

Consumption Pattern And Purchase Intention Of Consumers Regarding Organic Food Products :An Empirical Study In Delhi Ncr

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ABSTRACT

The objectives of this study were to examine the organic food consumption pattern and purchase intention of consumers towards organic food. Respondents were selected by using stratified convenience sampling method. The data was collected from Delhi (National capital Region). Out of 500 respondents personally interviewed, 442 questionnaires were completed and suitable for further analysis. Frequency distribution, percentage and cross tabulation were used as statistical tool to analyze data with the help of SPSS. The finding of the study revealed that the consumption of organic products has increased tremendously during last five years. Herbs, spices, pulses, vegetable, fruits and cereals were consumed frequently by the respondents. Specialized organic stores considered as most preferred place to buy organic food followed by karyana store, supermarket, and vegetable market. Majority of respondents come to know about organic food through Word-of-mouth communication followed by specialised organic food store, foreign visits. Internet, newspaper and magazine are major source of information for nutritional and safety updates. Organic India was the most preferred organic brand followed by 24 letter manta, Morarka and Sanjeevani. The study suggested that for improving awareness regarding organic food, the marketers and producers should conduct health campaigns, public lectures, and use print media and internet as effective tool to enhance the awareness about organic food among common people.

Key words: *organic food, Consumption pattern*

1. INTRODUCTION

With rise in awareness level regarding Environment conservation and sustainable development, in modern era consumers have become highly conscious about their food choices and its relative health benefits. Consumers are inclined more towards those food products which are free from pesticides, artificial colouring and preservatives (Zotos, 1999). Organic food generally considered as a healthier food and more favorable to human health than conventional foods (Holden, 2000; gold, 2007;Oliveira et al., 2013). According to United States Department of Agriculture (USDA, 2002) Organic food is produced without use of conventional pesticides, synthetic fertilizer, and also free from bioengineering. Organic food have high amount of nutrition value, minerals like zinc, iron, phosphorus, magnesium and vitamins particularly vitamin c (Crinnion, 2010). The studies indicate that organic food

helps to trim down the risk of obesity, cancer, diabetes, high blood pressure and moreover, inspire consumers to buy organic food [1](Crinnion, 2010; Paul, Kemp, & Segal, 2013; Stevens, 2010). Over the last few years demand of organic food products has been increasing significantly due to change in food habits and tremendous enhancement in consumers awareness and consciousness related to environment protection, safety and health issues.

According to “Organic Industry Survey” conducted by Organic trade association, 2016, total sale of organic food in USA touched a new record of \$43.3 billion showing 11 percent growth over corresponding year which was \$39.7 billion. The survey projected 14 percent growth rate of USA organic food market during 2013-2018 [2]. Globally organic food market is expected to grow at 16 percent Compound Annual Growth Rate (CAGR) during 2015-2020 (TechSci Research, 2015).

In India, total area under organic certification (including wild collection area) was 1.2 million hectare in 2008 (FIBL & IFOAM, 2010), 5.21 million hectare in 2013 (FIBL & IFOAM, 2015) and continuously growing at fast pace and covered 7.2 million hectare (FIBL & IFOAM, 2016) in 2014. India reached to 9th position all over world by capturing largest area of organic agriculture whereas on top of the list is Australia with 27.15 million hectares (FIBL & IFOAM, 2018). National programme for organic production (NPOP) has been put into practice by the Indian Government to encourage organic farming. It deals with standards and practices of organic production and organic farming certification. This programme provides education and financial support to farmers and producers on regular intervals. European Union, Switzerland, and United State of Agriculture department (USDA Organic) officially recognised NPOP Standards and practices for production, unprocessed plant products, and for certification of organic agriculture (Apeda, 2018). Recognition from accredited bodies facilitates Indian organic food products to be easily accepted in the foreign market.

Total production of certified organic food in India increased from 1.35 to 1.70 Metric Tonnes which encompass diversity of food products i.e. Vegetables, fruits, spices, tea, dry fruits, coffee, sugarcane, pulses, cereals & millets, oil seeds, cotton and medicinal plants (Apeda, 2018). In India, Madhya Pradesh constitutes maximum area under organic certification and Sikkim has been declared fully organic state (Apeda, 2018). India is the largest producer of organic cotton followed by China, Turkey, Tanzania and the USA. Out of total organic producers (2.3 million) in the world, Asia comprises 40 percent, Africa 26 percent and Latin America 17 percent of organic producers. India is the sole country with largest number of organic producers (6, 50,000) in the world followed by Uganda (1,90,552) producers and Mexico (1,69,703) (FIBL & IFOAM, 2016). But as per FIBL & IFOAM, 2018, India has been increasing constantly number of producers year by year and having highest number of producers (835,200), followed by Uganda (210,352), and Mexico (210,000). In the year 2015-16, India has exported 263687 Metrics tonnes of organic food but in the year of 2018 increased to 4.58 lakh Metrics tonnes in all over the world (European Union, United states, Switzerland, New Zealand, Australia, Canada etc.) worth increased from \$298 to \$515.44 million US dollar in the 2018 year (Apeda, 2018). According to TechSci Research report 2015, the Indian organic food industry is expected to grow at the Compound Annual Growth Rate of more than 25 percent during 2015-20.

