

# Consumers' Awareness Towards Organic Food Products in Coimbatore District

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## Abstract

The high growth of population and life expectancies during the twentieth century increased demand for food supplies in India. To meet this demand, the green revolution became the corner stone of India's agricultural achievement that transformed India from a food-deficient to a self-sufficient country. This self-sufficiency was achieved through an indiscriminate and excessive use of synthetic pesticides and chemical fertilizers. Overexploitation of natural and non-renewable resources, indiscriminate and irrational use of synthetic inputs like chemical fertilizers and pesticides for producing more and more food products has impaired the ecological balance and has put the health of the consumers in jeopardy. Therefore, the apparent contradiction of necessity for nutritional safety on the one hand and environmental sustainability on the other made it inevitable to resort to alternative food products like organic food products. However, the growth of the organic food sector is not upto the mark in India due to lack of awareness among consumers. Thus, this study analyzed the consumers' level of awareness about organic food products in Coimbatore District. A disproportionate stratified random sampling method was used, and a total of 550 respondents were surveyed by using a questionnaire. The results showed that 40.5% and 38.4% of the respondents were aware and partly aware about organic food products, and only 14% of the respondents were highly aware about the same. Thus, awareness acts as a crucial factor in changing the attitude of consumers towards organic foods.

**Keywords:** organic foods, green revolution, consumer awareness

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The twentieth century has been a witness to the most technological agricultural revolutionary changes. The high growth of population and life expectancies increased demand for food supplies. To meet this demand, the technical green revolution has been the corner stone of India's agricultural achievement, which transformed India from a food-deficient to a self-sufficient country. But this self-sufficiency was achieved through an indiscriminate and excessive use of chemical fertilizers and synthetic pesticides that jeopardized the agricultural productivity in the long run. The harmful chemicals and pesticides entered our food chain and the current agricultural practices become unsustainable. This necessitates an alternative agricultural method that can function in an eco-friendly system in crop production.

An increase in prevalence of several chronic diseases is strongly associated with food intake and food choices. The consumers are becoming more health conscious, and they ask for more information about health and nutrition. The food-related health scares motivate the consumers to talk more about food safety, health benefits, environmental issues, and as a result, their food habits and dietary patterns are changing. Considerable attention and interest has been shown by the consumers towards the food products that are free from chemicals, additives, preservatives, and forth. Consumers are willing to spend a premium amount to gain access to greener, healthier, and natural food products.

Organic food products are produced without using modern inputs such as synthetic pesticides and chemical

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fertilizers by using an environmentally and socially responsible approach. Organic agriculture in India was practiced long back in 1900 by Sir Albert Howard, a British agronomist, in a local village of North India, and he is often referred to as the “Father of Modern Organic Agriculture”.

Organic farming and its food products balance both the sustainable livelihood of the farmers as well as safeguard the consumer's health. It promotes the healthy use of natural resources, improves soil fertility, preserves biodiversity, and minimizes all forms of pollution. It aims to produce a food product which gives a long-term benefit to both the environment and health of future generations. Many consumers believe that organic food products are healthier, better tasting, and their quality is much higher than conventional food products, thus the preference for organic foods among consumers is associated with multiple factors.

With growing awareness towards healthy foods, surging income levels, and shift in consumer behavior, India's emerging organic food market is transforming into the world's fastest growing food market because it is bestowed with a lot of potential to produce all varieties of organic food products due to various agro climatic regions (Bhattacharya, 2004).

India ranks 10th among the top 10 countries in terms of cultivable land under organic certification. During 2013-14, India produced around 1.24 million tonnes of certified organic products and this figure is not limited to the edible sector, but also to organic cotton fiber, functional food products, and so forth. India exported 135 products with a total volume of 1,94,088 million tonnes, including 16,322 million tonnes of organic textiles (APEDA, n.d.).

In general, the overall image of organic food products seems to be positive from the consumers' point of view, since these products are considered to be nutritious, better tasting, and more environmental friendly. However, there are some obstacles regarding the purchase of these products in India. On the one hand, appropriate information about the importance of organic food products has not reached the consumers completely, and hence, the consumers are unaware about the existence of organic food products and the specific attributes that differentiate these from conventional ones. On the other hand, marketing problems related to supply, price, distribution, and promotion of these products also exist.

The success in the growth of the organic food sector depends on consumer acceptance and use, and hence, the importance of building consumer's awareness is increasing day by day. Thus, a consumer oriented approach should be developed with the help of various marketing strategies to attract potential organic food consumers and for the successful widening of the organic food sector in India.

