

A Study on Perception of Urban Consumers regarding Organic Foods in Eastern India

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ABSTRACT

All over the world the food consumption pattern is changing speedily due to growing consciousness on health issues, environmental safety issues and food safety issues and now people are showing greater concern regarding consumption of organic food. India is also experiencing a growing demand for organic foods and there is a mushrooming growth of organic food markets in India. The present study deals with assessing the perception of urban consumers regarding organic foods in Eastern India. The study was conducted in one metro city Kolkata and one non-metro Ranchi in the eastern part of India. The results concluded that majority of the respondents strongly perceived that organic foods are eco-friendly, safer, price of the organic foods are higher than that of conventional foods, there is difficulty in getting organic foods in nearby areas. There is a need to generate awareness about the advantages of organic food products among people and promote its use while at the same time there is the principal need to persuade the farmers to go for organic farming. Most of the respondents agreed that organic foods are natural, healthy, prevents diseases and they desire to adopt it. They strongly disagreed with the factors that consuming organic food will lead to malnutrition and food deficit.

Key words: Eastern india, eco-friendly, food safety, organic foods, perception, urban people.

INTRODUCTION

Over the past few years, organic food industry is growing at a much faster rate all over the world which directly or indirectly supports the fact that people are becoming more health conscious, environment friendly and eco-friendly. A noticeable change in the food pattern of people is obvious. Organic food is well-defined as a product from a farming system which eludes the use of synthetic fertilizers and pesticides. The principles used in the farming system apply the benefit of modern scientific understanding and technologies to offer a more sustainable food production (Institute of Food Science and Technology, 2005). Within the agricultural industry, the organic food market is steadily changing from a niche market to mainstream market. Although all the food products are available in the organic market, the only

difference is it is available in a particular season. From the time of initiation of organic food industry, fresh fruits and vegetables have been the top selling category and still now they are outselling other categories. Organictagging has been considered an actual measure to help consumers obtain valid and trustworthy information in the organic food market, particularly for those with limited knowledge (Teng and Wang, 2015). Velmurugan *et al.* (2017) concluded that urban people's perception is good towards the eco-friendly, non-chemical nature of organic food but awareness level is not so high which suggests that to organize awareness campaigns. According to Kalyani (2017), consumers' liking for quality organic food taking is based on a general perception that organic foods have greater desirable characteristics than conventionally-grown alternatives.

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The Green Revolution in India and the background in which it took place assured and enabled farmers to increase their production of crops and achieve self-sufficiency. Along with its positives, it had its own trade-offs. Today's consumer, However, is not living in an economy burdened by shortages anymore. The consumer can afford to choose products based on variety, quality, safety and convenience. Inspection of consumer goods through all these lenses, places organic products in an advantageous position. The transition from a "production -driven supply chain" to a "demand-driven value chain" has been phenomenal, especially in the last five years with the organic market growing significantly.

India is experiencing a growth of organic markets especially in urban areas although it is in a burgeoning stage. The price and easy availability of the organic products are the key obstacles towards its purchase, so the sellers need to emphasize on such barriers for penetrating the market of organic products in India (Laheri and Arya, 2015). With this background knowledge, here it is important to understand the feelings and perception of urban people towards organic food. Hence, the present study was conducted in order to reveal the perception of urban consumers regarding organic food in eastern India.

METHODOLOGY

The present study was conducted in two purposively selected cities; one metro city *i.e.* Kolkata and other comparative non-metro *i.e.* Ranchi. It is obvious from researches that eastern part of India is nutritionally vulnerable (especially West Bengal, Bihar, Jharkhand, Odisha, Chhattisgarh) and organic food consumption system to a large extent governs the nutritional status. Besides these, most of the studies related to organic food were conducted in northern and western India, eastern part still remains untouched. Various news reports revealed that the organic food market is gradually blooming in eastern part of India and demands for organic food is also increasing at par. Hence, Kolkata being a metro city in eastern part of the India was chosen purposively and the equivalent control group *i.e.* non metro city Ranchi was chosen for a comparative study.

The *ex-post-facto* research design was used in the study, as the manifestation of the variables presumably had already occurred and there was no scope for further manipulation. From each of the selected cities, ten percent of the total number of municipal wards were chosen randomly. Fifteen respondent households were chosen from each ward of two cities using stratified random sampling technique. From Kolkata, fourteen Municipal Wards ($10\% \times 140$) and from Ranchi, ($10\% \times 40$) *i.e.* four

municipal wards were chosen randomly. Hence, total sample size (N) for the current study was (15×18) *i.e.* two hundred seventy. Since the study was conducted in the urban area, hence the respondents were mostly urban people.