Due to increase in awareness and knowledge of consumer the demand for organic food is rapidly increasing and people show positive approach towards organic food. But despite of increase in demand and positive attitude of people, still huge chunk of consumers prefer to buy conventional food than organic food in India. This paper aims to provide insight

regarding consumers' opinion, level of awareness, consumers' consumption pattern and purchase intention towards organic food among Indian consumers.

Objective of the Study

To study consumption pattern of Indian consumers towards organic food products

To examine purchase intention of Indian Consumers regarding organic food products

2. REVIEW OF LITERATURE

While buying organic food products, health consciousness, environmental concern, and food safety concerns are the major drives which influenced perception of consumers [3], [4]. [5] revealed that health is a major aspect behind escalation in demand for organic food. Consumers do not want to compromise with health aspects of eatables in any manner. Health is the main drive which generates a link between consumers and organic food (Makatouni, 2002). The consumer wants "safe food" and organic food seems to be fitted very well in the frame of safe food because organic farming complies with stringent regulation and standards that restrict the use of synthetic pesticides and chemical in certified pasture and croplands.

As per the previous researches conducted, other reasons such as rise in level of education, knowledge of consumers regarding healthy food and their concern regarding eco-friendly food played significant role in rising the curiosity among consumers for organically grown food [5], [6]. Majority of people are well aware regarding organic food. Consumers' perceived that consumption of these products seems to be free from synthetic fertilizers, safer and healthier alternative to conventional food [6], [7]. [8] revealed that consumers exposed positive attitude towards organic products and also ready to pay premium price for these products. Gill et al. 2000 claimed that 50 percent of respondents of their sample were ready to pay 15-25 percent more for organic food. Moreover, Canavari et. al., 2003 also concluded that 65.8 percent of Italian organic consumers willing to pay premium price for organic peaches and apples. Finding from the previous studies mentioned that consumers have shown positive value perception regarding these products. Although, it does not mean that positive perception and willing to pay more for organic food transform prospective buyers into actual buyers. Organic food is still far away from the food basket of aware people [9]

However, some studies exhibit negative value perception in context of organic food. Many barricades like higher price than conventional food, [10]–[13] non availability of organic food, doubts on products certification, lack of knowledge, [5], [13] (and satisfaction with existing conventional food [11], [14] limits the consumption of organic food in the market. Superior quality, reasonable prices, adequate knowledge about organic food and pesticide residue practices can be the focal points to catch potential buyers (Vitterso & Tangeland, 2015).

[15] revealed that adequate knowledge about food influenced the consumers' buying decisions. [16] found that urban consumers are more aware than rural consumers. Working professionals buy organic food on regular basis as they believe intake of organic food helps to trim down stress levels and maintain an energetic lifestyle. Both male and female consumers are enthusiastic to pay more for organic food and try to collect more and more adequate information regarding these products due to health related benefits.

Factors such as health consciousness, environmental concerns and organic knowledge significantly influenced the attitude of the consumers towards organic food. Furthermore,

quality, adequate knowledge, familiarity and availability of organic food affects purchase intention of consumers. Familiarity the sole dimension was found to exhibit a high correlation with purchase intention and organic consumer's purchase behaviour. Increasing organic knowledge through educational campaigns not only makes consumers more aware and familiar with organic food products but also increase intention to buy organic products [17]. Consumers' belief and Knowledge regarding green and eco-friendly products influenced the intention of consumers regarding organic food products [18].

3. RESEARCH METHODOLOGY

A self administered questionnaire was designed to gauge the consumption pattern and purchase intention of consumers. The measurement instrument was designed in three distinct facets. First section comprised questions regarding consumption pattern of organic consumers. Second section consisted questions related to purchase intention of the consumers. Third section is related to demographic profile of the respondents.

After discussing with academicians experts and organised organic food retailers the study is purported to accumulate response of consumers who would be stepping in various specialised organic store, supermarket, organic vegetable market and Karyana stores. Stores were selected on the basis of monthly footfall. Stores were divided into 3 groups; 1. low footfall group (less than 40 footfall) 2. Medium footfall group (between 40 to 90 footfall) 3. High footfall group (more than 90 footfall). Out of 53 visited stores, 30 stores were fallen in the category of low footfall group and 13 were fallen in medium group. Only 10 stores were fallen in the category of high footfall group, which indicates that more than 90 consumers buy organic food from these stores. The stores with medium and high footfall were considered for the survey purpose.

Statistical tools like frequency distribution, percentage and cross tabulation have been utilized in the current study to examine consumers' consumption pattern and purchase intention with the help of SPSS. The data has been collected from 500 respondents in the NCR Region (Delhi, Noida, Gurgaon). After scrutinized the data, 442 questionnaires found to be completed and suitable for further analysis. Purchase Intention Statements measured on five-point likert scale.