## **Statement of the Problem**

With the advent of green revolution, industrial and technological advances, food products produced with synthetic pesticides and chemicals are engrossing the major portion of everyone's consumption pattern of human life. Overexploitation of natural and non-renewable resources, indiscriminate and irrational use of synthetic inputs like chemical fertilizers and pesticides for producing more and more food products seriously impairs the ecological balance, putting the health of the consumer and the environment in jeopardy. As a result of increasing intensity of chemical fertilizers and pesticides usage, their ill effects on human health and environment have become evident and some of the negative impacts have been widely acknowledged. Therefore, the apparent contradiction of necessity for nutritional safety on one hand and environmental sustainability on the other makes it inevitable to resort to alternative food products like organic food products, which appear to be a possible option to meet both these objectives. Thus, the increased negative cause of the food products produced with help of synthetic pesticides and chemical fertilizers had a thoughtful effect on consumer behaviour, which ensures the worldwide growth of organic food products at a remarkable rate.

In general, the intention to purchase organic food products is not upto the mark in India because of the limited

awareness among consumers. Hence, this study plans to contribute to bridge this knowledge gap by investigating the consumers' level of awareness about organic food products.

## **Review of Literature**

Brewer and Prestat (2002) analyzed the consumers' attitude towards food safety in general. The results from factor analysis showed that 360 consumer responses revealed six factors underlying 31 specific items evaluated on individual five-point scales. Univariate test results showed that as general level of concern with food safety increased among consumers, so did concern with chemical issues (artificial colors, pesticide residues, hormones, preservatives, irradiated foods, excessive processing of foods, and plastic packaging) ; spoilage issues (restaurant sanitation, shelf-stable foods, pasteurized foods, refrigerated, prepared foods, improper food preparation, microbiological contamination, and nutritional imbalances) ; health issues (vitamin, calorie, carbohydrate, fat, cholesterol and sugar content) ; regulatory issues (pesticide safety, fish and imported food inspection and health labeling of food) ; deceptive practices (naturally occurring toxins, food ingredients associated with allergies and weight reduction diets advertised as healthy) ; and information issues (availability of detailed information at stores, markets and restaurants).

Briz and Ward (2009) exemplified that organically produced foods have shown remarkable industry growth, but majority of consumers are still not aware about the same. Their study focused on Spanish consumers' state of knowledge and awareness about organic food products. Both the probability of being aware of organics and then the likelihood of consuming were estimated using categorical data collected through a survey of approximately 1,000 potential Spanish consumers. Using multinomial logit and probit models, the results showed that approximately 46% of the respondents clearly understood the meaning of organic foods. In this study, education was shown to be a major contributing factor that influenced the level of awareness of the participants.

Dhanalakshmi (2011) measured the awareness about organic products among non-organic product consumers. Results showed that 74.8% of the respondents were very well aware about the organic products, and only 25.2% of the respondents did not have any idea about organic products. The study also stated that non-organic product consumers who were aware about organic products were queried about the advantages of using organic products.

Nandi, Bokelmann, Gowdru, and Dias (2014) stated that the market for organic products in India is still in its infancy, and knowledge about organic consumers in the country is definitely under-researched. The objective of this paper was to gain knowledge about consumers' preferences regarding the purchase places of organic products in Bangalore ; 201 consumers were involved in this study using stratified random sampling techniques. The results revealed that the most preferred places to purchase organic food products were specialized organic stores and supermarkets and least were local open markets and conventional retail shops. The unrelated regression results showed that the preferences about places to purchase organic food products were mainly influenced by gender, education, family size, and income.

## **Objectives of the Study**

The study aims to achieve the following objectives. They are :

- (1)** To measure the consumers' food purchasing attitude towards food safety.
- (2)** To analyze the consumers' level of awareness about organic food products.
- (3)** To suggest suitable measures to improve the marketability and growth of organic food products.

## **Formulation of Hypotheses**

After analyzing the various factors relating to the study and the variables taken up for the study, I formulated the

following null hypotheses :

- (1)** There is no significant association between personal factors of the respondents and their level of awareness about organic food products (Chi-square).
- (2)** There is no significant association between the respondents' level of awareness about organic food products and their opinion about the importance of buying food products without synthetic pesticides and chemical fertilizers for health safety (Chi-square).
- (3)** There is no significant relationship between personal factors like age, educational status, occupational status, family size, economic status, and residential area of the respondents and their level of awareness about various facts related to organic food products (ANOVA).
- (4)** There is no significant relationship between personal factors like gender, marital status, family type, and food habits of the respondents and their level of awareness about various facts related to organic food products (*t*-test).

## Research Methodology

The research methodology is presented briefly under following headings:

- (1) Research Type :** The type of this research is Quantitative. The consumers' response has been analyzed with appropriate statistical tools and the results have been presented with the help of figures and statistical parameters so this research is categorized as Quantitative research.
- (2) Area of the Study :** In TamilNadu, Coimbatore has been selected as area of the study owing to the main reason that the researcher belongs to that district and she is familiar with all the places which links with Organic food products.
- (3) Tools used for Data Collection and Sampling Design :** A well structured tool for data collection in the form of questionnaire has specifically designed for the purpose of this study. In the summated rate scale, Likert scaling was used in this study. In this study, disproportionate stratified random sampling has been used.
- (4) Sample Size and Period of the Study :** The researcher has selected three taluks from the Coimbatore district comprises of Coimbatore North, Coimbatore South, and Mettupalayam. Based on the research plan, 550 respondents have been selected for this study by using Disproportionate stratified random sampling technique. The data used for this study were collected from April- October 2012.
- (5) Tools used for Analysis :** The researcher has applied the following tools in this present study with the help of SPSS version 16.0 (Statistical Package for Social Sciences). They are : (a) percentage analysis, (b) chi-square analysis, (c) ANOVA, (d) *t* - test, (e) mean scoring analysis.

