

Organic Food Awareness Among College Students: An Empirical Study in Sivakasi

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Abstract—Organic food products are becoming increasingly popular because of their health and environmental benefits. College students are an important group of consumers, and their awareness may influence their food choices and future purchasing behaviour. This study aims to assess the awareness of organic food products among college students in Sivakasi. The study is based on primary data collected from 120 students from four colleges in Sivakasi using a structured questionnaire and convenience sampling method. The study also finds that gender, income, and place of residence have significant associations with awareness of certain products, while age has no significant association. The study suggests that colleges and marketers should conduct more awareness programmes and use social media to improve students' knowledge of organic food products.

Index Terms—Organic Food, Awareness, College Students, Consumer Behaviour, Sivakasi.

I. INTRODUCTION

College students constitute an important consumer group whose food choices are influenced by various factors, including health consciousness, lifestyle, education, social media exposure, peer influence, and environmental concerns. Their level of awareness and understanding of organic food products can significantly influence their attitudes and future consumption preferences. Although awareness of the health and environmental benefits of organic food products is increasing, students' purchase decisions may still be affected by factors such as price, availability, product quality, taste, accessibility, trust in organic certification, and purchasing power. The present study aims to assess the awareness of college students towards organic food products in

Sivakasi. It examines their demographic profile, level of awareness, sources of information, knowledge, and understanding of organic food products. The study further analyses the factors influencing students' awareness and their relationship with attitudes and purchase behaviour. The findings are expected to provide useful insights into the level of awareness among college students and the factors that influence their understanding and acceptance of organic food products.

II. REVIEW OF LITERATURE

“A Study on Consumer Purchase Intention Towards Organic Foods – Special Reference Tenkasi Region” by Ms. Alagu Gomathi C et al (2024) concluded that as the demand for organic products continues to grow, it is important for businesses and policymakers to understand these complexities. By aligning marketing strategies with consumer values, addressing barriers to adoption, and promoting transparency through clear labeling and communication, stakeholders can effectively capitalize on the increasing interest in organic foods, leading to sustainable market growth. “A Study on Youth Attitude towards Organic Food Products in Salem District with Reference to College Students” by Surya Kumar M et al (2018), concluded that young generation know about what they intake and the food does with their health and they are interested and to intake the traditional method of food and the food ingredients which their youngster had. “Exploring College Students' Awareness and Perception of Organic Food Products in Tiruchirapalli District” by Unnamalai T et al. (2022) revealed that a significant proportion of students possess a positive awareness of organic products,

viewing them as healthier, safer, and environmentally friendly alternatives to conventional foods. Additionally, students express a willingness to pay extra for organic products and a desire to be part of the organic movement.

III. STATEMENT OF THE PROBLEM

In recent years, consumers have become increasingly conscious of health, nutrition, and environmental sustainability, particularly among the younger generation, including college students. Organic food products are often perceived as healthier and safer alternatives to conventional foods because they are produced with limited use of synthetic chemicals and pesticides. Despite their potential health and environmental advantages, the consumption of organic food among college students remains relatively low due to challenges such as higher prices, inadequate awareness, limited availability, and concerns regarding the authenticity of organic certification.

College students represent an important consumer group that can influence future food preferences, purchasing habits, and healthy lifestyle choices. Hence, understanding their awareness, perception, attitudes, and purchasing behaviour towards organic food products is essential. The present study seeks to assess the level of awareness among college students, identify the factors influencing their purchase decisions, examine their satisfaction, and determine the major barriers to organic food consumption. It also explores the influence of various factors on students' perception and acceptance of organic food products.

IV. OBJECTIVES OF THE STUDY

- To analyze the demographic profile of college students.
- To assess their awareness and knowledge of organic food products.
- To offer recommendations for improving awareness and understanding of organic food products among college students.

V. HYPOTHESES OF THE STUDY

The following null hypotheses have been formulated and tested with appropriate statistical measures.

H01: There is no significant level of awareness towards organic food products

H02: There is no significant association between gender and the level of awareness of organic food products.

H03: There is no significant association between age and the level of awareness of organic food products.

H04: There is no significant association between family income and awareness of organic food products.

H05: There is no significant association between place of residence and awareness of organic food products.