Perception can be operationalized as the way urban consumers interpret or understand the consumption of organic food is good for health. Perception was measured on a Likert type scale having 5 point continuum with strongly agree (SA), agree (A), undecided (U), disagree (D), and strongly disagree (SD). For this purpose 27 items were selected which were administered to the urban respondents to find out to what extent they agree or disagree to each item related to organic food and its consumption. Data analysis was done in Microsoft Excel and final results were presented in the form of frequency, percentage, and mean perception score(MPS) and standard deviation (SD). Mean perception scores were calculated by taking the averages of all the responses to a particular statement. SD denotes the level of variation of responses by the respondents on a particular statement.

RESULTS AND DISCUSSION

Perception is defined as the awareness of the elements of environment through physical sensation. In this study, perception can be operationalized as the way urban consumers interpret or understand consumption of organic food is good for health. The results explains the percentage of respondents agreeing or disagreeing with different statements and also the mean perception scores for each statement. A higher mean perception score (MPS) explains that people strongly perceive those facts regarding organic food.

The analysis is depicted in the following Table 1. The findings of the table suggest that majority of the respondents strongly perceived that organic foods are 'eco-friendly', 'safer', and more awareness is needed regarding organic foods and there is difficulty in getting organic foods in nearby areas. Most of the respondents agreed that organic foods are natural, healthy, prevents diseases and they desire to adopt it. People are undecided regarding the factors like longer shelf life of organic foods, regarding their purchase preference. Respondents disagree with the issues that 'consuming organics will restrict their food choices' and consuming organics acts as 'a status symbol'. They strongly disagree with the factors that consuming organic food will lead to malnutrition and will lead to food deficit. About 71.11 per cent respondents strongly agree that organics are eco-friendly, 70.37 per cent respondents agreed that organics are natural and provides a healthy food system, 61.85 per cent

respondents are undecided that whether organics are having more shelf life than conventional foods whether 73.33 per cent respondents disagreed with the fact that organics lead to restriction of food choices. 49.63 per cent respondents strongly disagreed with the issue that organics will lead to food deficit. The overall mean perception score for both Kolkata and Ranchi is 3.25 which reveals that urban people are still having moderate level of satisfaction with organic foods and they have not fully replaced conventional food items with organic

foods. With respect to the current study, the study of Kalyani (2017), who was also of the opinion that consumers' liking for quality food taking is based on a general perception that organic foods have greater desirable characteristics than conventionally-grown alternatives. Human health, food safety and environmental stewardship, along with several other product characteristics such as nutritive value, taste, freshness, appearance, and other sensory characteristics influence consumer preferences.

Table 1: Perception of urban consumers regarding organic foods

n= 270

Statements	SA (%)	A (%)	U (%)	D (%)	SD (%)	MPS
I feel organic food is safer than the conventional one.	41.11	36.67	18.15	4.07	0.00	4.13
I think organic food is more nutritious than the traditional food.	35.19	28.89	29.26	6.67	0.00	3.91
I always prefer to purchase organic food although its price is high compared to others.	0.74	11.11	50.00	22.22	15.93	2.57
It is difficult to get organic foods in nearby areas	45.19	27.78	12.59	14.44	0.00	4.02
Organic food is tastier.	8.15	38.15	28.52	25.19	0.00	3.28
Organic food generally takes less time for cooking than conventional foods.	9.26	6.30	53.33	27.41	3.70	2.88
I have no belief in most of the companies who are selling organic food product whether they are selling 100 per cent organic products.	7.41	28.52	50.74	13.33	0.00	3.28
I feel public awareness is needed for identifying authentic food products.	55.56	16.30	16.67	4.07	7.41	4.07
I suggest my children/ relatives to always buy organic products.	0.74	35.56	34.44	15.56	13.70	2.92
I feel that organic foods are easily digestible.	0.74	48.15	35.56	4.07	11.48	3.21
Organic foods have longer shelf life.	5.56	19.63	61.85	12.59	0.37	3.16
Eating organic food is a status symbol.	0.00	7.78	22.22	53.33	16.67	2.2
We should depend on organic food for good health.	22.96	23.33	8.15	8.52	0.00	3.96
Organic food eating is just a fad.	4.44	8.52	31.11	45.56	10.37	2.49
Consumption of organic foods can lead to malnutrition	3.70	12.59	20.37	13.70	49.63	2.05
Organic farming will lead to food deficit.	0.00	11.11	11.48	28.15	49.26	1.82
Organic food consumption will lead to less disease like cancer.	7.04	66.67	19.26	4.07	1.85	3.68
Organic foods are easily available	0.00	29.26	25.19	33.70	11.85	2.70
Organic food production is eco-friendly	71.11	15.56	13.33	0.00	0.00	4.43
Organic foods can be easily integrated in existing food patterns	12.96	28.52	33.70	20.00	4.81	3.23
I find the adoption of organic foods in India desirable	10.74	59.63	11.85	10.37	7.41	3.64
I feel restriction in my freedom of choice of foods, if I go for organic foods	0.00	14.81	10.74	73.33	1.11	2.38
Organic food is more fresh than the conventional one	12.22	54.07	25.19	8.52	0.00	3.68
Organic food is natural	24.81	70.37	4.81	0.00	0.00	4.16
Organic foods are on the healthy food systems	29.63	70.37	0.00	0.00	0.00	4.28
Organic foods are easily accessible	11.11	14.81	44.07	26.67	5.19	2.98
Organic foods are easily affordable	4.81	3.33	47.78	38.52	5.56	2.61
Total MPS						3.25

