



ORIGINAL RESEARCH PAPER

Commerce

SAFE CONSUMPTION AND HEALTH BENEFITS OF ORGANIC PRODUCTS AMONG CONSUMERS IN TIRUCHIRAPPALLI CITY

KEY WORDS: organic products, Safe consumption, health aspects, Nutritional value, etc.

Ms. R. Ayswarya

Ph.D (Full Time) Research Scholar PG and Research Dept of Commerce Holy Cross College, Tiruchirappalli Tamil Nadu, South India.

Dr. S. Vasanthi

Associate Professor of Commerce PG and Research Dept of Commerce Holy Cross College, Tiruchirappalli, Tamil Nadu, South India.

ABSTRACT

Organic farming is a new form of agriculture and its main idea to accentuate nature as significant initiative. Organic agriculture has been evolved to cultivate healthy, quality and highly safer products without using synthetic chemicals such as fertilizers and pesticides. Today, India has emerged one of the largest potential in organic market. The consumers and public interest towards organically produced products has increased in developing countries and the consumers show more concern for organic products for safer utilization, human consumption and health benefits because they have more nutritious value, secure, beneficial and hygienic to consume. Thus the demand for organic products is escalating by means of health concern and safe consumption of products among consumers. The study is descriptive in nature and analyzes the safe consumption of organic products among consumers in Tiruchirappalli city. Convenience sampling technique has been used and one hundred respondents were surveyed by using a well structured questionnaire. The findings of the study shows that most of the respondents (66 per cent) are female, three fourth of respondents (76 per cent) belongs to the age group between 31- 40 years prefer to buy organic products and they belong to sample respondents who are employed in private sectors. Therefore the majority of the sample consumers prefer the organic products for safe consumption reasons, health benefits and for nutritious content.

1. INTRODUCTION

In India, agriculture is the backbone of our economy and agriculture occupies 60 per cent of the population in the developing countries. Organic farming is a traditional form of agriculture and it has been practiced for thousands of years. Organic agriculture creates the best possible relationship between earth and man. It also develops the conscious efforts to inspire the people about the cultivation/production of the products as there is a rich diversity of organic agriculture across the world. The method of Organic agriculture is used to produce high quality products without creating side effects to the consumers. Indian organic food and product market shows optimistic development in this sector, as consumer's disposable income has been increased naturally as demand for the organic products has been increased rapidly. All the organic products are produced based on organic farming by way of using organic fertilizers, pesticides which evades genetically modified organisms in production. Thus organic food and products is safer as it contains 25 per cent more nutritious in terms of vitamins and minerals than the products derived from industrial agriculture. Globally consumers have more concern on their health, quality of various products they consume since these products are toxic free, free from chemical induced diseases and are beneficial to health and safety.

SIGNIFICANCE OF THE STUDY

Organic products are user friendly and these products have been accepted worldwide by the consumers as they have more nutritious value. It contains higher level of beta carotene, vitamins D, C and E, health promoting polyphenols, cancer fighting antioxidants, fatty acids and essential minerals too. Quality of the organic products tastes better than conventional products. The demand for organic products has also created new export opportunities for the developing countries. In the next five years organic food market will be growing and this will implement various standards to improve the products. Keeping in mind the awareness about the organic products reached among the consumers, an attempt has been made to study the "Safe Consumption and Health Benefits Of Organic Products Among Consumers In Tiruchirappalli City".

STATEMENT OF PROBLEM

Organic food and products industry in India is in nascent stage; it is expected to grow fast in the near few years. Though organic products are very costly they have been produced with total quality management in a very safe manner for the purpose of human consumption. Nowadays, the demand for organic product is considerably growing in India and consumers are also becoming more conscious about its usage and the level of consumption.

Hence this study is very essential to focus on the day-to-day safe consumption and health benefits of organic products utilized among the consumers in Tiruchirappalli City.

