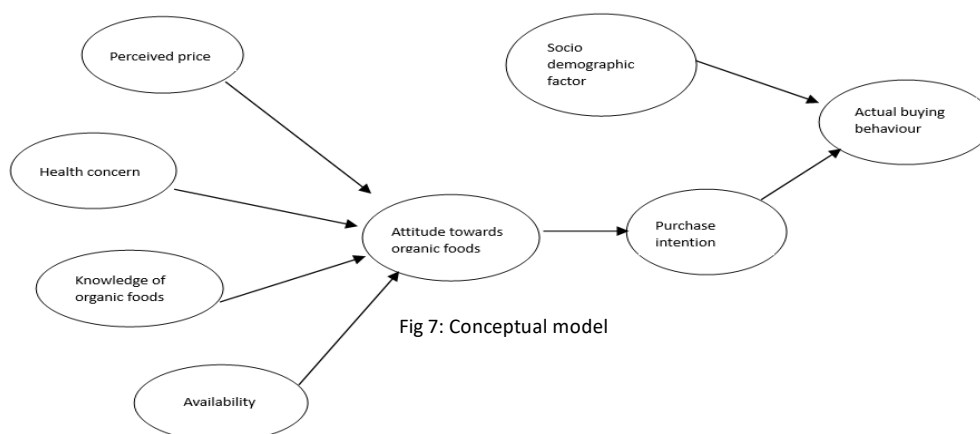


Fig 7: Conceptual model

availability on consumer attitudes. The results indicated that these five factors collectively accounted for 34% of the explained variances in consumer attitudes towards organic food products. This suggests that factors such as health consciousness, knowledge, and perceived price play significant roles in shaping consumers' attitudes towards organic foods. Additionally, hierarchical regression analysis was employed to examine the relationship between these influencing factors and purchase intentions, with consumer attitudes acting as a mediator. The findings supported showing that health consciousness, knowledge, perceived price, and availability positively influenced consumer attitudes, which in turn impacted purchase intentions. Furthermore, the results revealed that consumer attitudes and purchase intentions mediated the relationship between influencing factors and actual buying behavior. Overall, the regression analysis provided valuable insights into the complex interplay of factors influencing Indian consumers' behaviors towards organic food products, highlighting the importance of understanding these dynamics for businesses seeking to effectively market organic foods in India.[7]

Data analysis

The responses were thoroughly checked and coded for the purpose of statistical analysis. The data was entered in Statistical Package for Social Sciences (SPSS) version 2.1.

Hypothesis

H1. Health consciousness has a positive influence on the consumer attitude towards organic food products.[8]

H2. Consumers' knowledge of organic food has a positive influence on their attitude.[9]

H3. Perceived price influences the consumer attitude towards organic food products.[10]

H4. Perception of availability positively influences the consumer attitude towards organic food products.[11]

3. RESULTS AND DISCUSSION

The demographic characteristics of customers were examined. The data show that about 59.1% of the customers were males, with the remaining 40.9% being females (Fig 2). The bulk of respondents were between the ages of 26 and 33 (Fig 3), accounting for around 69.5% of the sample respondents. The bulk of consumers (46.8%) ranked 12th, followed by postgraduates (30.5%) and undergraduates (22.2%) (Fig 6). The sample analysis results show that most respondents had an income in the ₹5,00,000 to ₹7,00,000 bracket (Fig 4). The majority of respondents (55.7%) live in two-person households, closely followed by a further 24.1% living in four-person households (Fig 1).

8. Reasons for purchasing organic foods

People who had heard of 'organic' items were asked if they had ever purchased them. After the affirmative responses, these "buyers" were questioned further about their purchase patterns. Of those surveyed, 51.2% buy organic items frequently, 22.2% purchases every month, 17.7% every two months and 8.9% are irregular buyers.

Respondents mostly purchased organic food for its health benefits.