Table 2 clearly explains that how people of Kolkata perceive organic foods, whether they are healthy, safe or better than conventional foods. The statement 'Organic food production is eco-friendly' is having maximum mean perception score (MPS = 4.68) with less variability (SD=0.63). Other statements having high MPS (above 4) are organic foods are safer (4.22), natural (4.15), healthy food system (4.28), difficult to get organic foods in nearby areas (4.05), more public awareness is needed for identifying authentic food products (4.20). It clearly

depicts that along with positive notions regarding organic food, people are facing hindrances in consuming organic foods. The statement having minimum MPS is organic farming will lead to food deficit (MPS=1.83). Other statements related to organic food on which most of the respondents disagreed are 'I always prefer to purchase organic food although its price is high compared to others' (MPS=2.55), 'Organic foods are easily available' (MPS=2.65), organic foods take less time for cooking (MPS=2.95). The overall mean perception score is 3.27

which depicts that people of Kolkata moderately agree with the fact that organic foods are healthy, safety and can be used as an alternative for conventional food items. The findings of the present study matches with the findings of Velmurugan *et al.* (2017), who concluded that city people's perception is good towards the eco-friendly, non-chemical nature of organic food but awareness level is not so high which suggests that to organize awareness campaigns.

Table 2: Perception of respondents of kolkata regarding organic foods (n1=210)

Statements	MPS	SD
I feel organic food is safer than the conventional one.	4.22	0.81
I think organic food is more nutritious than the traditional food.	3.85	0.95
I always prefer to purchase organic food although its price is high compared to others.	2.55	0.91
It is difficult to get organic foods in nearby areas	4.05	1.08
Organic food is tastier.	3.30	0.93
Organic food generally takes less time for cooking than conventional foods.	2.95	0.90
I have no belief in most of the companies who are selling organic food product whether they are selling 100 per cent organic products.	3.23	0.77
I feel public awareness is needed for identifying authentic food products.	4.20	1.13
I suggest my children/ relatives to always buy organic products.	3.03	0.98
I feel that organic foods are easily digestible.	3.35	0.87
Organic foods have longer shelf life.	3.09	0.68
Eating organic food is a status symbol.	2.20	0.83
I should depend on organic food for good health.	3.93	0.79
Organic food eating is just a fad.	2.40	0.87
Consumption of organic foods can lead to malnutrition	1.93	1.13
Organic farming will lead to food deficit.	1.83	1.02
Organic food consumption will lead to less disease like cancer.	3.64	0.86
Organic foods are easily available	2.65	1.01
Organic food production is eco-friendly	4.68	0.63
Organic foods can be easily integrated in existing food patterns	3.27	1.04
I find the adoption of organic foods in India desirable	3.92	2.82
I feel restriction in my freedom of choice of foods, if I go for organic foods	2.40	0.76
Organic food is more fresh than the conventional one	3.65	0.78
Organic food is natural	4.15	0.62
Organic foods are on the healthy food systems	4.28	0.46
Organic foods are easily accessible	2.98	1.05
Organic foods are easily affordable	2.60	0.86
Overall MPS	3.27	

Table 3 provides overall mean perception score (MPS) of the respondents of Ranchi as 3.23 which denotes moderate level of perception regarding organic foods. The statement 'I always prefer to purchase organic food although its price is high compared to others' shows lowest MPS of 1.63 (SD=0.90). This means that high price of organic foods as compared to that of conventional foods is one of the major hindering factors in the way of its easy consumption and mainstreaming. Other statements having low MPS are organic foods will lead to food deficit (MPS=1.85), Organic foods leads to malnutrition (MPS=2.48), taking organic foods is a status symbol (MPS=2.16), organic foods are easily available (2.88). Respondents of Ranchi strongly perceived that organic foods are safer than conventional one (MPS=4.80) with

less variability (SD=0.83). Besides this, other factors on which respondents strongly agreed are organic foods are more nutritious (MPS=4.11), safer (MPS=3.81), difficulty in getting organic foods in nearby areas (MPS=3.91), eco-friendly (MPS=4.50), natural (MPS=4.20) and healthy food system (MPS=4.30).