## Analysis and Results

The Table 1 shows the personal profile of the respondents associated with this study. The statistical analysis shown is arranged based on the study objectives.

## Objective No. 1 : Consumers' Food Purchasing Attitude Towards Food Safety

From the Table 2, it is clear that, 75.8% of the respondents opined that it is very important to buy food products without synthetic pesticides and chemical fertilizers for safety health, 23.1% opined that it is important and 1.1% of the respondents opined that it is not very important.

From the above Table 3, it is clear that, with the highest mean score of 4.67, the respondents have given first priority to Quality, which is considered as a major factor by the respondents before purchasing grocery food products, vegetables and fruits. With the mean score of 4.56, the respondents have given second priority to Nutritious and Healthy product and with the mean of 4.49, third priority were given to freshness of the product. With the mean score of 4.46, 4.14, 4.10, 4.06, 4.01 and 4.00, the respondents have given fourth, fifth, sixth, seventh, eighth and ninth priority to taste, brand name, absence of synthetic pesticides and chemical fertilizers, shelf life (storage life), labeling and packaging and for price. With the mean score of 3.96, 3.94, 3.86, 3.77, 3.68 and 3.34, the respondents have given tenth, eleventh, twelve, thirteen, fourteen, fifteen and sixteenth priority to the factors like ripeness, eco-friendly nature, familiarity, shopping environment & customer service, availability, variety and location where it is produced.

From the above Table 4, it is clear that 72.4% of the respondents opined that food products produced with the help of synthetic pesticides and chemical fertilizers is of serious hazard, 52.7% opined that antibiotic and growth stimulant found in fruits, vegetables and livestock is of serious hazard, in 53.3% opined that genetically modified food products is of somewhat hazard and 63.5% opined that additives, preservatives and artificial ripening found in the food products is of serious hazard.

## Objective No. 2 : Consumers' Level of Awareness About Organic Food Products

From the Figure 1, it is found out that, 40.5% of the respondents are aware about the organic food products, 38.4% are partly aware, 14% are highly aware and 7.1% are not aware about the organic food products.

From the Table 5, it is clear that 31.9% of the respondents came to know about the organic food products through newspaper, magazine and books, 24.8% through television, 21.7% through friends and colleagues, 7.8% through health workers like doctor, nurse and nutritionist, 5.3% through Internet, 3.9% through radio,

**Table 1. Personal Profile of the Respondents**

Factors	Classification	Frequency	%
Age	Less than 20 years	22	4
	21 to 30 years	182	3.1
	31 to 40 years	<b>233</b>	<b>42.4</b>
	41 to 50 years	70	12.7
	Above 51 years	43	7.8
	<b>Total</b>	<b>550</b>	<b>100</b>
Gender	Male	189	34.4
	Female	<b>361</b>	<b>65.6</b>
	<b>Total</b>	<b>550</b>	<b>100</b>
Marital Status	Married	<b>366</b>	<b>66.5</b>
	Unmarried	184	33.5
	<b>Total</b>	<b>550</b>	<b>100</b>
Educational Status	No formal education	3	.5
	Primary school education	7	1.3
	Secondary school education	81	14.7

	Diploma	39	7.1
	Under graduation	175	31.8
	Post graduation	159	28.9
	Professional	86	15.6
	<b>Total</b>	<b>550</b>	<b>100</b>
<b>Occupational Status</b>	Employee	327	59.5
	Professional	63	11.5
	Business people	28	5.1
	Agriculturalist	17	3.1
	Home makers	105	19.1
	Others	10	1.8
	<b>Total</b>	<b>550</b>	<b>100</b>
<b>Factors</b>	<b>Classification</b>	<b>Frequency</b>	<b>Percent</b>
<b>Family Type</b>	Joint	354	64.4
	Nuclear	196	35.6
	<b>Total</b>	<b>550</b>	<b>100</b>
<b>Family Size</b>	1 to 3 members	186	33.8
	4 to 6 members	327	59.5
	Above 6 members	37	6.7
	<b>Total</b>	<b>550</b>	<b>100</b>
<b>Economic status of the family</b>	Below ₹ 10,000	104	18.9
	₹ 10,001 to ₹ 20,000	207	37.6
	₹ 20,001 to ₹ 30,000	89	16.2
	₹ 30,001 to ₹ 40,000	54	9.8
	₹ 40,001 to ₹ 50,000	23	4.2
	Above ₹ 50,001	73	13.3
	<b>Total</b>	<b>550</b>	<b>100</b>
<b>Residential area</b>	Urban	285	51.8
	Semi-urban	134	24.4
	Rural	131	23.8
	<b>Total</b>	<b>550</b>	<b>100</b>
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	₹ 20,001 to ₹ 30,000	89	16.2
	₹ 30,001 to ₹ 40,000	54	9.8
	₹ 40,001 to ₹ 50,000	23	4.2
	Above ₹ 50,001	73	13.3
	<b>Total</b>	<b>550</b>	<b>100</b>
<b>Residential area</b>	Urban	285	51.8
	Semi-urban	134	24.4
	Rural	131	23.8
	<b>Total</b>	<b>550</b>	<b>100</b>