The majority of respondents preferred organic foods for their health benefits, reduced pesticide content, freshness, and environmental friendliness. 56.2% of respondents believed that nutritious content is crucial when making purchasing decisions and they value the health of the family. This resonates earlier data, with 56.2% of respondents indicating healthful content as the main reason for purchasing organic food.[12]

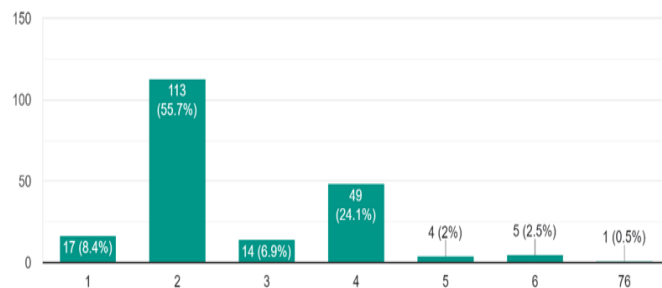
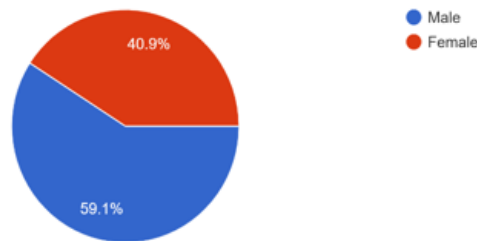


Fig 6: Education

Fig 2: Gender

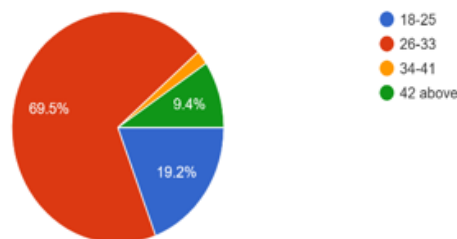


Fig 3: Age

Fig 4: Income of respondents

Fig 5: How often you purchase organic products

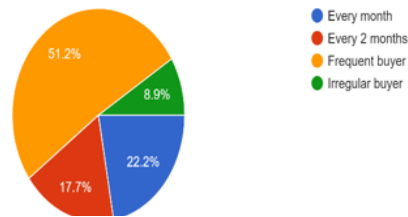


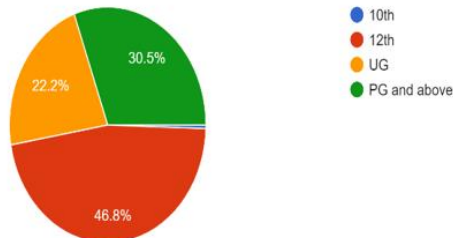
Table. 1

Model		95.0% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	3.246	4.398
	1. Age	.191	.463
	2. Gender	-.949	-.361
	3. Education Level	-.920	-.551
	20. What would need to happen in order for you to change your preferences for organic agricultural products.	-.014	.185

Fig 6. Education

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.291	4	14.823	31.080	.000 ^b
	Residual	91.092	191	.477		
	Total	150.383	195			



Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.492 ^a	.701	.689	.691	.833

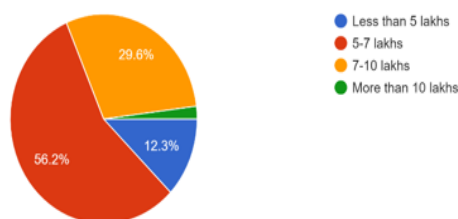


Table.2

Interpretation

The analysis includes variables such as age, gender, and education level to explore their influence on consumer behavior.

Descriptive statistics provide insights into the central tendency and variability of these variables across 200 cases.

Correlation Analysis

Correlation matrices reveal the relationships between variables, highlighting significant correlations between age and gender. The correlations suggest potential associations between demographic factors and purchasing behavior.

These findings suggest that age and gender are important factors to consider when analyzing consumer preferences for organic products.