REVIEW OF RELATED LITERATURE

Renee Shaw Hughner, Pierre McDonagh, Andrea Prothero, Clifford J. Shultz II and Julie Stanton (2007), identified several themes that reflect various stimulus used by consumers when they decide to purchase organic food. The organic food industries have to develop by way of knowing about various motivations, perceptions and attitudes of consumers regarding organic foods and their consumption pattern. If there is any interests to the stakeholders of food marketing are also to be best served.

Lucimar Santiago de Abreu, Sergio P. Mendes, Paul Kledal and Lucie Sirieux (2008), study focused on the consumption of agro-ecological products, based on a socio economic and anthropological approach which focus was on the motivation and the spending practices in the metropolitan region of Campinas, Sao Paulo State, Brazil. The purpose was to confirm that what level the consumer behaviour shows cultural and economic values with reference to current ecological culture. Therefore, the understanding of cultural dynamics of each and every expenditure process can give meaningful to the current circumstance of local relations and global exchanges.

Joris Aertsens, Wim Verbeke, Koen Mondelaers and Guido Van Huylenbroeck (2009), paper aims to provide an overview, within a framework linking Schwartz values theory and the theory of planned behaviour (TPB). It seeks to focus on the importance of affective attitude, emotions, personal custom, involvement and ambiguity related to organic food consumption. Both the values theory and the theory of planned behaviour have been referred to related theories for better understanding consumer's choice for organic food.

Douglas H. Costance and Jin Young Choi (2010), their paper investigates the predictors of interest and the perceived blockade to organic acceptance among pragmatic conventional producers in Texas, compared to organic and conventional producers. The results indicated that more than 40 per cent of producers who currently have conventional operations have some interest in organic production. Thus the paper concludes that increased institutional support and facilitates organic adoption.

Jan P. Voon, Kwang Sing Ngui and Anand Agrawal (2011), study examined the determinants motivate to purchase organic food products among consumers in a Malaysian city, using a survey.

Thus indicates the efforts to promote consumption should focus on influencing the attitudes of consumers.

Justin Paul and Jyoti Rana (2012), the present study is to know about the behaviour of consumers and their intention to purchase organic food. The study is also to determine the factors influencing consumer behaviour towards organic food. The result indicates that consumer attitude towards buying organic food are positively influencing by health, availability and education from demographic factors. The overall satisfaction of consumers for organic food is more than non organic food but the satisfaction level varies depends on different factors. This study suggests that retailers can develop strategies and effective marketing program to influence consumers positively

Sonia Attanasio, Angela Carelli, Lucio Cappelli and Patrizia papetti (2013), their paper examines about the consumer's intention to purchase the organic food products in Pontina Province, Italy and 280 respondents were interviewed using semi-structured questionnaires. Thus the results indicated that buying intention of organic products is influencing by the consumer's perception about the value of organic food products, belief on health and safety of the product.

Ravi Nandi, Wolfgang Bokelmann, Nithya Vishwanath Gowdru and Gustavo Dias (2014), paper examines to gain knowledge about consumers preferences regarding the organic products purchasing place in Bangalore, India. The results revealed that most prefer purchase places were organic stores and supermarkets.

Tah Poh Leong and Laily Paim (2015), study focuses to analysis the factors that affect college students of Chinese and their intention to use organic food; 500 samples had collected through online questionnaire by mail. Thus the findings would assist to increase the local availability of organic food products in Malaysia. Safdar Muhammad et.al., (2016), says about factors influencing consumer awareness and benefits of organic food products in United Arab Emirates. It found that awareness of consumers about organic food product is influencing by gender, nationality and education, income, occupation and age. Thus the results are essential to the beneficiaries of food marketing planners, agricultural and food policy makers.

OBJECTIVES OF THE STUDY

- To analyze the demographic profile of the sample respondents.
- To measure the consumer's perception towards organic products for safe consumption and health benefits.

HYPOTHESIS OF THE STUDY

The hypothesis framed for the study is
 H01: There is no significant association between gender and reasons for buying organic products.

Ho2: There is no significant difference between age and consumer's perception towards organic products for safe consumption and health benefits.

