Original Research Article

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A study on awareness of organic food products in Trichy district

Rock B. 1*, Puhalenthi K. 1, Vishnupriya S. 2, Pavithra R. 2, Supriya A. S. 2, Gayathri K. 1

¹Department of Community Medicine, ^{1,2}Chennai Medical College Hospital and Research Centre, Trichy, Tamil Nadu, India

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*Correspondence: Dr. Rock B.,

E-mail: rockbrittogmail.com

E-man. rockormogman.com

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ABSTRACT

Background: The high growth of population and life expectancies during the recent years increased demand for food supplies in India. To meet this, the green revolution became the corner stone of agricultural achievement. Overexploitation of natural and non-renewable resources has impaired ecological balance and has put the health of the consumers in jeopardy. Therefore it is inevitable to resort to organic food products. The aim of the study was to assess the awareness of organic food products among the consumers in Trichy district, Tamil Nadu.

Methods: A cross sectional questionnaire based study was conducted among rural, semi-urban, urban residents (100 each, total of 300) in august 2016.

Results: Out of 300 respondents, 76%, 73%, 62% of the respondents have heard known about, and purchase organic food products respectively. The main source of organic foods was from specific shops and kitchen gardens and the most preferred factor while purchasing food items is the credibility. Though 62% of consumers purchase organic food, they mainly prefer vegetable and fruits and 38% of the respondents consume organic food regularly. The reason for not consuming organic foods in our residents is the non-availability.

Conclusions: Awareness of organic food products among study population is about 76% with the greater awareness level among urban population. The main reasons for consuming organic food being credibility & availability. Increasing the awareness level of organic products, encouraging people to create their own organic garden can increase consumption of organic foods.

Keywords: Organic food, Consumer awareness, Consumer behaviour

INTRODUCTION

Agriculture is practiced since ancient times. Intervention of machinery, scientific methods, weather predictions have revolutionized the field of agriculture, while variety of chemical fertilizers and pesticides have increased yield without any concern of environmental measures for economic reasons. Modern man has contaminated soil and the atmosphere, leads to pollution that is destroying our planet. The current fad for organic food is more than just hype. Today it is a common practice for farmers to liberally make use of pesticide spray or fertilizers in order to improve the crop yields. A group of people, who felt

strongly about the long term effects of these tampered food, started to grow and lead to what is called organic food. The term organic farming was coined by Lord Northbourne. He described a holistic, ecologically balanced approach to farming. When crops are grown without the use of conventional pesticides, sewage sludge or unnatural fertilizers and processed without the use of ionizing radiation or the addition of food additives, they are termed 'organic'.

However the practice of organic farming has been prevalent from time agriculture was first conceived. It was with the advent of the 'green revolution' that the natural way of growing crops started becoming unpopular and economically less feasible. More crop yield meant higher profits to the farmer and better utilization of the land. Organic food farming continued in small family run. Large scale organic farming was begun by farmers and scientist, as a mark of protest to the agricultural industrialization. Now organic food is widely available and has become very popular with soaring sales.

Organic food promotes no artificial preservatives and best maintain the originality of food. This prevents excess use of harmful ingredients and thereby ensures health. This study attempted to gain knowledge about consumer attitude towards organic food product consumption and to see whether there is any potential this might have for changing their behaviour. The rationale for carrying out this study is that consideration for the environment could come only from well-informed citizens who are aware of, and fully committed to their rights to a quality health and environment.

Objectives of the study

- To assess the awareness of organic food products in Trichy district.
- To determine the awareness level of organic products among rural, semi urban and urban population in Trichy district.
- To determine other factors associated with the awareness level.

METHODS

A descriptive study was done in August 2016 among the rural, semi-urban, urban population (100 each, total of 300) of Trichy district. Rural, semi-urban and urban population were from N. Sangenthi, Samayapuram and Trichy city respectively. A self-administered paper-based questionnaire was used to collect relevant data from the households. After establishing rapport with the study subject, the purpose, procedure, benefits, risks and confidentiality of the study were explained. Informed written consent from the study subject was taken before the questionnaire was administered. The convenient was used to select study subjects. The questionnaire had 2 parts.