Table 3: Perception of the respondents of Ranchi regarding organic food (n2=60)

Statements	MPS	SD
I feel organic food is safer than the conventional one.	3.81	0.97
I think organic food is more nutritious than the traditional food.	4.11	0.94
I always prefer to purchase organic food although its price is high compared to others.	1.63	0.90
It is difficult to get organic foods in nearby areas	3.91	1.07
Organic food is tastier.	3.18	0.94
Organic food generally takes less time for cooking than conventional foods.	2.63	0.91
I have no belief in most of the companies who are selling organic food product whether they are selling 100 per cent organic products.	3.46	0.81
I feel public awareness is needed for identifying authentic food products.	3.6	1.54
I suggest my children/ relatives to always buy organic products.	2.55	1.17
I feel that organic foods are easily digestible.	2.73	1.20
Organic foods have longer shelf life.	3.41	0.78
Eating organic food is a status symbol.	2.16	0.69
I should depend on organic food for good health.	4.08	0.88
Organic food eating is just a fad.	2.8	1.01
Consumption of organic foods can lead to malnutrition	2.48	1.45
Organic farming will lead to food deficit.	1.85	0.95
Organic food consumption will lead to less disease like cancer.	3.80	0.65
Organic foods are easily available	2.88	1.00
Organic food production is eco-friendly	4.50	0.70
Organic foods can be easily integrated in existing food patterns	3.15	1.11
I find the adoption of organic foods in India desirable	3.25	1.14
I feel restriction in my freedom of choice of foods, if I go for organic foods	2.28	0.69
Organic food is more fresh than the conventional one	4.80	0.83
Organic food is natural	4.20	0.46
Organic foods are on the healthy food systems	4.30	0.51
Organic foods are easily accessible	3.00	0.97
Organic foods are easily affordable	2.65	0.68
Overall MPS	3.23	

Table 4 portrays that the overall MPS for respondents of Kolkata and Ranchi almost fall in the same range i.e. MPS for Kolkata is 3.27 and that for Ranchi is 3.23 with less variability in responses (SD for Kolkata=0.95, SD for Ranchi=0.93). Respondents of both the places have moderately perceive that organic foods are healthy, environment friendly, safe along with some limiting factors like high price, not easily accessible etc. The major limiting factor perceived by respondents of Ranchi was the high price of organic foods as compared to that of conventional one. Major limiting factors for respondents of Kolkata was not easy availability of organic foods in nearby areas, high price, and lack of public awareness. The findings of the current study can be supported by the findings of Kumar and Chandrasekhar (2015) came out with the view that urban people are having good perception towards consumption of organic food. But, supply cannot compensate the rising demands which

ultimately leads to increasing price. Marketing facilities are also inadequate and lack of awareness is also less. Hughner *et al.* (2007) reviewed previous research and concluded that the motives of organic food consumers include concerns about health, the environment, food safety, and animal welfare, desires for supporting the local economy and a wholesome lifestyle, nostalgia for the past, and pursuit of fashion. Some of the findings of this study match with the findings of the current study. Similar trends were found in the study of Mukul *et al.* (2013) who was of the opinion that consumers' perceptions on quality sureness of organic food consumption is influenced by five factors namely food safety, price, environmental friendly, nutrition and sensory attributes.

Table 4: Comparison of MPS and SD of kolkata and ranchi. (n= 270, n1=210, n2=60)

Places	MPS	SD
Kolkata	3.27	0.95
Ranchi	3.23	0.93

CONCLUSION

The results of the present study clearly revealed that in Eastern India the preference of organic foods in comparison with conventional foods is at a moderate level. Although urban people are having some knowledge regarding organic food but still much more public awareness is needed regarding accurate organic farming practises and norms, organic tagging and labelling of food products etc. to bring it into mainstream market. Majority of the people prefer to take organic foods because these foods are eco-friendly, healthy, safer, fres.. The adoption of organic food in India seems obviously desirable. But Besides having these positive notions regarding organic food, there are some barriers which come across its way of getting popularized. These are high price, lack of easy availability, accessibility, lack of authenticity in the organic labelling etc. This implies that still there lies a big gap between expanding organic markets and actual consumption. There is an immediate need to tackle these obstacles that come in the way of organic food purchasing and ultimate consumption. At this point extension service can a major role by arranging for demonstrations or exhibitions or discussions to be conducted for enhancing

knowledge and awareness regarding organic foods. Strategies should be undertaken to popularize organic food consumption. Authentic certification of organic products, price lowering by allowing subsidies, giving a share of profit margin to the organic producer, undertaking quality control policy strictly in context of organic products are some of the ways that can help in better commercialising organic foods and its consumption.

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