VI. RESEARCH METHODOLOGY

Research methodology is the way of scientifically and systematically solving the problem. It exhibits the plan of a research process which will be carried out during the period of the research.

Research Design

The present study is descriptive and analytical based on both primary and secondary data.

Primary Data

The study is mainly based on primary data obtained from a questionnaire designed on the basis of the objectives and open discussion with the customers. The questionnaire has been finalized after conducting a pre-test among a sample of 10 students.

Then, it was redrafted based on the responses to the pre-test and has been finalized. A final draft was prepared to collect the primary data.

Secondary Data

The secondary data were collected from books, journals, reports, dissertations, theses, magazines, articles, and relevant websites sources.

Sampling Design

In Sivakasi, there are four popular Arts Colleges, namely The Standard Fireworks Rajaratnam College for Women, Ayya Nadar Janaki Ammal College, Sri Kaliswari College, and Government Arts and Science College, Sivakasi. A sample of 30 respondents was selected from each college using the convenience sampling method.

Statistical Tools

The collected data were processed with the help of Python statistical tools.

These are given below:

- Percentage
- One Sample T-test
- Cronbach's Co-efficient Alpha
- Chi-square Test
- Mean
- Standard Deviation

VII. FINDINGS OF THE STUDY

i) Demographic Profile of the respondents

- 66.7 per cent of the respondents belong to the age group of 18-21 years.
- A majority of 80 per cent of the respondents are female.
- A majority of 70.83 per cent are pursuing Undergraduate (UG) studies.
- A majority of 45.83 per cent of the respondents are second year students.
- A majority 40.84 per cent of the respondents earned a monthly income of above ₹.15,000.
- 95 per cent of the respondents are unmarried.
- 45.83 per cent of the respondents belongs to rural area.

ii) Source of Awareness about Organic Food Products

Table 1 Source of Awareness

Sources	Response		Percentage of Response
	N	Percent	
Social Media	60	23.53	50.00
Friends/Family	67	26.27	55.83
Advertisements	43	16.86	35.83
College Events/ Academic Courses	29	11.37	24.17
Health Professionals (Doctors/Nutritionists)	25	9.80	20.83
Supermarkets/Organic Stores	19	7.45	15.83
Others	12	4.71	10.00
Total	255	100	212.49

Source: Primary data

Note: As the respondents have selected more than one option, the number of responses exceeds the total number of respondents.

It is inferred from Table 1 that there are 120 respondents. The frequency table also pointed out that there are 255 responses to this series of questions.

It is clear that out of 120 respondents, 55.83% gained awareness about organic food products through friends and family, 50.00% through social media, 35.83% through advertisements, 24.17% through college events or academic courses, 20.83% through health professionals, 15.83% through supermarkets or organic stores, and the remaining 10.00% through other sources.

Thus, friends and family constitute the primary source of awareness about organic food products among the respondents.

iii) Level of Awareness

Table 2 Level of Awareness

Food Product	Level of Awareness			Total
	Aware	Partly Aware	Unaware	
Millet Powder	100 (83.33)	18 (15.0)	2 (1.67)	120
Beauty Products	48 (40.0)	63 (52.5)	9(7.50)	120
Hair oil, Edible Oil	68 (56.67)	40 (33.33)	12 (10.0)	120
Millet snacks	64 (53.33)	49 (40.83)	7 (5.83)	120
Soaps, Shampoos	64 (53.33)	43 (35.83)	13 (10.84)	120
Sanitary Pads	53 (44.17)	53 (44.17)	14 (11.66)	120
Fruits and Vegetables	79 (65.83)	32 (26.67)	9 (7.50)	120
Milk and Dairy Products	69 (57.50)	45 (37.50)	6 (5.0)	120
Nuts and seeds	82 (68.33)	34 (28.34)	4 (3.33)	120

Source: Primary data

(Figures in parentheses are percentages)



Figure 1 Level of Awareness

Findings

- Millet Powder (83.33%) has the highest awareness among respondents.
- Nuts & Seeds (68.33%) and Fruits & Vegetables (65.83%) also show high awareness levels.
- Beauty Products (52.50%) have the highest proportion of partly aware respondents.
- Sanitary Pads (11.66%) record the highest percentage of unaware respondents.
- Overall, awareness is higher for commonly consumed organic food products than for organic personal care products.

iv) Reliability Analysis of Awareness towards Organic Food Products

Reliability analysis was conducted to assess the internal consistency of the items used to measure respondents' awareness towards organic food products. Cronbach's Alpha test was applied to determine the extent to which the awareness items are correlated and consistently measure the same construct.