4. DATA ANALYSIS AND INTERPRETATION

Demographic profile of the respondents

Table 1:
Demographic profile of the respondents

Demographic		Frequency (Total no. respondents 442)	Proportion of the sample (%)
Gender	Male	242	54.8
	Female	200	45.2
Age(in years)	21-30 years	48	10.9
	31-40 years	140	31.7
	41-50 years	143	32.4

	51-80 years	111	25.1
Occupation	Govt. Services	121	27.4
	Private Services	175	39.6
	Business	105	23.8
	Specified any other	41	9.3
Education	Graduate	176	39.8
	Post-Graduate	224	50.7
	Any other	42	9.5
Income per month	20,000 to 50,000 Rs	79	17.9
	50,000 to 1,00,000 Rs	175	39.6
	1,00,001 to 1,50,000 Rs	95	21.5
	1,51,000 to 2,00,000 Rs	56	12.7
	Above 2 lakh	37	8.4
Marital Status	Married	338	76.5
	Single	104	23.5
Area of residence	Rural	48	10.9
	Urban	394	89.1

Source: Primary Data

Table 1 illustrated the demographic characteristics of the respondents. In this study, 54.8 percent of the respondents are male and 45.2 percent respondents are female. Majority of respondents (32.4%) are belongs to the age group of 41-50 and 31.7 percent represent age group 31-40 years. In term of profession, most of respondents were from services class (39.6 percent from private services and 27.4 percent from government services). As the table pointed that half of respondents are well educated, 50.7 percent respondents have master degree, 39.8 percent have bachelor degree and rest 9.5 percent have doctorate degree. While considering the income category, 39.6 percent of the respondents were getting salary between 50,000 and 1 lakh per month. A large portion of respondents belongs to the urban area (89.1 %). Most of the respondents were married (76.5%) and fewer respondents were single.

Table 2:
Consumption pattern of organic food consumers

Statements		Total No. of respondents (442)	Percentage
When did you buy organic food first time	Before 2000	41	9.3
	2000-2005	57	12.9
	2006-2010	153	34.6
	2011-2015	191	43.2
How often do you buy organic food	Daily	81	18.3
	Thrice a week	23	5.2
	Twice a week	75	17
	Once in a week	81	18.3

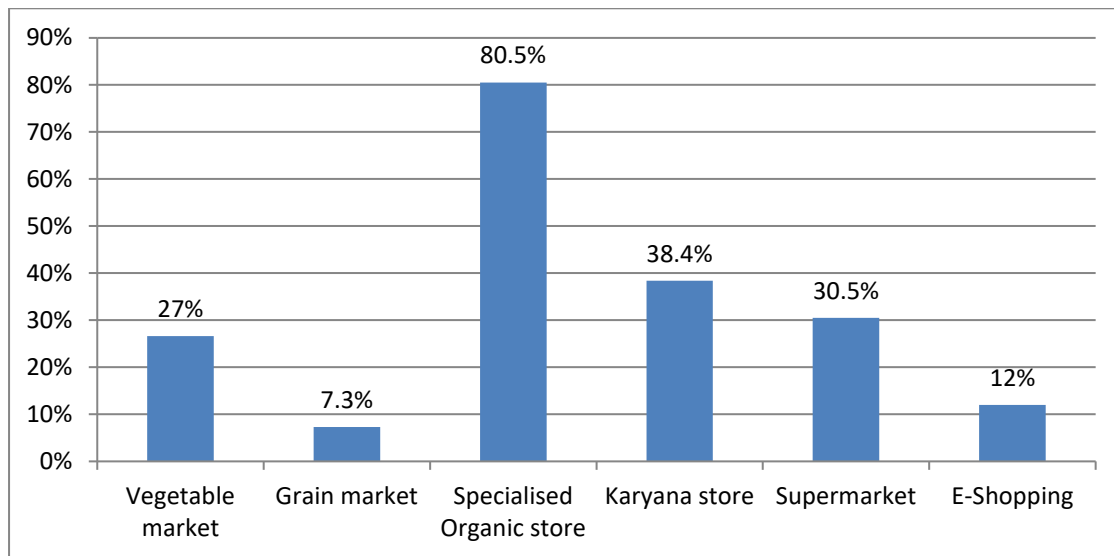
	Once in 2 week	58	13.1
	Once in month	124	28
Monthly expenditure on food	Up to 5000	17	3.8
	5000-10000	101	22.9
	10000-15000	132	29.9
	15000-20000	97	21.9
	Above 20000	95	21.5
Monthly expenditure on organic food	Up to 5000	142	32.1
	5000-10000	155	35.1
	10000-15000	66	14.9
	15000-20000	47	10.6
	Above 20000	32	7.2
Respondents' Tendency to read organic food labels	Never	4	0.9
	Often	160	36.2
	Always	278	62.9

Source: Primary Data

The demand of organic food has increased in last decades. 43.2 percent of the respondents have been interested in organic food for more than 5 years and 34.6 percent of the respondents were interested in organic food during the period of 2006-2011. A clear majority (28%) of the participants do organic food shopping once in a month followed by 18.3 percent of respondents purchase organic food on daily bases and same percentage of consumers buy twice in a week.

