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Awareness and Decision-Making Factors Influencing Teenagers' Organic Food Choices in Mumbai

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ABSTRACT:

This research investigates the level of awareness and key factors influencing teenagers' decisions to choose organic food products in Mumbai. With growing concerns about health, environmental sustainability and the harmful effects of chemical inputs, organic food consumption is gaining traction across both developed and developing nations. Teenagers represent a unique consumer segment whose attitudes and behaviors can shape future consumption patterns. The study employed a cross-sectional design and purposive sampling of 125 participants aged 13–19 years. Data were collected through surveys and interviews, supported by secondary sources. Descriptive statistics, t-tests, regression and factor analyses were used to interpret the findings. Results indicate varied awareness levels, with some teenagers demonstrating considerable knowledge while others displayed limited understanding. Although health, taste and environmental benefits were perceived as important factors, regression analysis found no statistically significant relationship between these factors and actual purchasing decisions. Primary sources of information included family, peers and media. The study concludes that awareness campaigns and targeted educational initiatives may enhance knowledge and positively influence teenage consumer behavior towards organic food products.

KEYWORDS: Organic food; teenagers; consumer awareness; decision-making; sustainable consumption; Mumbai; regression analysis.

INTRODUCTION:

On a global scale, there is a growing understanding of the importance of health consciousness, sustainable agriculture methods, environmental protection and the negative impact that chemical inputs have on the soil, the environment and human health. As a result, there has been a noticeable trend towards organic farming. In recent years, there has been a significant rise in the level of dissatisfaction among consumers about nonorganic food items. This unhappiness is mostly attributed to health and environmental concerns, which has resulted in a widespread trend towards organic farming and the consumption of organic food products. As a result of the fact that consumers are now more knowledgeable and careful about their purchases, there has been a tendency noted among consumers to seek out environmentally friendly product variations. Another area that has been observing this tendency is the selection of food. When opposed to non-organic meals, organic foods are intended to be more beneficial to the environment and healthier for



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consumers. As a result, consumers are exhibiting an interest in purchasing organic food. The consumption of organic food is gaining popularity not just in affluent countries but also in developing countries.

Organic Food Products

The method of farming that takes into consideration the preservation of the natural environment is known as organic farming. In organic farming, the pesticides and fertilizers that are used have the least amount of chemicals, which helps to minimize soil pollution and also reduces the amount of pollution that is found in waterways. In addition, organic farming ensures the well-being of animals by allowing them to be raised in conditions that are more natural and freer, so avoiding the need of antibiotics as a kind of veterinary care. Irradiation and genetic modification (GM) are not used in the farming process, which is beneficial to the crops because it protects them. Therefore, organic farming is beneficial to the habitats of wildlife and biodiversity. Consequently, it is distinct from the traditional method of farming.

The key characteristics of organic farming are:

- Organic material serves to protect the quality of the soil and to increase biodiversity.
- The delivery of nutrients to crops by means of microorganisms found in the soil
- By utilizing legumes, nitrogen can be fixed in the soil.
- Methods such as crop rotation, biological variety, natural predators, organic manures and appropriate chemical, thermal and biological intervention are utilized in the process of weed and pest management.
- In addition to the raising of cattle, the preservation of natural ecosystems and fauna

The issues connected with customary cultivating are:

- Loss of soil ripeness because of unreasonable utilization of compound manures and absence of yield pivot.
- Water assets tainted because of nitrate overflow during downpours
- Soil disintegration because of profound furrowing.
- More use of fuel for development.
- Utilization of harmful bio-dices showers to check bother and weeds.
- Brutality to creatures in their lodging, taking care of, rearing and butchering.
- Local creatures and plants lose their space to fascinating species and cross breeds.

The advantages of eating organic food

Better Nutrition: When compared to food that has been produced using traditional methods for a longer period of time, organic food features a significantly higher concentration of various natural supplements. The mineral, vitamin and nutrient content of a food product are the essential components that determine the health benefits of that food product. Growing food in an organic



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manner improves the soil's nutritional value, which is then transferred to the plants and animals that are grown there.

Totally free of any harmful substance: Organic farming does not involve the use of any dangerous synthetic compounds, pesticides, or weedicides. This means that organic farming is free of any toxic substances. According to the findings of many studies, a significant portion of the population that consumed dangerous compounds that were utilized in conventional farming has been found to have contracted diseases such as a malignant development that ultimately results in cancer. Because organic farming does not involve the use of these toxins, it reduces the number of disorders and diseases that are caused by them.

