

Consumer awareness towards organic food and their preferences

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Abstract

The present study was aimed to elicit information about organic food present in Hyderabad, to assess the knowledge of consumers about organic food. A total of 353 subjects; 224 Females and 129 Males (18-60 years), were selected through random sampling method. The data was collected using self-administered questionnaires and google forms. Results showed that 89.3% of the population was aware about the organic food and 73.7% knew the difference between organic and conventionally produced food. The correlation between awareness and purchase was found to be insignificant under p value <0.05 with the t value. Similarly, the correlation between family income and purchase was found to be insignificant under the p value of < 0.05 with the t value. The correlation between availability and purchase of organic food was also found to be insignificant under the p value < 0.05 with the t value.

Keywords: organic food, awareness about organic food, organic farming

1. Introduction

1.1 Organic Food

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^[1]

Females and individuals with more education and income have more awareness and knowledge of food hazardous to health^[2]

It was found that there is strong correlation between increasing consumption of organic food and the level of formal education. Organic consumers have willingness to pay 10% premium for organic food product with an average of 9.5% by women and 11.4% by men^[3]

As per the Food and Agriculture Organization (FAO) report, 14000 tonnes of organic food produce is from certified organic farms in India. But there are more organic farm areas than mentioned by FAO. Sometimes Organic food is not recognized though it has been grown in organic farms as farmers have not registered their name nor paid the registration charges for official certification^[4]

In past studies on organic food-buying behaviour, the role of subjective norms has often been neglected – either they are not included in the models or their explanatory power has been weak^[5]

2. Methodology

2.1 Tools and Techniques

The information required for the study was collected using self-structured questionnaires (Annexure I). The objectives of the study were kept in mind while constructing the questionnaire. The questionnaire consisted of closed ended

questions. Multiple choice questions constituted the questionnaire (Annexure I) where the respondent was given options to choose from. For a few questions provision was made for any other type of response which was not included in the options.

The questionnaire was filled by a few people in person and with the help of google forms by some people. The method of circulating the questionnaire in the form of an online survey helped in reaching out to a larger population of respondents. The form collected the email addresses of the respondents such that one person would be able to answer the survey only one time.

The questionnaire (Annexure I) was divided into following areas:

General Information

The general information included name, gender, age, occupation, highest education obtained and family income (per annum) of the respondents.

Information about Organic Foods

This section had questions regarding the awareness about organic foods.

The questions were mainly framed around the purpose of assessing the awareness of the respondents about organic food.

The questions also included the following aspects:

- Difference between the organic and conventionally produced food.
- Source of information about organic food.
- If they do purchase organic food, how often is the purchase.
- If there a specific reason for not purchasing, if they don't.
- Where do they buy organic products from.
- If they believe that organic foods are healthier.

- What would help increase their level of trust towards products which claim to be organic.
- If awareness about organic food can lead them to purchase organic food.
- If they know that pesticide residue in food could be carcinogenic in the long run.
- If they would be willing to know more about organic foods.
- If they would be willing to make the switch from conventional to organic if they received more information and
- If they would purchase organic food instead of

conventional food if they were available at the same cost.

At the end of the survey, the respondents were given handouts about organic food and to the people who responded via google forms, the handout was sent in the form of a PDF to the email addresses collected at the beginning of the online survey.

3. Results and Discussion

The results of the conducted study are depicted in the following figures.

3.1 General Information of the Respondents

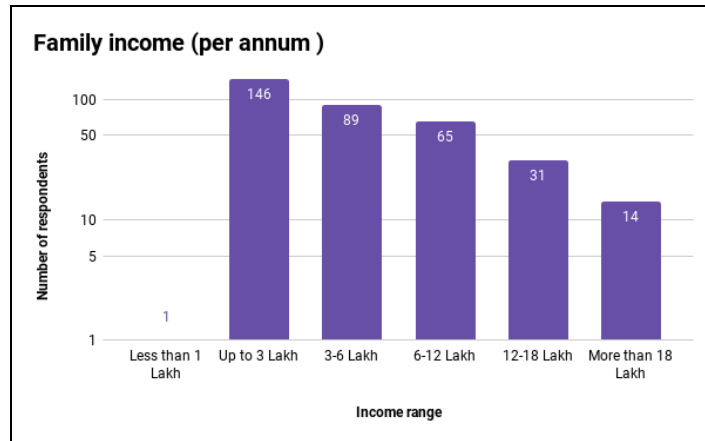


Fig 1: Family income of the respondents (per annum).