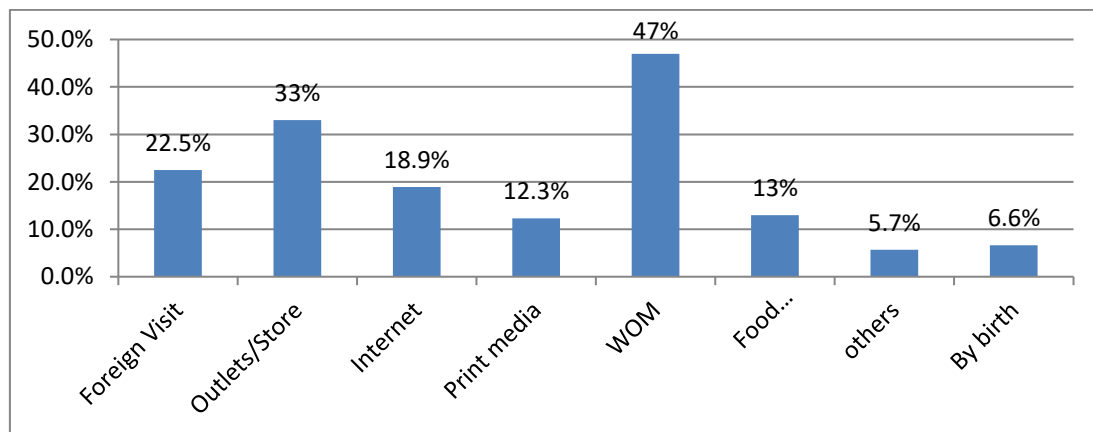
As shown in table 1, 29.6 percent of the respondents' monthly expenditure on food was between Rs. 10000 and 15000 and 23.1 percent spend between 5000 and 10000. These results suggested that most of the (72.7 %) consumers spend more than 10000 Rs. on food every month. Furthermore, majority of respondents (35.1 %) spend between 5000-10000 Rs per month and 32.1 percent of respondents spend up to 5000 on organic food over conventional food.

Table 1 gauges the respondents' tendency to pay attention on information label while buying organic food products. Massive portion of respondents (62.9%) pay attention towards information labels on organic food and 36.2 percent of respondents who often pay attention on food labels.



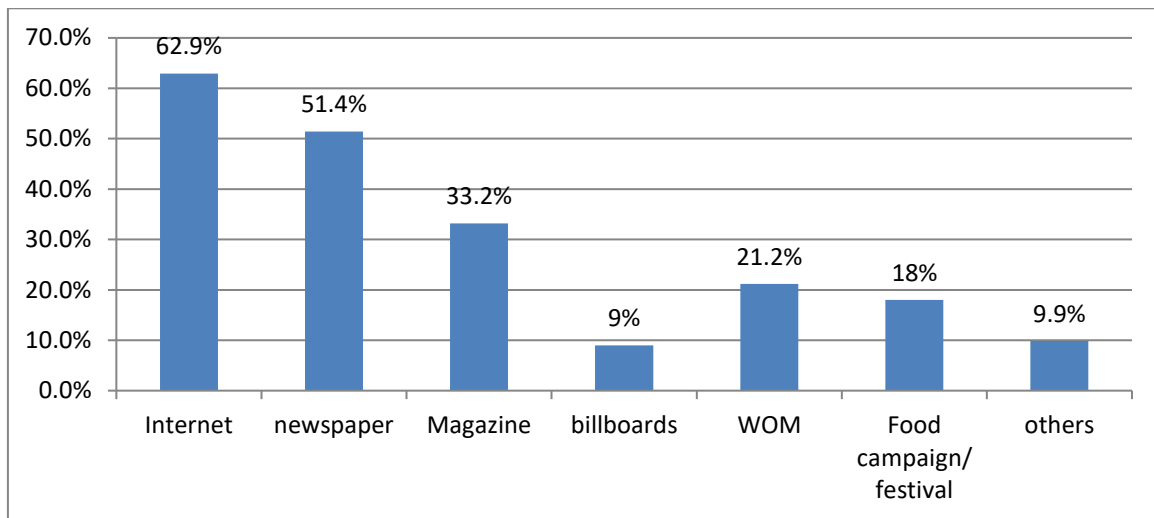
Source: Primary Data
Figure 1: Preferred place of purchase for organic food products

Figure 1 shows the distribution of the respondents on the basis of preferred place for organic food shopping. Most of the consumers (80.5%) buy organic food from specialized organic food store followed by karyana store (38.4%). A fewer number of respondents buy organic food products from E-shopping websites and grain markets, 12 percent and 7.3 percent respectively.