**Table 2. Importance of Buying Food Products Without Chemical Hazard**

S.No.	Level of Importance	Frequency	Percent
1	Very Important	<b>417</b>	<b>75.8</b>
2	Important	127	23.1
3	Not very important	6	1.1
	Total	<b>550</b>	<b>100</b>

**Table 3. Factors Considered Before Purchasing Food Products**

S.No.	Factors	Mean Score	Priority ranking
1	Price	4.00	9
2	Availability	3.77	14
3	Taste	4.46	4
4	Brand name	4.14	5
5	Freshness	4.49	3
6	Labeling and Packaging	4.01	8
7	Location where its produced	3.34	16
8	Variety	3.68	15
9	Quality	4.67	1
10	Eco-friendly nature	3.94	11
11	Familiarity	3.90	12
12	Nutritious and Healthy	4.56	2
13	Ripeness	3.96	10
14	Shopping Environment and Customer Service	3.86	13
15	Shelf Life (storage life)	4.06	7
16	Absence of synthetic pesticides and chemical fertilizers	4.10	6

**Table 4. Hazards Found in the Food Products**

S.No.	Hazards found		Serious hazard	Somewhat hazard	Not at all hazard	Total
1	Food products produced with the help of synthetic pesticides and chemical fertilizers.	No	<b>398</b>	146	6	550
		%	<b>72.4</b>	26.5	1.1	100
2	Antibiotic and growth stimulants found in fruits, vegetables, and livestock,	No	<b>290</b>	239	21	550
		%	<b>52.7</b>	43.5	3.8	100
3	Genetically modified food products.	No	213	<b>293</b>	44	550
		%	38.7	<b>53.3</b>	8	100
4	Additives, preservatives, and artificial ripening.	No	<b>349</b>	188	13	550
		%	<b>63.5</b>	34.2	2.4	100



2.4% through other sources like window display in stores, relatives, farmers producing organic foods, parents, Organic food retailers and 2.2% of the respondents came to know about the Organic food products through seminar and conference.

From the Table 6, it is found out that 30.5% of the respondents are aware about the Organic food products for above 3 years, 30.1% aware about it for 1 to 2 years, 24.9% aware about it for less than 1 year and 14.5% of the respondents are aware about the Organic food products for a period of 2 to 3 years. From the Table 7, it is clear that 83.6% of the respondents have opined that price of the Organic food products is high compared to conventional food products, 11.1% opined that price is same and 5.3% opined that price of the Organic food products is low compared to conventional food products.

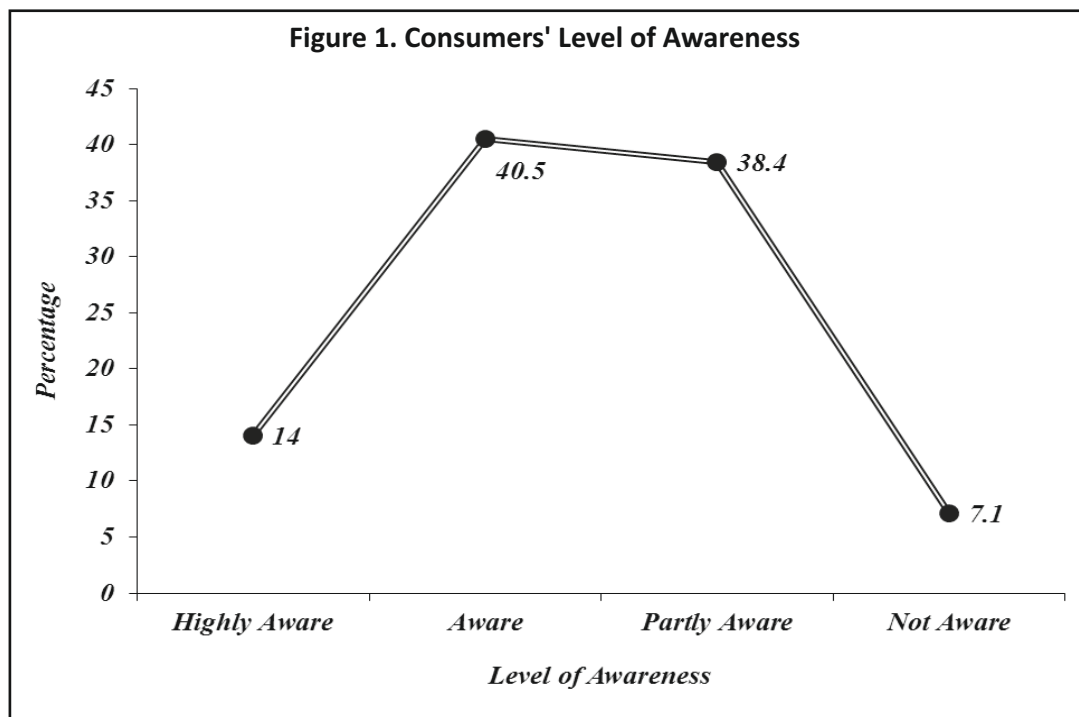
From the above Table 8, it is clear that, 50.7% of the respondents opined that creating awareness about Organic food products should be targeted on adults, 29.8% opined that middle aged ladies should be targeted, 10.4% opined that children's should be targeted, 3.8% opined that middle aged gents should be targeted, 2.7% opined that older people should be targeted and 2.6% of the respondents opined that all groups of people should be targeted.