RESEARCH METHODOLOGY

Research design

The current study is descriptive research in nature. This study was conducted to analyze the consumer's perception towards organic products for safe consumption and health benefits of organic products.

Collection of data and Source of information

Both primary and secondary data used for this study but the analysis was made mainly using primary data. Primary data was collected through well structured questionnaire using Rensis Likert's Five Point Scale. Secondary data has been obtained from journals, books, websites and articles.

Area of the study

The population of Tiruchirappalli Corporation as per census 2011

is 9,16,857 approximately. Tiruchirappalli Corporation has been divided into four zones and the selected zones are Srirangam zone, Abishekapuram zone, Ariyamangalam zone and Ponmalai zone. Hence Tiruchirappalli Corporation is selected as area of the study. Sampling Size and Techniques

One hundred sample respondents were taken for the study by survey method. Convenience sampling technique has been applied for this study.

Variables used in the study

The are two types of variables taken for the study. They are demographic profile as "Independent variables" and organic products for safe consumption and health benefits as "Dependent variables".

Demographic profile as "Independent variables"

Following are the various variables taken to measure the demographic variables such as Age of the respondents, gender, monthly income, marital status, occupation and reasons for buying organic products.

Consumer Perception towards organic products for safe consumption and health benefits variables as "Dependent variable".

The organic products for safe consumption and health benefits variables are hygiene, taste, health benefits, purity & safe, without added food additives, natural flavours, nutritional value, eco friendly benefits, free from genetic modifications organisms , quality, trust, free form side effects, free from chemical fertilizers & pesticides, safe for consumption and safe certification label. Period of the study and Tools used for analysis

This study has been conducted during the month of April to September 2016. The collected data were analyzed with the help of statistical packages namely SPSS 20.0 version by using statistical tools such as Percentage Analysis, Chi square and ANOVA.

LIMITATIONS OF THE STUDY

- The study is confined to geographical region of Tiruchirappalli City Corporation only.
- The sample size is limited to one hundred respondents only.
- The analysis is made based on the opinion given by the sample respondents in the study area.

ANALYSIS AND DISCUSSION

The collected data from the sample respondents have been analyzed and interpreted as follows:

Demographic profile

The demographic profile is analyzed with help of variables like gender, age, monthly income, marital status, occupation, reasons for buying organic products. The results of the analysis are discussed below

Table 1.1
Demographic profile

Factors	Classification	Frequency	Percentage
Gender	Female	66	66
	Male	34	34
	Total	100	100
Age (in years)	21-30 years	7	7
	31-40 years	76	76
	41-50 years	9	9
	Above 50 years	8	8
	Total	100	100
Monthly Income (In rupees)	Below 25000	55	55
	25000- 50000	25	25
	50000-100000	17	17
	Above 100000	3	3
	Total	100	100

Marital status	Married	81	81
	Unmarried	19	19
	Total	100	100
Occupation	Government employee	20	20
	Private employee	66	66
	Business	10	10
	Professional	4	4
	Total	100	100
Reasons for buying organic products	Safe factors	56	56
	Health care	20	20
	Nutritional content	17	17
	Without added preservatives	7	7
	Total	100	100

Source: Primary Data

The above table shows that most of the respondents (66 per cent) are female. More than three fourth of the respondents (76 per cent) are belong to the age group between 31-40 years. More than half of the respondents (55 per cent) earn a monthly income of below ₹25000. Majority of the respondents (81 per cent) are married. Most of the respondents (66 per cent) are private employee. More than half of the respondents (56 per cent) reason for buying organic products for safe factors.

GENDER AND REASON FOR BUYING ORGANIC PRODUCTS

In order to assess the association between Gender and reason for buying organic products Chi square analysis is used. The result of the chi square analysis is given below:

H01: There is no significant association between Gender and reason for buying organic products.