The family income is the gross total income of the family per annum, depending upon the income, the family jots down the budget for food, shelter, clothing etc. The bar graph above explains the frequency distribution of the family income (per annum) of the respondents. The least number of responses i.e. 1 for the category of Less than 1

Lakh, followed by 146 responses for the category of Up to 3 Lakh, followed by 89 responses for the category of 3-6 Lakh. Whereas there were 65 responses for the category 6-12 Lakh, 31 responses for the category 12-18 Lakh and 14 responses for the category of More than 18 Lakh per annum, respectively.

3.2 Information about Organic Foods

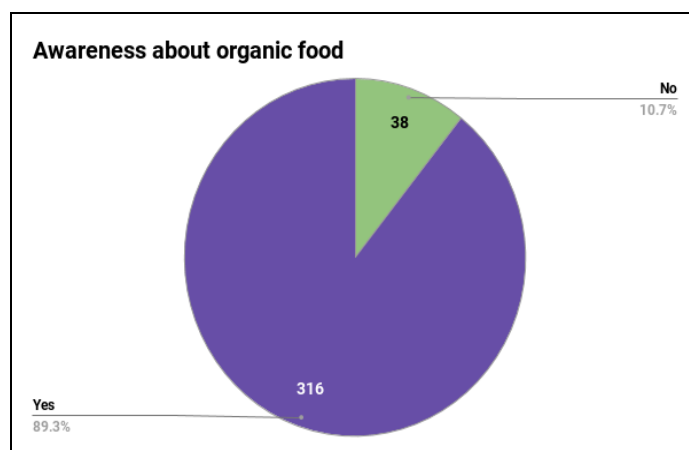


Fig 2: Awareness about organic food.

The questionnaire was aimed at assessing the awareness of the respondents towards organic food. The above graph gives an account of the responses

regarding the awareness about organic food. It shows that there were 316 responses for yes whereas there were 38 responses for no.

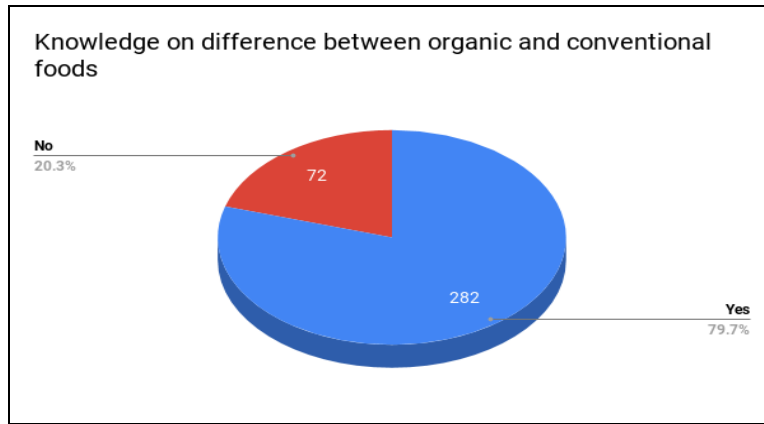


Fig 3: Knowledge on difference between organic and conventional foods.

A part of knowing about organic food is to know how its produced and if there is a difference from the regular way of production. The above pie chart shows the responses of the adults when asked about if they know the difference between organic

and conventional food. 282 of the respondents said they know the difference between organic and conventional foods, whereas 72 respondents said they do not know the difference between organic and conventional food.