⇒ **H1:** There is no significant association between personal factors of the respondents and their level of awareness about organic food products.

⇒ **H01:** There is a significant association between personal factors of the respondents and their level of awareness about organic food products.

H1 is rejected in case of personal factors like gender, marital status, educational status, occupational status and economic status of the respondents and H1 is accepted in case of personal factors like age, family type, family size, residential area and food habit of the respondents.

From the Table 9, it is clear that the significant values of gender, marital status, educational status,





**Table 5. Sources of Awareness**

S.No.	Source of Awareness	Frequency	Percent
1	Television	127	24.8
2	Radio	20	3.9
3	Internet	27	5.3
4	Newspaper, Magazine and Books	<b>163</b>	<b>31.9</b>
5	Friends and Colleagues	111	21.7
6	Seminar and Conference	11	2.2
7	Health worker like Doctor, Nurse or Nutritionist	40	7.8
8	Others	12	2.4
	<b>Total</b>	<b>511*</b>	<b>100</b>

\* The sample size is 511 as 39 respondents were unaware about organic food products, they are excluded.

**Table 6. Duration of Awareness Level**

S.No.	No. of years	Frequency	Percent
1	Less than 1 year	127	24.9
2	1 to 2 years	154	30.1
3	2 to 3 years	74	14.5
4	<b>Above 3 years</b>	<b>156</b>	<b>30.5</b>
	<b>Total</b>	<b>511*</b>	<b>100</b>

\* The sample size is 511 as 39 respondents were unaware about organic food products, they are excluded.

**Table 7. Price Range Comparison of Organic With Conventional Foods**

S.No.	Opinion about price range	Frequency	Percent
1	High	<b>460</b>	<b>83.6</b>
2	Same	61	11.1
3	Low	29	5.3
	<b>Total</b>	<b>550</b>	<b>100</b>

**Table 8. Targeted Group of People to Increase Organic Foods' Awareness**

S.No.	Targeted group of people	Frequency	Percent
1	Older people	15	2.7
2	<b>Adults</b>	<b>279</b>	<b>50.7</b>
3	Middle aged ladies	164	29.8
4	Middle aged gents	21	3.8
5	Children	57	10.4
6	All people	14	2.6
	<b>Total</b>	<b>550</b>	<b>100</b>

occupational status and economic status are .000, .030, .001, .026 and .007. As the significant values are less than .05, the hypothesis is rejected and the results shows that there is a significant association between the personal factors like gender, marital status, educational status, occupational status and economic status of the respondents and their level of awareness about organic food products.

The significant values of age, family type, family size, residential area and food habit are .082, .544, .246, .171 and .069. Hence the significant values are greater than .05, the hypothesis is accepted and the results shows that there is no significant relationship between the personal factors like age, family type, family size, residential area and food habit of the respondents and their level of awareness about organic food products.

✍ **H2:** There is no significant association between the respondent's level of awareness about organic food products and their opinion about the importance of buying food products without synthetic pesticides and chemical fertilizers for safety health.

✍ **H02:** There is a significant association between the respondent's level of awareness about organic food products and their opinion about the importance of buying food products without synthetic pesticides and chemical fertilizers for safety health.

We observe that H2 is rejected.

From the Table 10, it is clear that the significant value of .014 is less than .05, thus the hypothesis is rejected and the results shows that there is a significant association between the respondents level of awareness about organic food products and their opinion about the importance of buying food products without synthetic pesticides and chemical fertilizers for safety health.