Taste Enhancement: The taste of food is another factor that determines the overall quality of the dish. In many cases, the flavor of organic food is superior than that of other foods. Fruits and vegetables that are grown organically have a higher sugar content, which gives them a more robust flavor.

To have a longer shelf life: Organic plants have a more noticeable metabolic and basic integrity in their cell structure than conventional crops, which results in a longer shelf life. This enables organic food to be stored for a longer period of time, which is a significant benefit. As a result, organic food has a longer shelf life and can be consumed and stored for longer.

1.1. Research Objectives

- To assess the level of awareness among teenagers in Mumbai about organic food products.
- To examine the factors that influence teenagers' decisions to choose organic food products over conventional ones, if at all.

1.2. Research Hypothesis

H0A: The level of awareness among teenagers in Mumbai about organic food products is not significantly different from the average awareness level.

H1A: The level of awareness among teenagers in Mumbai about organic food products is significantly higher/lower than the average awareness level.

H0B: There is no significant relationship between the factors influencing teenagers' decisions to choose organic food products and their actual choices.

H1B: There is a significant relationship between the factors influencing teenagers' decisions to choose organic food products and their actual choices

LITERATURE REVIEW

Call et al. (2002): The study by Call and colleagues offers a comprehensive and global perspective on the health and well-being of adolescents in the 21st century. It examines various factors that significantly influence teenagers' health, such as social trends and lifestyle choices. The authors emphasize the importance of situating adolescent health within the broader context of societal changes and trends. This inclusive approach is crucial in a rapidly evolving global landscape where



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social, economic and cultural factors continually impact adolescents' health outcomes and lifestyles. The research serves as an essential resource for understanding the intricate web of elements that collectively define the health and well-being of teenagers in the contemporary world.

Gandhi and Sheorey (2019): The study by author focused on green consumer behavior in India, a developing nation. It aims to understand the factors driving environmentally conscious decisions among consumers in this unique socio-economic setting. The research contributes to our understanding of the elements that shape green consumer behavior and sheds light on the dynamics at play in a developing country. The findings have practical implications for businesses, policymakers and environmental advocates aiming to promote sustainable consumption patterns in diverse cultural and economic landscapes. Author's research is a crucial piece in understanding and encouraging environmentally responsible consumer choices on a global scale.

Jose and Koshy (2018): A study was conducted to understand the factors influencing young consumers' choices when choosing organic food items. The research aimed to uncover nuanced patterns and motivations that might differ from broader consumer trends. The study was relevant to the ongoing study and contributed significantly to the overall knowledge base of consumer behavior within the food industry. It added a layer of specificity and depth to our understanding of the intricate dynamics at play in the decision-making processes of young consumers in relation to organic food consumption.

Ajitha and Sivakumar (2017): The study explores the complex relationship between personal and social values, as well as consumer preferences, in the luxury cosmetics market. It aims to understand the underlying processes shaping the industry and provide insights into the factors influencing consumer choices. The research offers valuable insights into the dynamics at play within the luxury cosmetics industry and provides a foundation for businesses and marketers to better align their strategies with the intricacies of consumer attitudes and behaviors. The findings contribute to a more nuanced understanding of the factors influencing consumer choices in this specific market segment.

1. RESEARCH METHODOLOGY

3.1. Research Design

The study employed a cross-sectional research approach to gather data at one specific moment in time, enabling an examination of the attitudes and practices that Mumbai's adolescent population now has about organic food items. This design made it easier to examine the several elements that teens considered while making judgements about organic food products throughout the course of six months, from June 2023 to September 2023.

3.2. Sampling

Sampling Teenagers (ages 13 to 19) who live in Mumbai are among the particular criteria that are used to identify participants through the use of purposive sampling. The intended margin of error



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and degree of confidence are used to calculate the sample size. In order to make sure that the sample accurately reflected the relevant target population, purposive sampling was used. This method made it possible to choose participants based on their capacity to offer pertinent insights into the goals of the study, such as their knowledge of and decision-making processes for organic food items.

3.3. Data Collection

The research employed a combination of primary and secondary data collection techniques to get extensive data for examination.