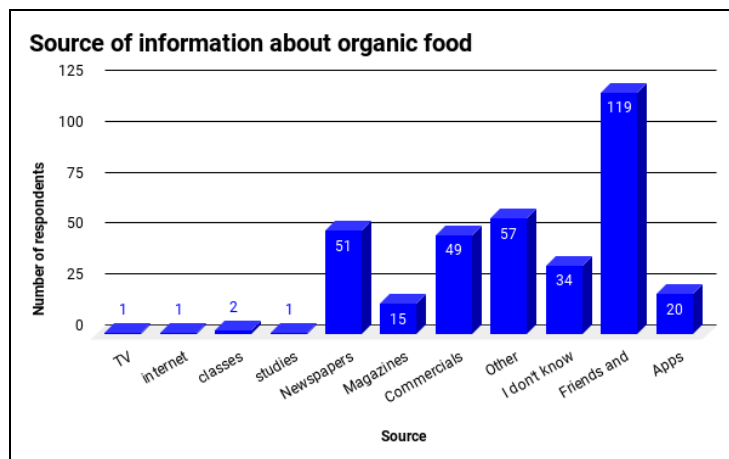


Fig 4: Source of information about organic food.

With some bogus sources that surround us, it is very essential that we obtain the information from a trustworthy source and not believe everything that is sent our way. The above bar graph shows the responses about the source of information to the respondents about organic food. The maximum number of responses i.e. 119 were towards family and friends, followed by 57 responses, for others, followed by 51 for Newspapers. Commercials were given 49

responses whereas 34 respondents said they didn't know about organic food. 20 respondents said they had come to know about organic food through the mobile applications/ apps whereas 15 respondents said they came to know about organic food through the Magazines. The least number of responses were given towards TV, Internet, Classes and Scientific Studies which were 1,1,2,1 respectively.

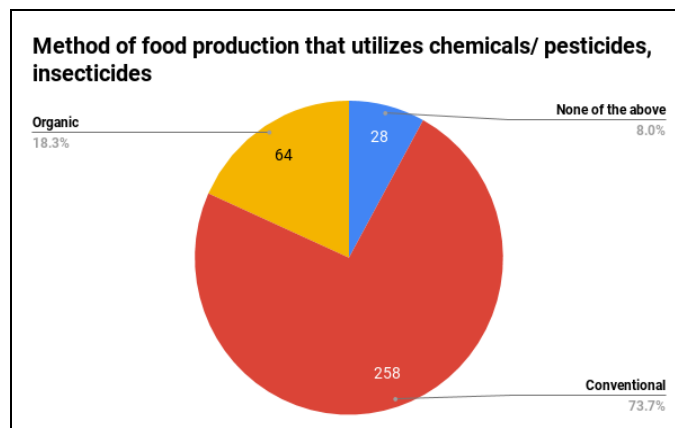


Fig 5: Method of food production that utilizes chemicals/ pesticides, insecticides.

The above given pie chart shows the answers of respondents when asked about the method of food production that utilizes chemicals/ pesticides and insecticides. 258 respondents said that it was the conventional method of food production that utilizes chemicals/ pesticides and insecticides, 64 respondents said that it was the organic

method of food production that utilizes chemicals/ pesticides and insecticides and 28 respondents said that they didn't know which method of food production utilizes chemicals/ pesticides and insecticides. Which corresponds to 73.7%, 18.3% and 8% respectively.

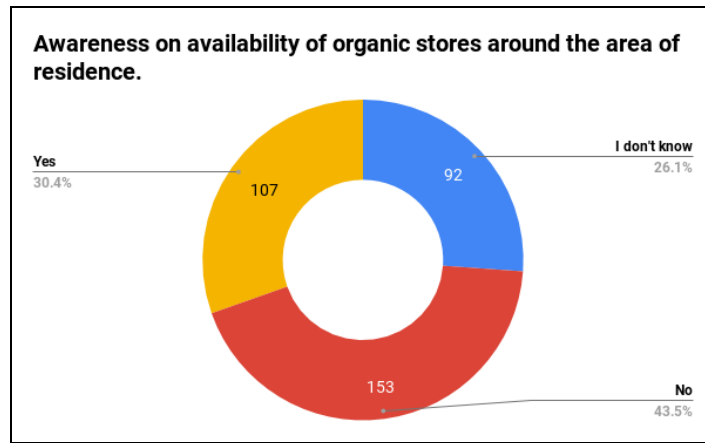


Fig 6: Awareness on availability of organic stores around the area of residence.