Part 1: Informed written consent, socio-demographic details.

Part 2: Level of importance for various factors of food products, awareness, consumption pattern, source, and reasons for preferring and not preferring regarding organic food products were studied.

The data was entered in Microsoft Excel and analysed using Epi info software, for proportions, frequencies and associations.

RESULTS

From the study, among the 300 respondents about 76% of the respondents heard about organic products, 73% know about the organic products and 62% of them purchase organic products. The main source of organic foods is from specific shops and from kitchen gardens. The reason for purchasing organic food products is credibility (30.3%) followed by knowledge (13.3%) and availability (12%). The most preferred organic food product is vegetables and fruits (64.5%) followed by dairy products (45.3%) and meat (23.7). About 38% of the respondents consume organic food daily in some manner. The main hindering factor for not preferring organic food products was lack of knowledge (22%) followed by high price (4.7%) and difficulty to identify the real organic products (4.7%).

Demographic details

Total sample size 300 surveyed in the study, the mean age and standard deviation of the respondents was 39.15 and 14.199 respectively.

Out of 300 study population, 180 (60%) were female and 120 (40%) were male.

Majority of the respondents were graduates -25.3% (76) and about 6.7% (20) were illiterate.

Out of study population, 41.3% (124) were unemployed, 32.4% (97) were employed in skilled work and 8% (24) were professionals.

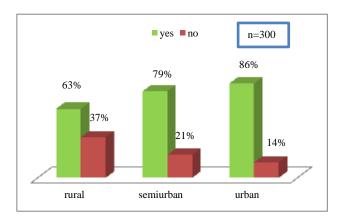


Figure 1: Percentage of respondents heard about organic food products.

In the study population about 63%, 79%, 86% of respondents heard about organic food products. Figure 1 represents the difference in percentage of respondents heard about the organic food products in rural (63%), semi urban (79%) and urban areas (86%), which is statistically significant, in which the urban population constitutes majority of respondent who were heard about organic food products (p<0.01, df=2, Chi square value=15.241).

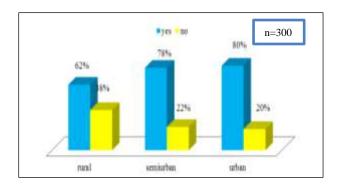


Figure 2: Percentage of respondents known about organic food products.

In the study population about 62%, 78%, 80% of respondents known about organic food products. Figure 2 represents the difference in percentage of respondents who were known about organic food products in rural (62%), semi urban (78%) and urban (80%) study population which is statistically significant (p=0.019, df=2, Chi square value=7.900).

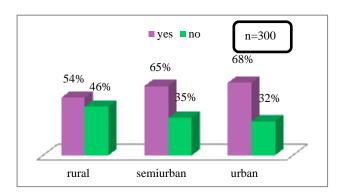


Figure 3: Purchase of organic food products.

In the study population about 54%, 65%, 68% of respondents purchase organic food products. Figure 3 represent the difference in percentage of respondents who purchase organic food products in rural, semi urban, urban study population, which statistically significant (p=0.01, df=2, Chi square value=14.202).

Reasons for purchasing organic food products

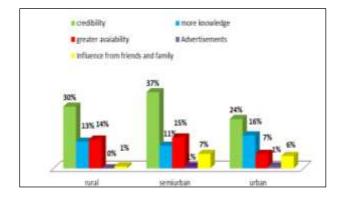


Figure 4: Reasons for purchasing organic products.

Figure 4 represents the percentage of respondents with various reasons for preferring organic food products. The main reason for purchasing organic food products is credibility in urban, semi urban, rural population.

The degree of freedom is 12; p value is less than 0.05; there is significant difference between the factors influencing purchase of organic products between rural, semi urban and urban respondents.

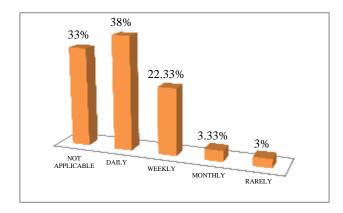


Figure 5: Consumption pattern.