Source: Primary Data
Figure 2: Source of information regarding organic food

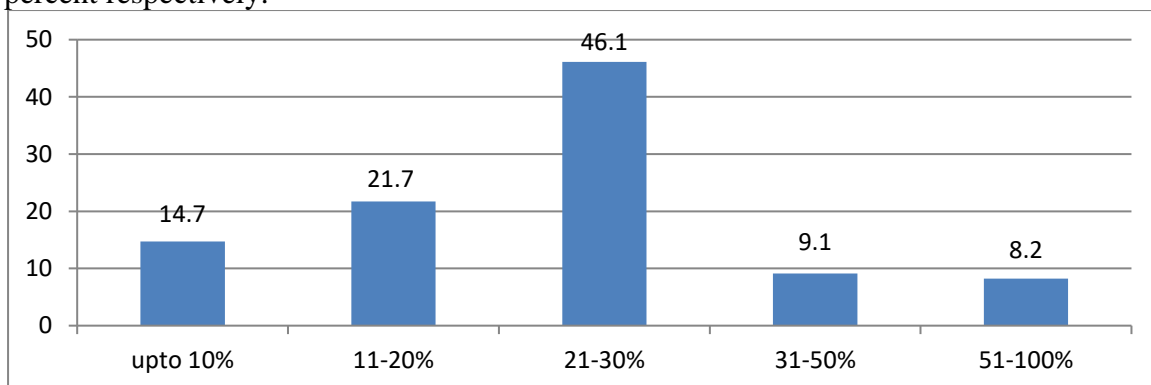
Figure 2 depicts the distribution of the respondents on the basis of source of information about organic food. Majority of respondents (47%) asserted that Word-of-mouth communication is a main source of information followed by 33 percent of respondents exposed that they know about organic food through specialized organic outlets/stores. 22.5 percents of participants know about organic food from foreign visit.



Source: Primary Data

Figure 3: Source of information regarding food safety and nutritional updates

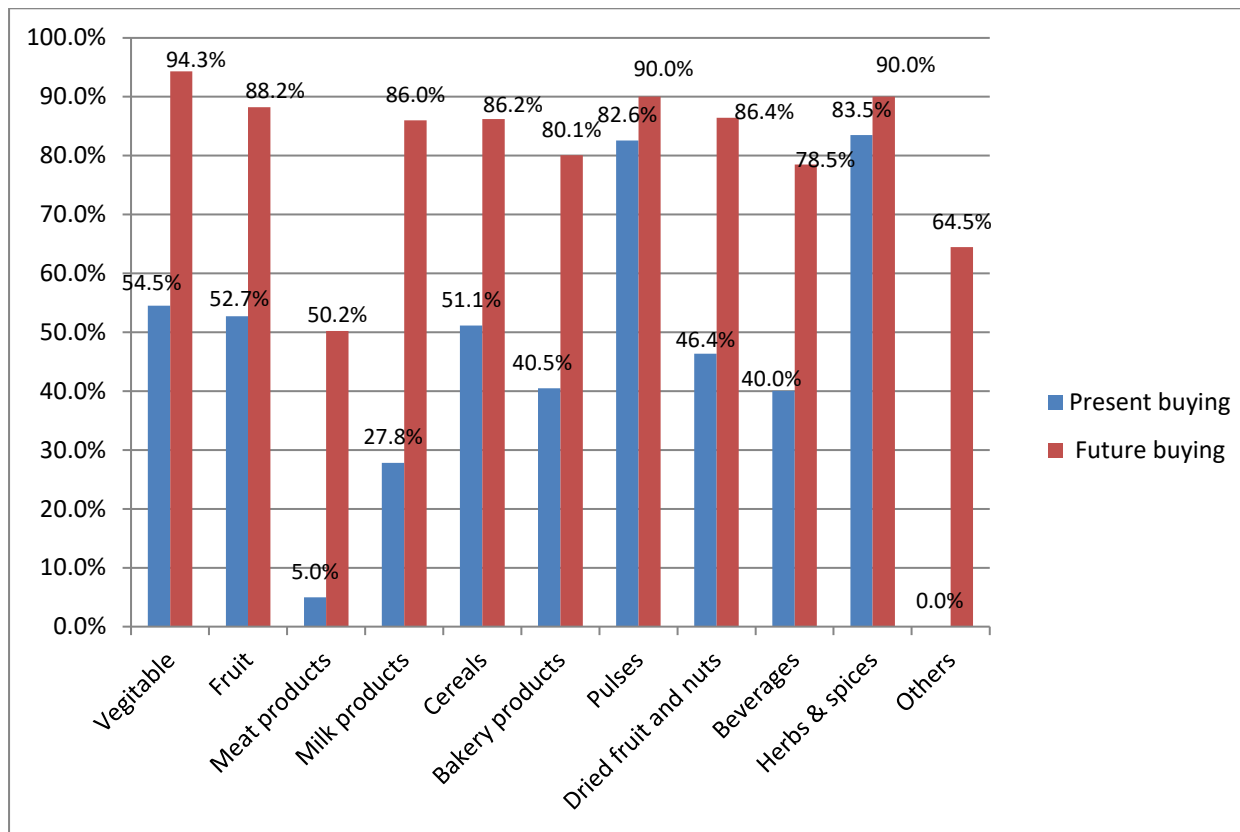
Figure 3 described that a majority of respondents get information regarding food safety and nutritional updates from Internet, newspaper, magazine, 62.9 percent, 51.4 percent, and 33.2 percent respectively.