The above given pie chart shows the answers of respondents when asked about the awareness they had about any stores or organic products outlets around their area of residence. 153 respondents said that they are not aware about the availability of the organic food stores around their house, 107 respondents said that they are aware about the

availability of the organic food stores around their house whereas 92 respondents said that they do not know about the availability of the organic food stores around their house. Which corresponds to 43.5%, 30.4% and 26.1% respectively.

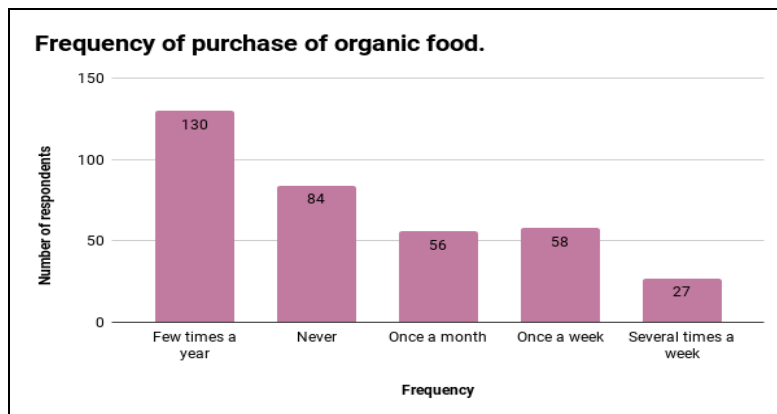


Fig 7: Frequency of purchase of organic food.

The above graph depicts the frequency of purchase of organic food by the respondents. 130 respondents said that they purchase organic food a few times a year, 84 respondents said that they never purchase organic products,

56 respondents said that they purchase organic products once a month. 58 respondents said that they purchase organic products once a week whereas 27 respondents said that they purchase organic products several times a week.

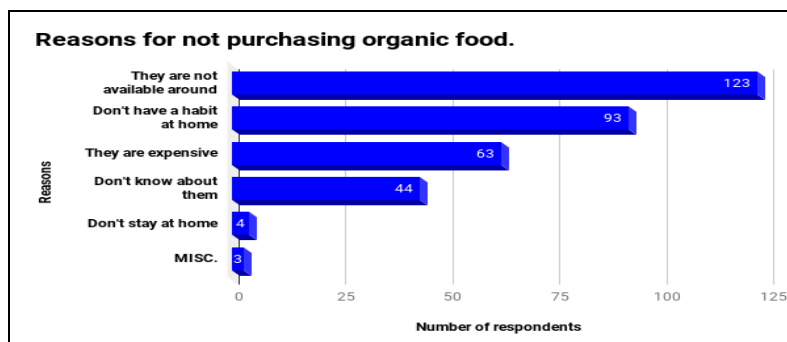


Fig 8: Reasons for not purchasing organic food

The above graph depicts the frequency of the reasons for not purchasing organic food. 123 respondents said that organic food is not available around their house. 93 respondents said that they don't have a habit of purchasing organic food at home. 63 respondents said that they do not buy organic food

because they are too expensive whereas 44 respondents said that they didn't know about organic food and hence don't purchase them. The least frequency was obtained by the reasons that they don't stay at home and miscellaneous i.e. 4 and 3 respectively.