From the Table 11, the result shows that, majority (37.5%) of the respondents are aware about the health benefits of organic food products. Majority (36.9% and 33.1%) of the respondents are partly aware about the organic food production method and organic food standards. Majority (61.8%, 67.6% and 54.9%) of the respondents are not aware about the facts like farmers should obtain organic certificate from accredited certifying agencies to do organic farming, about the National Organic movement prevailing in India and about the identification of certified organic food products by organic logo and label.

**Table 9. Association Between Personal Factors and Level of Awareness**

Factor	Chi square value	Degree of freedom	Significant Value	Hypo. result	S / NS
Age	19.264	12	.082	Accepted	NS
Gender	21.116	3	.000	Rejected	S
Marital status	8.927	3	.030	Rejected	S
Educational status	42.866	18	.001	Rejected	S
Occupational status	27.289	15	.026	Rejected	S
Family type	2.142	3	.544	Accepted	NS
Family size	7.892	6	.246	Accepted	NS
Economic status	31.925	15	.007	Rejected	S
Residential area	9.040	6	.171	Accepted	NS
Food Habits	7.100	3	.069	Accepted	NS

S - Significant - (Significant value  $\leq 0.05$ ), NS - Not Significant - (Significant value  $\geq 0.05$ )

**Table 10. Association Between Level of Awareness and Importance of Buying Food Products Without Chemical Hazards**

Level of Importance	Respondents level of awareness				Total	Statistical Inference
	HA	A	PA	NA		
Very Important	64	161	164	28	417	Chi square value = 16.026
Important	11	62	45	9	127	Significant value = 0.014
Not at all important	2	0	2	2	6	Degree of freedom = 6
<b>Total</b>	<b>77</b>	<b>223</b>	<b>211</b>	<b>39</b>	<b>550</b>	Hypothesis Rejected Result: Significant

Source: Primary Data

Abb: HA - Highly Aware, A - Aware, PA - Partly Aware, NA - Not Aware

Significant - (Significant value  $\leq 0.05$ ), Not Significant - (Significant value  $\geq 0.05$ )

↪ **H3:** There is no significant relationship between personal factors like age, educational status, occupational status, family size, economic status and residential area of the respondents and their level of awareness about various facts on Organic food products.

↪ **H03:** There is a significant relationship between personal factors like age, educational status, occupational status, family size, economic status and residential area of the respondents and their level of awareness about various facts on Organic food products.

H3 is rejected in case of personal factors like educational status, occupational status and economic status of the respondents and H3 is accepted in case of personal factors like age, family size and residential area of the respondents.

From the Table 12, it is clear that the significant value of educational status, occupational status and economic status is .000, .011 and .000. As the significant values are less than .05, the hypothesis is rejected and the results shows that there is a significant relationship between the personal factors like educational status, occupational status and economic status of the respondents and their level of awareness about various facts on organic food products.

The significant value of age, family size and residential area is .546, .058 and .285. Hence the significant values are greater than .05, the hypothesis is accepted and the results shows that there is no significant relationship between the personal factors like age, family size and residential area of the respondents and their level of awareness about various facts on organic food products.

↪ **H4:** There is no significant relationship between personal factors like gender, marital status, family type, and food habit of the respondents and their level of awareness about various facts on organic food products.

↪ **H04:** There is a significant relationship between personal factors like gender, marital status, family type and food habit of the respondents and their level of awareness about various facts on organic food products.

H4 is rejected in case of gender of the respondents and H4 is accepted in case of personal factors like marital status, family type, and food habit of the respondents.

**Table 11. Level of Awareness About Facts Related to Organic Food Products**

S.No.	Various facts		HA	A	PA	NA	Total
1	Organic food production method	No	64	159	<b>203</b>	124	550
		%	11.6	28.9	<b>36.9</b>	22.5	100
2	Its health benefits	No	104	<b>206</b>	176	64	550
		%	18.9	<b>37.5</b>	32	11.6	100
3	Organic food standards	No	57	150	<b>182</b>	161	550
		%	10.4	27.3	<b>33.1</b>	29.3	100
4	Farmers should obtain Organic certificate from accredited certifying agencies to do Organic farming	No	31	60	119	<b>340</b>	550
		%	5.6	10.9	21.6	<b>61.8</b>	100
5	About National Organic movement in India	No	11	45	122	<b>372</b>	550
		%	2	8.2	22.2	<b>67.6</b>	100
6	Certified Organic food products can be identified by a Organic logo and label	No	40	67	141	<b>302</b>	550
		%	7.3	12.2	25.6	<b>54.9</b>	100