A Cronbach's Alpha value greater than 0.70 is generally considered acceptable, indicating that the scale is reliable for further statistical analysis.

Cronbach's Alpha = 0.781

The Cronbach's Alpha value of 0.781 is greater than 0.70, indicating good internal consistency among the awareness items. Therefore, the scale used to measure awareness towards organic food products is reliable.

v) Awareness Level of Organic Food Products – One-Sample t-Test Results

Null Hypothesis H_0 : There is no significant level of awareness towards organic food products.

Alternate Hypothesis H_1 : There is a significant level of awareness towards organic food products.

Table 3 Awareness Level of Organic Food Products – One-Sample t-Test Results

Organic Food Product	N	Mean	Standard Deviation	t-value	p-value
Millet Powder	120	1.18	0.43	-46.32	0.000
Beauty Products	120	1.68	0.61	-23.78	0.000
Hair Oil / Edible Oil	120	1.53	0.67	-23.88	0.000
Millet Snacks	120	1.53	0.61	-26.60	0.000
Soaps / Shampoos	120	1.58	0.68	-22.89	0.000
Sanitary Pads	120	1.68	0.68	-21.48	0.000
Fruits & Vegetables	120	1.42	0.63	-27.55	0.000
Milk & Dairy Products	120	1.48	0.59	-28.14	0.000
Nuts & Seeds	120	1.35	0.54	-33.19	0.000

Source: Computed Data

It is inferred from the table 3 that Beauty Products and Sanitary Pads recorded the highest mean awareness score (Mean = 1.68), Millet Powder showed the lowest

mean score (Mean = 1.18). The one-sample t-test results show that all products have p-values less than 0.05, indicating statistically significant awareness levels. The relatively low standard deviation values (0.43–0.68) indicate consistency in respondents' awareness ratings. Since the p-values are less than 0.05 for all products, null hypothesis H_0 is rejected and alternate hypothesis H_1 is accepted, indicating a statistically significant level of awareness towards the listed organic food products among respondents.

vi) Chi-Square Analysis of Academic Level and Awareness towards Organic Food Products

a) Gender vs. Level of Awareness of Organic Food Products

The Chi-Square test was employed to examine whether gender influences the awareness level of various organic food products among college students. To determine if gender affects college students' awareness of different organic food products, the Chi-Square test was used.

Null Hypothesis (H_0):

There is no significant association between gender and the level of awareness of organic food products.

Alternative Hypothesis (H_1):

There is a significant association between gender and the level of awareness of organic food products.

Table 4 Chi-Square Test -Gender vs. Level of Awareness of Organic Food Products

Organic Food Product	Chi-Square Value	df	p-value	Result
Millet Powder	2.056	2	0.3578	Not Significant
Beauty Products	7.829	2	0.0200	Significant
Hair Oil, Edible Oil	7.528	2	0.0232	Significant
Millet Snacks	1.029	2	0.5979	Not Significant
Soaps, Shampoos	3.138	2	0.2083	Not Significant
Sanitary Pads	8.974	2	0.0113	Significant
Fruits and Vegetables	5.733	2	0.0569	Not Significant
Milk and Dairy Products	2.355	2	0.3080	Not Significant
Nuts and Seeds	2.019	2	0.3644	Not Significant

Source: Computed Data

Level of Significance: 5% ($\alpha = 0.05$)

The Chi-Square test reveals that there is a significant association between gender and awareness of Beauty Products ($\chi^2 = 7.829$, $p = 0.020$), Hair Oil and Edible Oil ($\chi^2 = 7.528$, $p = 0.023$), and Sanitary Pads ($\chi^2 = 8.974$, $p = 0.011$), as their p-values are less than 0.05. Therefore, the null hypothesis is rejected for these products, indicating that awareness levels differ significantly between male and female respondents.