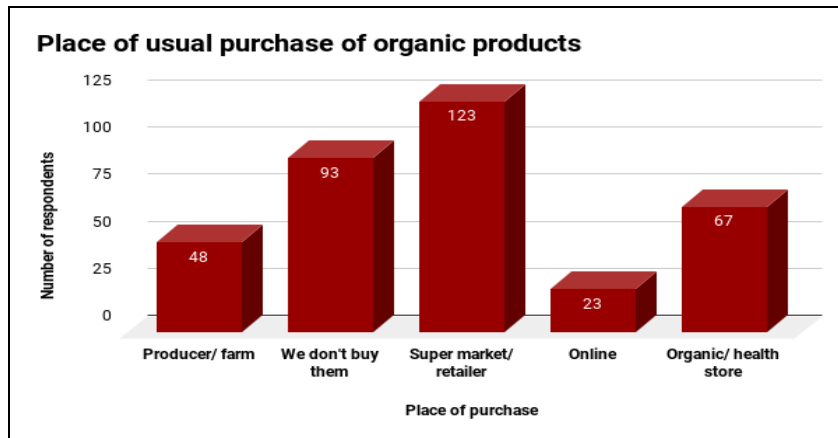


Fig 9: Place of usual purchase of organic products

The above bar graph depicts the frequency of place of usual purchase of organic products. The highest frequency i.e. of 123 was obtained by super market/ retailer whereas the least frequency i.e. 23, was obtained for purchasing online. 93

respondents said they do not buy organic food, 67 respondents said that they purchase the organic food from organic/ health store whereas 48 respondents said that purchase the organic food directly from the producer/ farm.

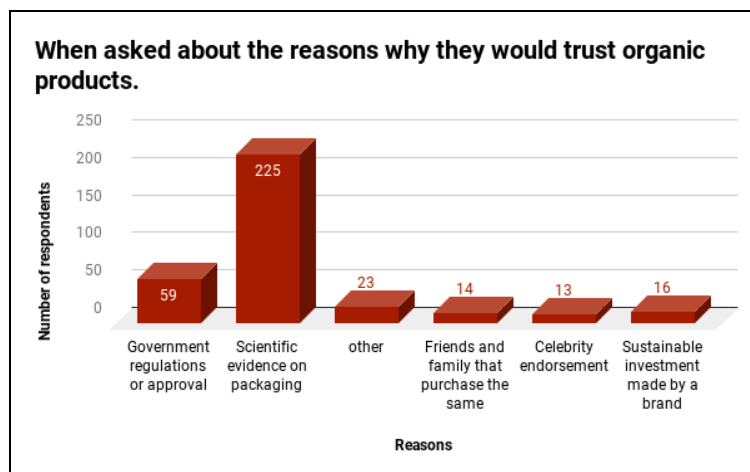


Fig 10: Reasons why the respondents would trust organic products.

The above bar graph depicts the reasons why the respondents would trust organic products. 225 respondents said that they would trust organic foods if there was more scientific evidence on packaging. 59 respondents said that they would trust organic products if there were government regulations or approvals on the packaging. 16 respondents said that they would trust organic products if

there is a sustainable investment made by a brand. 23 respondents gave the reason as other. 14 respondents said that they would trust the organic products if their friends and family purchased the same whereas 13 respondents said that they would trust the organic products if a celebrity endorsed the organic products.

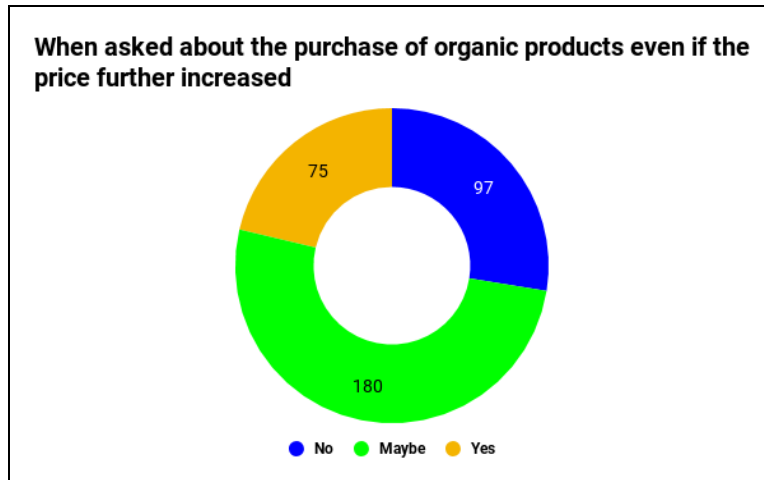


Fig 11: When asked about the purchase of organic products even if the price further increased.