Abb: HA - Highly Aware, A - Aware, PA - Partly Aware, NA - Not Aware

**Table 12. Relationship Between Personal Factors and Level of Awareness About Various Facts on Organic Food Products**

Personal factors	Source of Variation	Sum of Squares	DF	Mean Square	F	Sig. value	Hypo. result	S / NS
Age	Between groups	52.398	4	13.099	.769	.546	Accepted	NS
	Within groups	9286.613	545	17.040				
	Total	9339.011	549					
Educational status	Between groups	574.846	6	95.808	5.936	.000	Rejected	S
	Within groups	8764.165	543	16.140				
	Total	9339.011	549					
Occupational status	Between groups	251.100	5	50.220	3.006	.011	Rejected	S
	Within groups	9087.911	544	16.706				
	Total	9339.011	549					
Family size	Between groups	96.488	2	48.244	2.855	.058	Accepted	NS
	Within groups	9242.523	547	16.897				
	Total	9339.011	549					
Economic status	Between groups	540.142	5	108.028	6.679	.000	Rejected	S
	Within groups	8798.869	544	16.174				
	Total	9339.011	549					
Residential Area	Between groups	42.772	2	21.386	1.258	.285	Accepted	NS
	Within groups	9296.239	547	16.995				
	Total	9339.011	549					

S - Significant - (Significant value  $\leq 0.05$ ), NS - Not Significant - (Significant value  $\geq 0.05$ )

**Table 13. Relationship Between Personal Factors and their Level of Awareness About Various Facts Related to Organic Food Products**

Personal factors	't'	DF	Sig. (2 tailed) value	Hypo. result	S/NS
Gender	2.877	548	.004	Rejected	S
Marital status	.225	548	.822	Accepted	NS
Family type	-1.515	548	.130	Accepted	NS
Food habit	-1.404	548	.161	Accepted	NS

S - Significant - (Significant value  $\leq 0.05$ ), NS - Not Significant - (Significant value  $\geq 0.05$ )

From the Table 13, it is clear that the significant value of gender is .004. As the significant value is less than .05, the hypothesis is rejected and the results shows that there is a significant relationship between gender of the respondents and their level of awareness about various facts on organic food products. The significant value of marital status, family type and food habit is .822, .130 and .161. Hence the significant values are greater than .05, the hypothesis is accepted and the results shows that there is no significant relationship between the marital status, family type and food habit of the respondents and their level of awareness about various facts on Organic food products.

## Findings of the Study

The following are the key findings of the study :

- ✎ Based on mean scoring analysis, it is inferred that “Quality” is identified as a major factor considered by the respondents before purchasing grocery food products, fruits and vegetables.
- ✎ Majority 75.8% of the respondents opined that it is very important to buy food products without synthetic pesticides and chemical fertilizers for safety health.
- ✎ Majority 40.5% and 38.4% of the respondents are aware and partly aware about the organic food products.
- ✎ Chi-square result concluded that there is a difference in the respondents level of awareness about organic food products based on their gender, marital status, educational status, occupational status, economic status and there is no difference based on their age, family type, family size, residential area and food habits of the respondents.
- ✎ Chi-square result concluded that the opinion of respondents about the importance of buying food products without synthetic pesticides and chemical fertilizers for safety health varies with their level of awareness about organic food products.
- ✎ Majority 31.9% of the respondents came to know about the organic food products through newspapers, magazines, and books.
- ✎ Majority 30.5% of the respondents aware about the organic food products for above 3 years.
- ✎ Majority 83.6% of the respondents have opined that price of the organic food products are high compared to conventional food products.
- ✎ Majority 50.7% of the respondents opined that creating awareness about organic food products should be targeted on adults.

- ✎ One-way anova result concluded that there is a difference in the level of awareness about various facts on Organic food products based on the educational status, occupational status and economic status and there is no difference based on the age, family size and residential area of the respondents.
- ✎ *t*-test result concluded that there is a difference in the level of awareness about various facts on Organic food products based on the gender and there is no difference based on the marital status, family type and food habit of the respondents.

## Suggestions

- ✎ The awareness of the respondents can be increased through food exhibition, food festival, seminar, conference, trade fair, agricultural exhibition, educational programmes and through various promotional campaigns like health campaigns and communication campaigns.
- ✎ Media plays one of the most significant role in building consumer awareness about organic food products. Radio, television, magazines, newspapers (local, regional and national), Internet and other various information sources should be used to increase the awareness of organic food products. Internet can be used to build the consumers awareness about organic food products, because it has power to convey the messages beyond the boundaries.
- ✎ The most successful consumer information and awareness initiatives can be done by the traders or marketers are delivering the message about organic foods repetitively and consistently through various modes of communication such as their websites, newsletters, by advertising in magazines and stores, providing sponsorship for events, product sampling at stores and through media coverage about their products.
- ✎ Serving organic food for mid-day meals in school and college canteens is a chance to get youngsters acquainted with it and when they realize that the organic food is tasty and not weird, they might become more positive towards it and they would like to take it regularly.
- ✎ Intensive awareness and special training programmes should be conducted by the peoples like doctors, nutritionist, dietician etc. who have frequent contact with the people, so they can motivate the consumers to purchase organic food products for their better health.
- ✎ The policy makers can make use of the existing Public Distribution System for supplying organic food products at reasonable price to consumers.
- ✎ To create awareness and to develop domestic market, organic food stalls should be opened by the policy makers and private organizations in the busiest places like hospitals, colleges, school canteens, railway stations, airport, shopping malls, cinema theatres etc. and food should be supplied at reasonable price.
- ✎ Development of rural market like Ryot Bazar in Andhra Pradesh or Uzhavar Shanthai in Tamil Nadu, a separate arrangement can be made by all the farmers by setting up the own organic market in particular place to sell their organic food products directly to the consumers.
- ✎ A tour can be arranged by the educational institutions for the students to visit organic farms to make aware about organic farming techniques practically and its benefit of consuming with the help of organic farmers.
- ✎ The food product which was mainly liked by the children's like organic ice creams, organic chocolates,