Source: Primary Data

Figure 4: Willingness to pay an extra price for organic food products

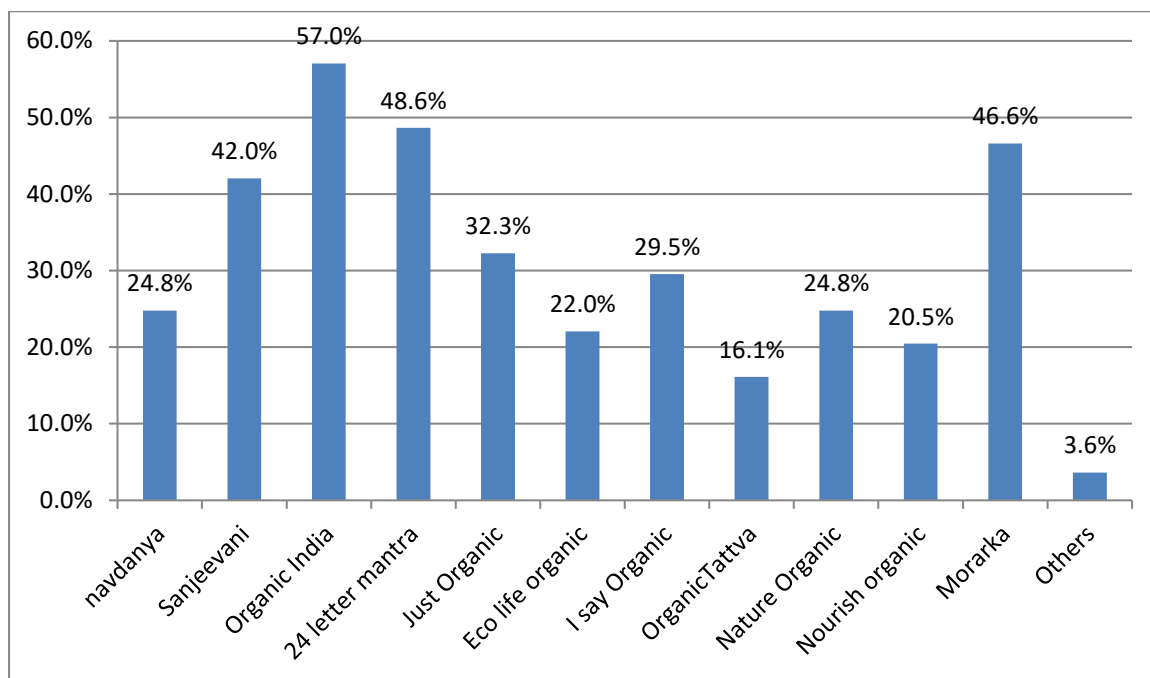
When respondents were asked about “How much extra money, you are ready to pay to buy organic food products, as compared to conventional food products”, majority of respondents (46.1 %) were willing to pay premium price up to 21-30 percent more for organic food. 21.7 percent of respondents were willing to pay 11-20 percent more.



Source: Primary Data

Figure 5: Product consumption in present and future

Figure 5 represents which type of organic food already consumed and expected to buy in near future by the respondents. In the case of organic consumption herbs, spices and pulses are the most preferred organic food products considered by the respondents followed by Fresh vegetables, fruits and cereals. Meat products, milk products and bakery products are the least preferred organic food items by the consumers. Prediction of prospective demand was done on the basis of future preference for organic food marked by the respondents. Analysis concluded that vegetables, pulses, herbs, spices and fruits are most preferred organic products in the future. Milk products, cereals, and dry fruits showed equal number of preference followed by bakery products and beverages. Consumers want to buy other organic food products like jiggery, juice, flour, organic beauty products and also organic medicines. Respondents showed less preference regarding meat and bakery products category. Furthermore, consumers show great intention to buy each and every item of organic food in the future.



Source: Primary Data
Figure 6: Most Preferred organic brand

Organic India dominates the Organic market of Delhi-NCR area as 57 percent of respondents preferred this brand as clearly shown in figure 6. After Organic India, 24 Letter mantra (48.6%), Morarka(46.6%) and Sanjeevani (42%) are preferred by the respondents the most. There are few brand like Just organic, I say organic possessed by respondents were 32.3 percent and 29.5 percent respectively. Fabindia, Conscious food, Organic tattva and many more brands preferred less by organic consumers.

Purchase intention towards organic food products

Table 3:
Cross tabulation of the respondents on gender basis.

Statements	Responses	Male(242)	Female(200)
I am willing to buy organic food in future	Strongly disagree	12(5.0%)	8(4.0%)
	Disagree	8(3.3%)	5(2.5%)
	Neutral	25(10.3%)	30(15.0%)
	Agree	143(59.1%)	121(60.5%)
	Strongly agree	54(22.3%)	36(18%)
I would buy more organic products if more information will be available in media.	Strongly disagree	10(4.1%)	7(3.5%)
	Disagree	11(4.5%)	6(3%)