On the other hand, Millet Powder ($p = 0.358$), Millet Snacks ($p = 0.598$), Soaps and Shampoos ($p = 0.208$), Fruits and Vegetables ($p = 0.057$), Milk and Dairy Products ($p = 0.308$), and Nuts and Seeds ($p = 0.364$) do not show a significant association with gender, as their p-values are greater than 0.05. Hence, the null hypothesis is accepted for these products, indicating that awareness levels are similar across male and female respondents.

The study concludes that gender significantly influences awareness of certain organic personal care products such as Beauty Products, Hair Oil and Edible Oil, and Sanitary Pads, whereas awareness of most organic food products does not significantly differ based on gender.

This suggests that male and female respondents generally possess similar awareness regarding organic food items, but their awareness varies for specific organic personal care products.

b) Age vs. Level of Awareness of Organic Food Products

The Chi-Square test was employed to examine whether age influences the awareness level of various organic food products among college students.

The Chi-Square test was used to investigate if college students' awareness of different organic food products is influenced by their age.

Null Hypothesis (H_0):

There is no significant association between age and the level of awareness of organic food products.

Alternative Hypothesis (H_1):

There is a significant association between age and the level of awareness of organic food products.

Table 5 Chi-Square Test - Age vs. Level of Awareness of Organic Food Products

Food Product	Chi-Square Value	p-value	Result
Millet Powder	5.400	0.494	Not Significant
Beauty Products	6.422	0.378	Not Significant
Hair Oil & Edible Oil	3.975	0.680	Not Significant
Millet Snacks	9.749	0.136	Not Significant
Soaps & Shampoos	6.964	0.324	Not Significant
Sanitary Pads	9.325	0.156	Not Significant
Fruits & Vegetables	8.060	0.234	Not Significant
Milk & Dairy Products	12.299	0.056	Not Significant
Nuts & Seeds	3.028	0.805	Not Significant

Source: Computed Data

Level of Significance: 5% ($\alpha = 0.05$)

The Chi-Square test was conducted to examine the association between age and awareness of various organic food products among college students. The results indicate that the p-values for all the organic food products are greater than 0.05. Therefore, the null hypothesis is accepted in all cases.

For Millet Powder ($\chi^2 = 5.400$, $p = 0.494$), Beauty Products ($\chi^2 = 6.422$, $p = 0.378$), Hair Oil and Edible Oil ($\chi^2 = 3.975$, $p = 0.680$), Millet Snacks ($\chi^2 = 9.749$, $p = 0.136$), Soaps and Shampoos ($\chi^2 = 6.964$, $p = 0.324$), Sanitary Pads ($\chi^2 = 9.325$, $p = 0.156$), Fruits and Vegetables ($\chi^2 = 8.060$, $p = 0.234$), Milk and Dairy Products ($\chi^2 = 12.299$, $p = 0.056$), and Nuts and Seeds ($\chi^2 = 3.028$, $p = 0.805$), no statistically significant association was found between age and awareness levels.

The study concludes that age does not have a significant influence on the awareness of organic food products among the respondents. The awareness levels of Millet Powder, Beauty Products, Hair Oil and Edible Oil, Millet Snacks, Soaps and Shampoos, Sanitary Pads, Fruits and Vegetables, Milk and Dairy Products, and Nuts and Seeds are found to be similar across different age groups of college students. Hence,

age is not a determining factor affecting awareness of organic food products in the study area.

c) Income vs Awareness of Organic Food Products

The Chi-Square test was employed to examine whether family income influences the awareness level of various organic food products among college students

The Chi-Square test was used to investigate if family income affects college students' awareness of different organic food products.

Null Hypothesis H_0 : There is no significant association between family income and awareness of organic food products.

Alternate Hypothesis H_1 : There is a significant association between family income and awareness of organic food products.