Regression Analysis

The regression model summary indicates a strong relationship between the predictors (age, gender, education level) and the frequency of purchasing organic products.

An R-squared value of 0.689 suggests that the model explains approximately 68.9% of the variance in the outcome variable.

Managerial Implication

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.822	.292		13.089	.000
	Table.3	.327	.069	.272	4.733	.000
	3. Education Level	-.655	.149	-.368	-4.391	.000
	20. What would need to happen in order for you to change your preferences for organic agricultural products.	-.736	.093	-.733	-7.875	.000
		.085	.050	.111	1.694	.092

Table.2

This study has major implications for organic product manufacturers, retailers, and market regulators. Creating an acceptable method is required to answer consumer concerns about health, safety, and the environment. The approach focuses on certain consumer segments to increase knowledge and comprehension of organic food products while also assuring customer satisfaction and delight. Customers trust organic goods, even if they are unaware of the differences between organic and conventional production practices until instructed. Consumer knowledge and comprehension of organic foods have a significant impact on purchase decisions. This study provides guidelines and recommendations for merchants marketing organic products. The study can help organic food manufacturers identify target consumers by illustrating how socio-demographic variables influence organic food purchases. The report can assist health and wellness businesses in adapting their production and marketing strategies to satisfy customer demand for healthier food alternatives and developing effective growth plans.

Organic food marketers should carefully segment their market and design their marketing plan to educate potential customers about the benefits of organic goods, such as healthy content, pesticide-free ingredients, freshness, and environmental friendliness. Consumers should be informed about the availability of organic produce, since many believe there is a limited supply on the market.

While the study's findings are significant, it is critical to acknowledge numerous limitations when evaluating the data. This study looked at particular criteria that influence customer sentiments towards organic goods. This study was conducted with respondents from Trivandrum, Ernakulam, and Malappuram districts in Kerala. The sample size of 200 consumers may be insufficient to generalise the results. More study with bigger sample numbers is required to establish the validity of these conclusions.[13]

Survey Questionnaire

1.Name

2. Age (Years):

a) 18-25 b) 26-33 c) 34-41 d) 42 above

3. Gender:

a) Male b) Female

3. What is your family's annual income level?

a) Less than 5 lakhs b) 5-7 lakhs c) 7-10 lakhs d) More than 10 lakhs

4. What is your education level?

a) 10th b) 12th c) UG d) PG and above

5. What is your household size? (Number)

a) 1 b) 2 c) 3 d) 4 e) 5

6. What do you think organic agricultural products are?

a) Pesticides free b) Organically grown

7. Do you believe that organic agricultural products are safe to eat?

a) Yes b) No

8. How often do you purchase organic agricultural products?

a) Every Month b) Every 2 months
c) Frequent buyer d) Irregular buyer

9. What types of organic agricultural products do you typically purchase?

a) Fruits b) Vegetables c) Dairy products
d) Meat

10. Where do you typically purchase organic agricultural products?

a) Super market b) Farm c) Shop d) Other

11. What factors influence your decision to purchase organic agricultural products?

a)Your preference for organic products b)Your concern for health of the family c)Social status
d)Any other

12. How 2 are organic agricultural products to you?

a) Not important at all b) somewhat important c) important d) very important

13. Are you willing to pay more for organic agricultural products?

a) Yes b) No

15. Would you recommend organic agricultural products to others?

a) Yes b) No

20. What would need to happen in order for you to change your preferences for organic agricultural products.

a) Health b) Environment c) Taste d) Quality e) Convenience

4. CONCLUSION

This study aims to understand the factors that influence customers' purchasing decisions for organic food items. The study examines the elements influencing consumers' attitudes towards organic goods. The study examines how influencing variables and attitudes impact customer purchase intentions for organic food products. Previous research suggests that customers may not always act on their intention to buy organic foods. This study investigates how socio-demographic characteristics influence purchasing behavior.