3.3.1. Primary Data Collection:

- **Surveys:** To directly collect data from teenagers in Mumbai, a standardised questionnaire was created. The questionnaire asked questions on their purchase habits, awareness of organic food products and factors influencing their choices.
- **Interviews:** A subgroup of participants underwent in-depth interviews in order to obtain a more comprehensive knowledge of their attitudes and behaviours towards organic food products. The qualitative information from these interviews supplemented the survey results.

3.3.2. Secondary Data Collection:

- **Literature Review:** A thorough analysis of the body of research on consumer behaviour, organic food items and related subjects was done. The study's theoretical underpinnings and context were supplied by these secondary sources.
- **Statistical Databases:** To augment the primary data and offer deeper insights into the study, pertinent statistical data from sources like government papers, industry publications and academic journals were used.

3.4. Variables:

3.4.1. Dependent Variables:

- **Awareness of Organic Food Products:** This variable assessed Mumbai's teenage population's knowledge of organic food items.
- **Factors Affecting Decision-Making:** This variable examined how teens' decisions to select organic food items over conventional ones were influenced by a variety of factors, including cost, health advantages, environmental concerns and taste preferences.
- **Purchase and Consumption Patterns:** This variable looked at how often teenagers bought organic food items and which kinds of organic food they most commonly bought.

3.4.2. Independent Variables:

- **Demographic Variables:** In order to comprehend how demographic factors can affect teenagers' views and behaviours towards organic food products, variables including age, gender, socioeconomic status and educational background were included.



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- **Information Sources:** This variable included the various places—such as friends, family, the media and educational institutions—where teenagers in Mumbai may find out about organic food products.

3.5 Tools for Analysing Data

The data are summarised using descriptive statistics like means, standard deviations and frequencies. Regression analysis and t-tests are examples of inferential statistics that are used to evaluate hypotheses and look at correlations between variables. Regression analysis was used to look at correlations between variables and t-tests were used to compare means in the data analysis. A significance threshold of $p < 0.05$ will be applied.

To guarantee consistency in the measurement of constructs, Cronbach's alpha is used to evaluate the reliability of the study instrument. By having experts evaluate the questionnaire to ensure that it measures the intended things, content validity ensures validity.

2. DATA ANALYSIS AND FINDINGS

4.1. Reliability and Validity

The reliability analysis, which employed Cronbach's alpha to evaluate the internal consistency or reliability of multiple scales assessing different features linked to organic food products among teens, is presented in Table 1. An indicator of internal consistency, Cronbach's alpha shows how strongly each scale's elements connect with one another. Greater internal consistency is shown by higher values of Cronbach's alpha (closer to 1), which shows that the scale's items have a strong correlation with one another. The Cronbach's alpha for the three items on the scale measuring consumer awareness of organic food products is 0.785, indicating strong internal consistency. With a Cronbach's alpha of 0.812, the scale that assesses the sources of information on organic food goods exhibits a high degree of internal consistency. The scale measuring how frequently information regarding organic food products is found exhibits a somewhat lower Cronbach's alpha of 0.701, which is still adequate. With a Cronbach's alpha of 0.812, the decision-making considerations scale, which measures health benefits, environmental concerns and taste preferences, shows strong internal consistency. With a Cronbach's alpha of 0.770, the scale measuring patterns of purchase and consumption of organic food products shows good internal consistency.

The factor loadings that emerged from a factor analysis of scales evaluating different features of organic food products among teenagers are shown in Table 2. The correlations between the underlying components that were identified from the data and the observed variables (items within each scale) are represented by factor loadings. Stronger correlations between the variables and the factors are indicated by higher factor loadings.

All three variables (1, 2 and 3) had relatively high factor loadings for the items pertaining to awareness of organic food products, ranging from 0.512 to 0.785. This shows that these items have



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a strong correlation with a number of other aspects, suggesting that the concept of awareness may have numerous dimensions. The items pertaining to information sources on organic food products show substantial factor loadings (0.441 to 0.812) across all three variables, much like awareness. This implies that a number of underlying factors are also connected to these items. A significant association with the underlying variables is indicated by the moderate to strong factor loadings (0.312 to 0.701) across the three factors for the items evaluating the frequency of encountering information about organic food products. The elements impacting decision-making (taste preferences, environmental concerns and health benefits) are represented by items with different factor loadings for each of the three factors. For instance, "Health benefits" has lower loadings on Factors 2 and 3, but a substantial loading on Factor 1 (0.812). Variable factor loadings across the three factors are also seen in the items pertaining to the buying and consumption patterns of organic food products, suggesting possible multidimensionality within this construct.