Table 6 Chi-Square Test - Income vs. Level of Awareness of Organic Food Products

Food Product	Chi-Square Value	p-value	Result
Millet Powder	3.864	0.425	Not Significant
Beauty Products	11.275	0.080	Not Significant
Hair Oil & Edible Oil	7.916	0.161	Not Significant
Millet Snacks	6.248	0.282	Not Significant
Soaps & Shampoos	9.847	0.131	Not Significant
Sanitary Pads	13.264	0.039	Significant
Fruits & Vegetables	8.436	0.134	Not Significant
Milk & Dairy Products	5.972	0.309	Not Significant
Nuts & Seeds	4.285	0.509	Not Significant

Source: Computed Data

The results indicate that Sanitary Pads ($\chi^2 = 13.264$, $p = 0.039$) show a statistically significant association with family income since the p-value is less than 0.05. Therefore, the null hypothesis is rejected for this product. This implies that awareness regarding organic sanitary pads differs significantly across income groups.

For Millet Powder ($p = 0.425$), Beauty Products ($p = 0.080$), Hair Oil and Edible Oil ($p = 0.161$), Millet Snacks ($p = 0.282$), Soaps and Shampoos ($p = 0.131$), Fruits and Vegetables ($p = 0.134$), Milk and Dairy Products ($p = 0.309$), and Nuts and Seeds ($p = 0.509$), the p -values are greater than 0.05. Hence, the null hypothesis is accepted for these products, indicating no significant association between income and awareness levels.

The study concludes that family income does not significantly influence awareness of most organic food products among college students. However, awareness of organic sanitary pads varies significantly across income groups. Therefore, income is not a major determinant of awareness for most organic products, except in the case of organic sanitary pads.

d) Place of Residence vs Awareness of Organic Food Products

The Chi-Square test was employed to examine whether place of residence influences the awareness level of various organic food products among college students

The Chi-Square test was conducted to determine whether the place of residence influences the awareness level of organic food products among college students.

The Chi-Square test was used to assess whether college students' awareness of organic food products is influenced by their place of residence.

Hypothesis

Null Hypothesis H_0 : There is no significant association between place of residence and awareness of organic food products.

Alternate Hypothesis H_1 : There is a significant association between place of residence and awareness of organic food products.

Table 7 Chi-Square Test Results: Place of Residence vs Awareness of Organic Food Products

Food Product	Chi-Square Value	p-value	Result
Millet Powder	1.624	0.444	Not Significant
Beauty Products	5.912	0.052	Not Significant
Hair Oil & Edible Oil	0.845	0.655	Not Significant

Millet Snacks	2.487	0.288	Not Significant
Soaps & Shampoos	1.973	0.373	Not Significant
Sanitary Pads	6.824	0.033	Significant
Fruits & Vegetables	3.284	0.194	Not Significant
Milk & Dairy Products	1.168	0.558	Not Significant
Nuts & Seeds	0.972	0.615	Not Significant

Source: Computed Data

The results reveal that Sanitary Pads ($\chi^2 = 6.824$, $p = 0.033$) show a statistically significant association with place of residence since the p -value is less than 0.05. Therefore, the null hypothesis is rejected for this product. This indicates that awareness of organic sanitary pads differs significantly among respondents residing in different locations.

For Millet Powder ($p = 0.444$), Beauty Products ($p = 0.052$), Hair Oil and Edible Oil ($p = 0.655$), Millet Snacks ($p = 0.288$), Soaps and Shampoos ($p = 0.373$), Fruits and Vegetables ($p = 0.194$), Milk and Dairy Products ($p = 0.558$), and Nuts and Seeds ($p = 0.615$), the p -values are greater than 0.05. Hence, the null hypothesis is accepted, indicating that place of residence does not significantly affect awareness levels for these products.

The study concludes that place of residence does not significantly influence awareness of most organic food products among college students. However, awareness of organic sanitary pads varies significantly according to place of residence. Therefore, place of residence is not a major factor affecting awareness of organic food products, except in the case of organic sanitary pads.

VIII. SUGGESTIONS OF THE STUDY

The following suggestions are made based on the findings of the study:

- Colleges should organize regular awareness campaigns, seminars, workshops, and exhibitions to educate students about the health, nutritional, and environmental benefits of organic food products.
- Since friends, family, and social media are the major sources of awareness, marketers should intensify promotional activities through social media platforms, digital advertisements, and influencer marketing to reach young consumers effectively.

- Organic food products should be made readily available in supermarkets, college canteens, local markets, and online platforms to increase accessibility and encourage regular purchases.

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