organic cookies, organic biscuits, organic muffins, organic soups, organic drinks can be introduced and advertised by the retailers to increase their awareness and sales of organic food products.

✍ With combined effort of producer organizations, consumer organizations, NGOs and retailers, a sample of Organic foods can be supplied to consumers in the form of organic popcorns, slice of organic breads, small organic fruit cups, organic squash soups, organic sandwiches or simply giving a one slice of organic apples to consumers to observe its taste, which in turn motivates them to make repeated purchases.

## Implications

In this study, majority of the respondents opined that it is very important to buy food products without synthetic pesticides and chemical fertilizers for safety health. This shows a positive response from respondents moving towards organic foods in future for safety health. Thus this is the right time for the government, producers and managerial persons to make aware the consumers about the health hazards found in the food products and the importance of consuming organic food products through various promotional measures. The study revealed that intense awareness about organic food products should be targeted on adults. As the today adolescents are future Indians, policies aimed at increasing awareness about organic food products should address the need of this group. Since the present world is running behind fast and junk foods, this kind of food products should be made available in places where young generation moves frequently.

The high price premium is one of the main obstacles faced by consumers, hence the government should regulate the price for all organic food products in the country and consumers should make aware about the reason of high price for organic food products. Research and development in the organic food sector is another significant area which requires serious attention. Funds should be provided by the policy makers and its research institutes to the researchers to involve in research work about the various aspects of organic foods products for its growth.

## Conclusion

Green revolution transformed India from a food-deficient to a self-sufficient country. But more usage of synthetic pesticides and chemical fertilizers, various ill effects have been observed. The whole world is now in the need to move to a new concept called "Ever green revolution" for the benefit of environment and present, future mankind. Thus with the changing dietary needs, enhanced income and rising awareness about the presence of chemical residues in food, there is a growing appreciation for organic food products among consumers.

Creating awareness is an essential tool to bring an unprecedented demand for organic foods in India. Thus this study analyze the consumers' level of awareness towards organic food products and the result showed that respondents' awareness about organic food products is fairly good but not adequate. Lack of awareness about organic food products can affect the attitude and perception about that product and ultimately the buying decision of the consumers. So, there is a need to create consumers awareness and it can be done through various promotional measures. The marketer also needs to be innovative and dynamic in order to compete with the consumers changing purchase behavior.

In India, organic food sector are ready to take the center stage but the need of the hour is to chalk out a definite nationwide strategy to ensure a balanced growth of supply and demand in domestic market. Thus marketers should analyze the behavior of consumers and weed out all the obstacles preventing them from purchasing



organic food products because, consumers loyalty is very important for the growth and success of Indian organic food sector.

The famous tamil quote says that “Food itself a medicine” (*Unnave Marunthu*) means that the food which we consume when is of right quality and choice, will itself take care off and fight against all the diseases we are prone to. At present, due to unsustainable method of agricultural practices, our own food itself has become a major reason in bringing about various lifestyle diseases. Therefore, in a country like India, where many children are malnourished and people who spend a major chunk of their income for health treatment, organic food products have the potentiality of bringing a positive change in the health status of the country. The future of organic food sector in India seems to be very bright and the concept of an organic lifestyle is here to stay.

## Limitations of the Study and Scope for Further Research

In spite of the fullest effort put in by me, this research work also possesses certain limitations. Some of the unavoidable limitations of the present study are as follows : (a) this study covers only Coimbatore District and hence, the results may vary from district to district. (b) this study aimed to analyze the consumers' level of awareness about organic food products in general and hence, the study did not concentrate upon any particular organic food products and the satisfaction consumers derived from these products.

The main purpose of this study is to analyze the consumers' awareness towards organic food products. But there is a vast scope for future researchers, to conduct a comprehensive study among the buyers of organic foods by taking as a large sample size. The effort should be taken by the future researchers to identify buyers directly at the spot where they are purchasing organic foods, because immediate response will capture the true picture. A detailed analysis can be done among buyers of organic food products on the various aspects like factors motivate them to purchase organic foods, their expectation and likeliness towards organic foods, health difference observed through organic foods, product wise satisfaction, overall satisfaction and obstacles faced by them in purchasing organic foods. More intensive research can be done in order to design the proper managerial strategies to attract new consumers and for the growth of organic food sector.

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