T-test

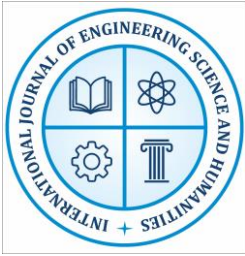
The findings of a one-sample t-test used to compare Mumbai teens' awareness ratings of organic food items with the presumptive average awareness level are shown in Table 3.

The purpose of this test is to ascertain whether there is a significant difference between the two groups. The alternative hypothesis (H1A) suggests that there is, whereas the null hypothesis (H0A) states that there isn't. The first group of 125 teens in Mumbai is shown in the statistics; their average awareness score is 35.23 and their standard error of the mean (SEM) is 0.74. For this group, the computed t-statistic is 0.63 and the corresponding p-value is 0.03. With a value of 40.63, the second group indicates the estimated average awareness level of Mumbai's youth regarding organic food products. The t-statistic calculates the amount of standard errors that separate the teenagers' mean awareness score from the anticipated average awareness level. The p-value is the likelihood of finding the stated outcomes—or something even more extreme—if the null hypothesis is correct. The p-value of 0.03 in this instance indicates that there is a statistically significant difference between the average awareness level assumed in this situation and the awareness scores of teenagers.

We accept the alternative hypothesis (H1A) and reject the null hypothesis (H0A) in light of these findings. This suggests that Mumbai's teenage population's understanding of organic food products differs greatly from the general population's presumed level of awareness. Teenagers' lower awareness scores than the anticipated average suggests that focused awareness campaigns or educational initiatives may be necessary to raise this demographic's knowledge of organic food products.

Regression

The findings of a logistic regression analysis that looked at the association between price, health benefits and environmental impact—three criteria that influence teenagers' decisions to purchase



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organic food products—and their actual choices are shown in Table 4. The purpose of the analysis is to compare the alternative hypothesis (H1B), which proposes a substantial association, with the null hypothesis (H0B), which claims that there is no significant relationship between these factors and the decisions made by teens.

The constant term (intercept) in the data is 0.869, with a z-value of 1.547 and a standard error of 0.562. The corresponding p-value is 0.122, above the usual significance level of 0.05. The fact that the constant term is not statistically significant implies that teens' decisions may not be significantly influenced by the considerations of price, health benefits and environmental impact taken together.

The p-values of 0.752, 0.273 and 0.873 for the price, health benefits and environmental impact coefficients, respectively, also show that none of them are statistically significant. This indicates that there is not enough data to support the alternative hypothesis (H1B) and reject the null hypothesis (H0B). As a result, the analysis's findings do not support the notion that there is a causal link between the variables influencing teenagers' decisions to select organic food items and their actual decisions.

4.1. Findings

The investigation of Mumbai teens' perceptions of organic food items produced a number of significant conclusions:

- *Awareness Levels:* The awareness levels of teenagers in Mumbai were found to differ, with some displaying a high degree of knowledge and others displaying a limited comprehension about organic food products.
- *Decision-Making Factors:* Teenagers' decisions to select organic food items were influenced by elements such as taste preferences, environmental concerns and health benefits. These variables did not, however, reliably forecast their actual decisions.
- *Purchase and Consumption Patterns:* The patterns of purchase and consumption of organic food products by teenagers varied, ranging from regular purchases to non-consumption.
- *Information Sources:* Teenagers in Mumbai primarily learned about organic food products via their families, friends and the media.
- *Factors and Choices:* Interestingly, the study found no correlation at all between the factors that teens used to make decisions and the actual choices they made about organic food products.

3. CONCLUSION:

The study provides meaningful insights into how teenagers in Mumbai perceive and interact with organic food products. While awareness of organic food is present among some teenagers, significant knowledge gaps remain. Findings show that teenagers consider health benefits, taste and environmental sustainability when evaluating organic food options; however, these factors do



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not necessarily translate into purchasing behavior. The lack of a significant correlation suggests that other influences—such as price sensitivity, convenience, or peer behavior—may play a more decisive role in actual choices. Given the importance of sustainable consumption, targeted interventions such as educational campaigns in schools, youth-oriented marketing strategies and accessible pricing could increase awareness and encourage more consistent adoption of organic food products. This study also highlights the need for further research to explore psychological, cultural and socio-economic factors that may shape teenagers' food choices, extending beyond Mumbai to a broader demographic.

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