	Neutral	42(17.4%)	27(13.5%)
	Agree	119(49.2%)	104(52%)
	Strongly agree	60(24.8%)	56(28.0%)
I would look for specialty shops to buy organic food	Strongly disagree	5(2.1%)	5(2.5%)
	Disagree	16(6.6%)	6(3.0%)
	Neutral	35(3.0%)	39(19.5%)
	Agree	111(45.9%)	85(42.5%)
	Strongly agree	75(31.0%)	65(32.5%)
I would also recommend others to buy organic food	Strongly disagree	10(4.1%)	4(2%)
	Disagree	7(2.9%)	10(5%)
	Neutral	42(17.4%)	37(18.5%)
	Agree	108(44.6%)	78(39%)
	Strongly agree	75(31%)	71(35.5%)
I would buy more organic products if organic products are genuinely certified	Strongly disagree	9(3.7%)	7(3.5%)
	Disagree	7(2.9%)	5(2.5%)
	Neutral	29(12%)	26(13%)
	Agree	118(48.8%)	90(45%)
	Strongly agree	79(32.6%)	72(36%)
I would buy more organic products if widely & easily available	Strongly disagree	6(2.5%)	6(3%)
	Disagree	10(4.1%)	9(4.5%)
	Neutral	31(12.8%)	14(7%)
	Agree	110(45.5%)	80(40%)
	Strongly agree	85(35.1%)	91(45.5%)

As shown in table 2, 81.4 percent of male respondents and 78.5 percent of female respondents agreed to buy organic food in future. For next statement female respondents (80 %) are more inclined to consume organic food if more information available in media than male respondents (73.4%). 76.9 percent of male respondents and 75 percent of female respondents agreed to buy organic food from specialized organic stores for safety and quality issues. The largest part of male and female respondents (75.6% of male and 74.5% of female respondents) agreed to recommend others to buy organic food for good health. More than 80 percent of male and female respondents will buy organic food if it gets certified from recognized body. Finally, 85.5 percent of female respondents and 80.6 percent of male respondents agreed to purchase organic food if it is easily available in the market.

5. FINDING AND CONCLUSION

Extant study explored the consumption pattern and purchase intention of consumers for organic food products in India. Rise in education level and increased awareness regarding environment friendly edibles are major reasons behind the unprecedented demand for organic food. Results indicate that during last decade, there has been significant increase in sale of organic food products. Before that only selected consumers used to buy organic food. In term of organic food consumption frequency, most of the consumers buy organic food once in month. Few number of respondents consume on daily basis, once in a week and twice in a week. It is apparent from findings that majority of respondents agreed that they spend more than Rs10000 on food every month, which shows that organic producers and manufacturers have best opportunity to tap those potential customers through providing adequate information about organic food. Two-third of respondents already spend more than Rs5000 on organic food so it clearly shown that the consumer willing to spend on organic.

Almost half of the organic consumers admitted that they always see labels of food while buying food items, negligible number of the respondents agreed that they never pay attention on food label at the time of shopping food. Our results in line with Rodríguez, Lupín & Lacaze, (2006) found that high percentage respondents from their sample admitted that they read label information. Specialized organic food store considered as a most preferred platform for organic food shopping followed by karyana store, supermarket, and vegetable market. Word-of-mouth communication is considered as a prominent source to obtain information regarding organic food. Other important sources of information are specialised organic food store, foreign visits, internet and food campaigns/festivals. In addition, highest percentage of respondents agreed that internet, newspapers and magazines are the popular sources to attain information regarding food safety and nutritional updates. Therefore, organic producers can use these means of communication to create awareness among untapped Indian potential customers. Organic products like herbs, spices, pulses, vegetable, fruits and cereals were consumed on regular basis by the respondents. But meat, milk and bakery products are type of organic food that the respondents do not consume on regular basis. Half of the respondents were willing to pay extra money up to 30 percent for organically grown products. Most of the respondents were claimed that Organic India is the most preferred brand followed by 24 Letter mantra, Morarka and Sanjeevani.

Study found that both male and female respondents are willing to buy organic food in future on regular basis if more information available in the media, if product is genuinely certified and if products will be easily and widely available in the market. Most of the respondents said that they will also recommend to their relatives and friends to consume organic food for

better health. This result signifies that both male and female have shown high purchase intention towards organic food products.

6. MANAGERIAL IMPLICATION

It is clear from the previous studies that the organic food market is niche market for Indian consumers. This study provides insight to producer and marketers about consumption, perception and purchase intention of organic food consumer. Producers and marketers should do some effective efforts to create awareness and build trust among consumers regarding organic food products. This study suggests that government involvement should be there to promote organic farming and also support farmers and producers by granting subsidies to them. Some amount of budget should also be allocated to R&D agencies to find the best way or production technique to reduce the cost of organic food. Currently in India, organic producers adopted export oriented approach to earn more profit from western country. Firstly, organic producer and government need to support the domestic organic food market to fulfill the demand of existing domestic consumers. Furthermore, organic producers have best opportunity to tap the untapped market of potential customers.

It is apparent from the this studies public lectures, organic food events and health campaigns need to be organized for all level of societies, schools, restaurant, stores, universities and also for all level of age group people. These awareness campaigns leads to eradicate the confusion exists in the mind of consumers regarding organic food and portrait the lucid picture of organic food in the eye/front of consumers. These efforts would elevate the consumption and intention for organic foods among people. This study is limited to only Delhi-NCR region, so finding cannot be generalised for entire population of India. Considering diversity in India population and culture of the country, future research should be carried out on larger extent and cover other part of the country to better understand the consumption pattern of organic consumers.