Table 1.2
Gender and reason for buying organic products

Reason for buying organic products	Gender		Total (%)
	Female	Male	
Safe factors	38	18	56 (56%)
Health Care	11	9	20 (20%)
Nutritional content	16	1	17 (17%)
Without added preservatives	1	6	7 (7%)
Total	66	34	100 (100%)
Pearson Chi-square	15.496a		
Sig	(.001)***		

Source: primary data
Significant @ 0.01***

The calculated Chi square value is 15.496 and "p" value is .001 at 1 per cent level of significant. Hence the results of Chi square shows that null hypothesis (Ho) is rejected and alternate hypothesis (H1) is accepted. It is concluded that there is a significant association between gender and reason for buying organic products. It is found that reason for buying organic products for safe factors and next prefer for nutritious content in the products.

AGE AND CONSUMER'S PERCEPTION TOWARDS ORGANIC PRODUCTS FOR SAFE CONSUMPTION AND HEALTH BENEFITS

In order to assess the significant difference between age and consumer's perception towards organic products for safe consumption and health benefits one way ANOVA analysis is used. The result of the one way ANOVA analysis is given below.

H02: There is no significant difference between age and consumer's perception towards organic products for safe consumption and health benefits.

Table 1.3
Age and consumer's perception towards organic products for safe consumption and health benefits

Safe consumption and health benefits	Mean Square	F value	Sig.
Hygiene	Between Groups	1.876	4.633 (.005)***
	Within Groups	.405	
Taste	Between Groups	6.242	10.962 (.000)***
	Within Groups	.569	
Health benefits	Between Groups	.901	4.036 (.009)***
	Within Groups	.678	
Purity and safety	Between Groups	1.131	4.093 (.006)***
	Within Groups	.597	
Without added food additives	Between Groups	.855	2.263 (.086)*
	Within Groups	.378	
Natural flavours	Between Groups	1.065	2.704 (.050)*
	Within Groups	.394	
Nutritional value	Between Groups	1.466	4.544 (.005)***
	Within Groups	.323	
Eco friendly benefits	Between Groups	.161	3.321 (.010)**
	Within Groups	.503	
Free form genetic modifications Organisms	Between Groups	1.782	3.401 (.015)**
	Within Groups	1.179	
Quality	Between Groups	2.103	3.466 (.019)**
	Within Groups	.607	
Trust	Between Groups	1.746	2.817 (.043)**
	Within Groups	.620	
Free form side effects	Between Groups	2.211	3.171 (.028)**
	Within Groups	.697	
Free form chemical fertilizers and pesticides	Between Groups	1.819	3.035 (.033)**
	Within Groups	.599	
Safe for consumption	Between Groups	2.791	2.741 (.048)**
	Within Groups	1.019	
Safe Certification label	Between Groups	2.298	7.328 (.000)***
	Within Groups	.314	

Source: Primary data
Significant @ 0.001***, 0.05**, 0.010*

The above table explains that one way ANOVA is done for Age and consumer's perception towards organic products for safe consumption and health benefits. Since the "F" value are significant at 0.001, 0.05 and 0.10 per cent level for variables like hygiene, taste, health benefits, purity & safe, without added food additives, natural flavours, nutritional value, eco friendly benefits, free form chemical fertilizers & pesticides, quality, trust, free form genetic modifications organisms, free from side effects, safe for consumption and safe certificate label. Hence the results of one way ANOVA reveals that null hypothesis (H0) is rejected and alternate hypothesis (H1) is accepted. It is concluded that there is a significant difference between age and consumer's perception towards organic products for safe consumption and health benefits. It is found that consumer's prefers the organic products for safe consumption and health benefits.

RECOMMENDATIONS

Organic agriculture increases the availability of nutritious products which facilitates the consumers to buy variety of products. Consumers have to make sure whether proper certificate information is available on the labels. Organic products influence the consumers positively and also convey the relevant information about the ingredients of the products by providing educational

materials to the consumers. It could also widen the mindsets of consumers by promoting the organic products and their uses through advertisements in television, newspaper etc.

CONCLUSION

Consumers are attracted to organically grown products and nowadays they are interested to buy the products because it is free from genetically modified organism, care about health and environment. In current scenario, major cities across India have awareness about safe concern, healthy and nutritional values of the products among consumers. It ensures the safe consumption and growth for organic products. Various standards implement to improve in quality of organic products in the country. Thus organic products help human's life better and keeps healthier by way of providing nutritious value in products and it is safer to consume without any side effects, which in turn, improves the immunology of consumers.