5. REFERENCE

1. C. Dimitri and L. Oberholtzer, "Marketing U.S. Organic Foods: Recent Trends From Farms to Consumers," *www.ers.usda.gov*. <https://www.ers.usda.gov/publications/pub-details/?pubid=44432>
2. D. A. John and G. R. Babu, "Lessons From the Aftermaths of Green Revolution on Food System and Health," *Frontiers in Sustainable Food Systems*, vol. 5, no. 1, Feb. 2021, doi: <https://doi.org/10.3389/fsufs.2021.644559>.
3. T. S. Chan, "Concerns for Environmental Issues and Consumer Purchase Preferences";, *Journal of International Consumer Marketing*, vol. 9, no. 1, pp. 43–55, Oct. 1996, doi: https://doi.org/10.1300/j046v09n01_04.
4. S. Das, A. Chatterjee, and T. K. Pal, "Organic farming in India: a vision towards a healthy nation," *Food Quality and Safety*, vol. 4, no. 2, pp. 69–76, May 2020, doi: <https://doi.org/10.1093/fqsafe/fyaa018>.
5. "ORGANIC AND CONVENTIONAL FOODS: DIFFERENCES IN NUTRIENTS," *Italian Journal of Food Science*, vol. 28, no. 4, pp. 565–578, Jun. 2016, doi: <https://doi.org/10.14674/1120-1770/ijfs.v224>.
6. S. Sri, "Production and marketing of organic products in India," *International journal of health sciences*, Accessed: Apr. 02, 2024. [Online]. Available: https://www.academia.edu/103974811/Production_and_marketing_of_organic_products_in_India
7. D. Pandey, A. Kakkar, M. Farhan, and T. A. Khan, "Factors influencing organic foods purchase intention of Indian customers," *Organic Agriculture*, Jan. 2019, doi: <https://doi.org/10.1007/s13165-018-0240-z>.
8. J. Iqbal, D. Yu, M. Zubair, M. I. Rasheed, H. M. U. Khizar, and M. Imran, "Health Consciousness, Food Safety Concern, and Consumer Purchase Intentions Toward Organic Food: The Role of Consumer Involvement and Ecological Motives," *SAGE Open*, vol. 11, no. 2, p. 215824402110157, Apr. 2021, doi: <https://doi.org/10.1177/21582440211015727>.

9. H. V. Nguyen, N. Nguyen, B. K. Nguyen, A. Lobo, and P. A. Vu, "Organic Food Purchases in an Emerging Market: The Influence of Consumers' Personal Factors and Green Marketing Practices of Food Stores," *International Journal of Environmental Research and Public Health*, vol. 16, no. 6, Mar. 2019, doi: <https://doi.org/10.3390/ijerph16061037>.
10. M. MS, "Perceived Price and Organic Food Consumption Behaviour," *Proceedings of the First International Conference of Economics, Business & Entrepreneurship, ICEBE 2020, 1st October 2020, Tangerang, Indonesia, 2021*, doi: <https://doi.org/10.4108/eai.1-10-2020.2305584>.
11. A. Roy, A. Ghosh, and D. Vashisht, "The consumer perception and purchasing attitude towards organic food: a critical review," *Nutrition & Food Science*, Aug. 2022, doi: <https://doi.org/10.1108/nfs-04-2022-0130>.
12. benjamin L. Onyango, BA (Hons), MA, and LL.B, "Purchasing organic food in US food systems," *British Food Journal*, Jan. 2007, Accessed: Apr. 02, 2024. [Online]. Available: https://www.academia.edu/84968665/Purchasing_organic_food_in_US_food_system
13. M. B. Basha and D. Lal, "Indian consumers' attitudes towards purchasing organically produced foods: An empirical study," *Journal of Cleaner Production*, vol. 215, pp. 99–111, Apr. 2019, doi: <https://doi.org/10.1016/j.jclepro.2018.12.098>.