The frequency of consumption of organic food was asked and the majority responded as daily consumption of organic food. Figure 5 represents the consumption pattern of the respondents. About 38% of them consume organic food products daily.

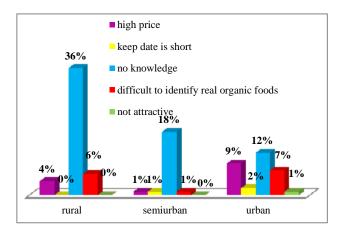


Figure 6: Factors hindering the purchase of organic food products.

The main factors hindering the purchase of organic food products are the high price. Figure 6 represents the hindering factors for not preferring organic food products.

DISCUSSION

This study shows, 76% of the total respondents were aware about organic food products in which 62% of the respondents were purchased and consumed organic foods respectively according to a survey conducted in 2013

shows that there has been a major shift in for organic products, especially fruits and vegetables in the cities as about 62% of metropolitans buy organic, an increase of 95% in the last 5 years.³ A survey conducted in Ramnad district revealed that only 76% of total respondents were aware of 'organic food' in which only irregularly/regularly consumed organic food. It indicates that for majority of the people even aware of 'organic food' is still away from their food basket.4 On comparison with the studies mentioned above, the common organic food products consumed by the respondents were vegetables and fruits. This study has only little difference between awareness level and consumption level so by increasing the awareness level shall have influence on consumption pattern. Though the above studies shows that the people in metropolitan cities have an increased awareness level but their consumption level is low, probably due to their availability, beliefs on conventional food and lifestyle modifications.

About 93.3% of the respondents were literate in which 25.3% were graduates and 12.3% were postgraduates which means education has a significant influence on knowledge about organic food products. Level of importance given while purchasing food products was enquired, of which freshness tops the list, but organic foods cannot be kept fresh for days as like conventional foods, so new methods for maintaining freshness of organic food has to be developed. The next priority was given to quality and certification of the products. Awareness of quality difference from conventional and organic can increase consumer's preference towards organic food products. Certification that the food is organic relieves the difficulty in identifying organic and sustained food products therefore non-organic improvement of product features will increase its consumption. Among the organic food products, the most preferred is vegetables and fruits this is clearly because of increased availability of vegetables and fruits when compared with the other organic food products. Some of the respondents were unaware that they consume organic food probably due to lack of knowledge. Major source of organic food products for the consumers were from specific stores and kitchen garden which implies that by increasing the number of those specific stores along with allocation of separate shares in departmental stores, encouraging people to practice kitchen gardening and terrace farming, these factors increases overall availability which can lead to increase in purchase and consumption.

Credibility is the major determining factor for the organic consumers. Availability factor corresponds to 12% and thus it affects the consumption pattern. Hence the farmers should be encouraged to cultivate more organic products so that the production and availability increases. Ensuring the quality of organic food by farmers through certification help them to get a good price.

Scientific evidence also greatly influences the consumers prospective about organic products. The hindering factor being the lack of knowledge so educating the people about the organic food benefits may provide a change in their behaviour towards organic products. Various studies have been done comparing the organic and conventional foods, and it was concluded that organic products had a higher dry matter, lower nitrate content and contained less pesticide residues and regarding vitamins they concluded that there were trends towards higher vitamin C contents in organic product. Some studies found that ascorbic acid, alpha-, gamma-tocopherols, and beta-carotene, phenolic acids, flavonols, proteins, amino acids, antimutagenic and antiproliferative are high in conventional foods than organic foods.

CONCLUSION

Awareness of organic food products among study population is about 76% with the greater awareness level among urban population. The main reasons for consuming organic food being credibility and availability. The hindering factors for consuming organic food being lack of knowledge and difficulty to identify organic foods. Increasing the awareness level of organic products, encouraging people to create their own organic garden can increase consumption of organic food products. Sustained improvements in product features like package, certification, and freshness would lead to increase in consumption of organic food products.

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Ethical approval: The study was approved by the Institutional Ethics Committee of Chennai Medical College Hospital and Research centre, Trichy

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