REFERENCES

1. Vishal Singh, Gurupreet Singh and Deepak Kumar Verma.(2013). "Organic foods: Benefits and Market Demand". Popular Kheti, vol. 1, Issue.4, pp: 71-78.
2. Bhupendra Kumar (2014), "Biofertilizers and organic farming", 1st edition, Centrumpress, New Delhi. pp:22-23.
3. Shalini Suri (2012), "Organic farming", APH publishing corporation, New Delhi. pp:25-26, 67.
4. Madhavaiah .C. and Shashikiran .L. (2016). "Review of consumer behaviour towards organic food products in Bangalore city". Adarsh Journal of Management Research, vol.9, Issue. 1, pp.29-35.
5. Sathyendra Kumar .A.D. and Chandrasekhar .H.M. (2015). "A study on consumer's behaviour towards organic food products in Mysore city". International Journal of Management Research and Review, Vol.5, Issue.11, pp.1082-1091.
6. Gil, J.M., Gracia, A. and Sanchez, M. (2000). "Market segmentation and willingness to pay for organic products in Spain". International Food and Agribusiness Management Review, 3, pp.207-226.
7. Renee Shaw Hughner, Pierre McDonagh, Andrea Prothero, Clifford J. Shultz II and Julie Stanton (2007), "Who are organic food consumers? A compilation and review of why people purchase organic food" Journal of consumer behaviour 6, pp: 1-17.
8. Lucimar Santiago De Abreu, Sergio P. Mendes, Paul Kledal and Lucie Sirieix (2008), "Sociocultural and economic values-organic food consumption in fairs and supermarkets in campinas, sp brazil, Available at <http://orgprints.org/16784>.
9. Joris Aertsens, Wim Verbeke, Koen Mondelaers and Guido Van Huylenbroeck (2009). "Personal determinants of organic food consumption: A review", British food journal, vol: 111, No: 10, DOI.10.1108/0007070091099296.
10. Douglas H. Costance and Jin Young Choi (2010), "Overcoming the barriers to organic adoption in the united states: A look at pragmatic conventional producers in Texas", Sustainability, 2, 163-188, ISSN2071-1050.
11. Jan P. Voon, Kwang Sing Ngui and Anand Agrawal (2011). "Determinants of willingness to purchase organic food: An exploratory study using structural equation modeling". International food and agribusiness management review, vol: 14, Issue: 2.
12. Justin Paul and Jyoti Rana (2012), "Consumer behavior and purchase intention for organic food", Journal of ConsumerMarketing", Vol:29, Issue:6, Pg:412-422, ISSN:0736-3761.
13. Sonia Attanasio, Angela Carelli, Lucio Cappelli and Patrizia papetti (2013), "Organic food: A study on demographic characteristics and factors influencing purchase intentions among consumers in Pontina province" International journal of latest research in science and technology, vol: 2, Issue: 6, pg: 128-132, ISSN: 2278-5299.
14. Ravi Nandi, Wolfgang Bokelmann, Nithya Vishwanath Gowdru and Gustavo Dias (2014). "Consumer preferences and influencing factors for purchase places of organic food products: empirical evidence from south India", Indian journal of marketing, vol: 44, no: 5, ISSN: 0973-8703.
15. Tah Poh Leong and Laily Paim (2015), "Factors affecting intention to consume organic food products: a study among Chinese college students in Malaysia", international journal review of management and business research, vol: 4, Issue: 1, ISSN: 2306-9007.
16. Safdar Muhammad, Eihab FatherIrahman and Rafi Ullah Tasbih Ullah (2016). "The significance of consumer's awareness about organic food products in the United Arab Emirates". Sustainability, 8, 833; doi:10.3390/su8090833.
17. www.irmbjournal.com
18. www.mdpi.com/journal/sustainability
19. www.interscience.wiley.com