7. REFERENCE

- [1] A. Cochu *et al.*, *Study on the potential of green bond finance for resource-efficient investments*. 2016.
- [2] D. F. Jennings and S. L. Seaman, "Aggressiveness of response to new business opportunities following deregulation: An empirical study of established financial firms," *J. Bus. Ventur.*, vol. 5, no. 3, pp. 177–189, 1990, doi: 10.1016/0883-9026(90)90031-N.
- [3] J. Aertsens, K. Mondelaers, W. Verbeke, J. Buysse, and G. van Huylenbroeck, "The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food," *Br. Food J.*, vol. 113, no. 11, pp. 1353–1378, 2011, doi: 10.1108/00070701111179988.
- [4] M. B. Basha, C. Mason, M. F. Shamsudin, H. I. Hussain, and M. A. Salem, "Consumers Attitude Towards Organic Food," *Procedia Econ. Financ.*, vol. 31, no. 15, pp. 444–452, 2015, doi: 10.1016/s2212-5671(15)01219-8.
- [5] B. Roitner-Schobesberger, I. Darnhofer, S. Somsok, and C. R. Vogl, "Consumer perceptions of organic foods in Bangkok, Thailand," *Food Policy*, vol. 33, no. 2, pp. 112–121, 2008, [Online]. Available: <https://econpapers.repec.org/RePEc:eee:jfpoli:v:33:y:2008:i:2:p:112-121>.
- [6] S. Padel and C. Foster, "Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food," *Br. Food J.*, vol. 107,

- 2005, doi: 10.1108/00070700510611002.
- [7] B. P. Baker, C. M. Benbrook, E. Groth, and K. L. Benbrook, "Pesticide residues in conventional, integrated pest management (IPM)-grown and organic foods: Insights from three US data sets," *Food Addit. Contam.*, vol. 19, no. 5, pp. 427–446, 2002, doi: 10.1080/02652030110113799.
- [8] M. Radman, "Consumer consumption and perception of organic products in Croatia," *Br. Food J.*, vol. 107, pp. 263–273, Apr. 2005, doi: 10.1108/00070700510589530.
- [9] F. Shafie and D. Rennie, "Consumer Perceptions Towards Organic Food," *Procedia - Soc. Behav. Sci.*, vol. 49, pp. 360–367, 2012, doi: 10.1016/j.sbspro.2012.07.034.
- [10] D. A. Jolly, "Differences Between Buyers and Nonbuyers of Organic Produce and Willingness to Pay Organic Price Premiums," *J. Agribus.*, vol. 09, no. 1, p. 62304, 1991, [Online]. Available: <https://econpapers.repec.org/RePEc:ags:jloagb:62304>.
- [11] G. V. T. Tangeland, "The role of consumers in transitions towards sustainable food consumption. The case of organic food in Norway," *J. Clean. Prod.*, vol. 92, pp. 91–99, 2015.
- [12] M. Wandel and A. Bugge, "Environmental concern in consumer evaluation of food quality," *Food Qual. Prefer.*, vol. 8, no. 1, pp. 19–26, 1997, doi: [https://doi.org/10.1016/S0950-3293\(96\)00004-3](https://doi.org/10.1016/S0950-3293(96)00004-3).
- [13] W. A. A. Al-Taie, M. K. M. Rahal, A. S. A. AL-Sudani, and K. A. O. AL-Farsi, "Exploring the Consumption of Organic Foods in the United Arab Emirates," *SAGE Open*, vol. 5, no. 2, 2015, doi: 10.1177/2158244015592001.
- [14] M. Magnusson, A. Arvola, U.-K. Hursti, L. Åberg, and P.-O. Sjöden, "Attitudes towards organic foods among Swedish consumers," *Br. Food J.*, vol. 103, pp. 209–227, Apr. 2001, doi: 10.1108/00070700110386755.
- [15] P. Honkanen and L. Frewer, "Russian consumer motives for food choice," *Appetite*, vol. 52, pp. 363–371, 2009.
- [16] S. S. Mohamad, S. D. Rusdi, and N. H. Hashim, "Organic Food Consumption among Urban Consumers: Preliminary Results," *Procedia - Soc. Behav. Sci.*, vol. 130, pp. 509–514, 2014, doi: <https://doi.org/10.1016/j.sbspro.2014.04.059>.
- [17] M. Keogh-Brown, R. Smith, J. Edmunds, and P. Beutels, "The macroeconomic impact of pandemic influenza: estimates from models of the United Kingdom, France, Belgium and The Netherlands," *Eur. J. Heal. Econ.*, vol. 11, no. 6, pp. 543–554, 2010, [Online]. Available: <https://econpapers.repec.org/RePEc:spr:eujhec:v:11:y:2010:i:6:p:543-554>.
- [18] M. J. Polonsky, A. Vocino, S. L. Grau, R. Garma, and A. S. Ferdous, "The impact of general and carbon-related environmental knowledge on attitudes and behaviour of US consumers," *J. Mark. Manag.*, vol. 28, no. 3–4, pp. 238–263, 2012, doi: 10.1080/0267257X.2012.659279.