The above pie chart shows the frequency distribution of the respondents' opinion when asked if they would purchase organic products if the price further increased. 180 respondents said they would maybe continue to purchase the

organic products whereas 97 respondents said they would not purchase organic products if the price further increased. 75 respondents said that they would continue to purchase the organic products if the price further increased.

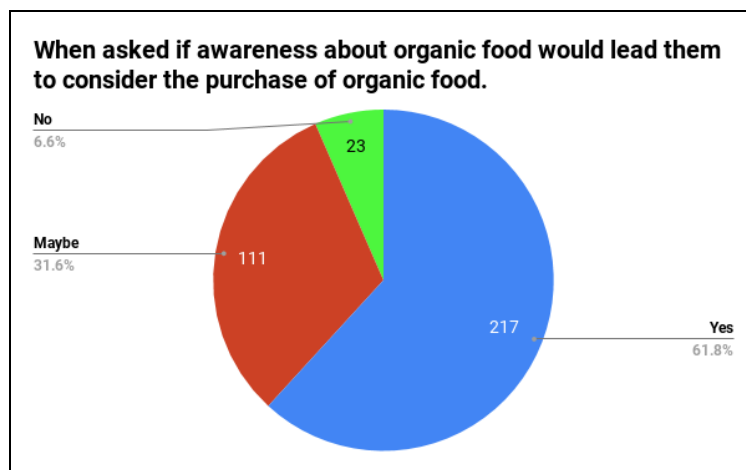


Fig 12: When asked if awareness about organic food would lead them to consider the purchase of organic food.

The above pie chart depicts the frequency of answers the respondents have given when asked if awareness about organic food would lead them to consider the purchase of organic food. 217 respondents said that they would purchase organic food if they were made aware about them. 111

respondents said that they would maybe purchase the organic food if they were made aware about it whereas 23 respondents said that would not purchase organic products even if they were made aware of them, they have the percentages 61.8%, 31.6% and 6.6% respectively.

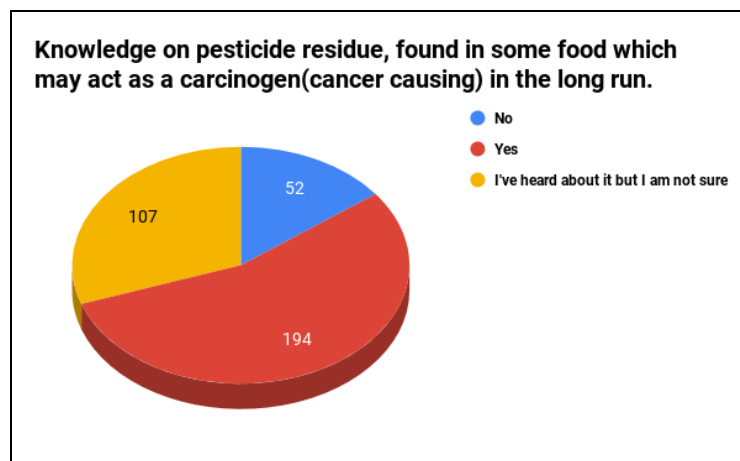


Fig 13: Knowledge on pesticide residue being carcinogenic in the long run.

The above pie chart depicts the responses of the respondents when asked about the pesticide residue and its effect in the long run. 194 respondents have said that they know pesticide residue in the long run is carcinogenic, 52

respondents have said that they did not know that pesticide residue is carcinogenic in the long run whereas 107 respondents have said that they did hear something about the same aspect but are not quite sure about it.

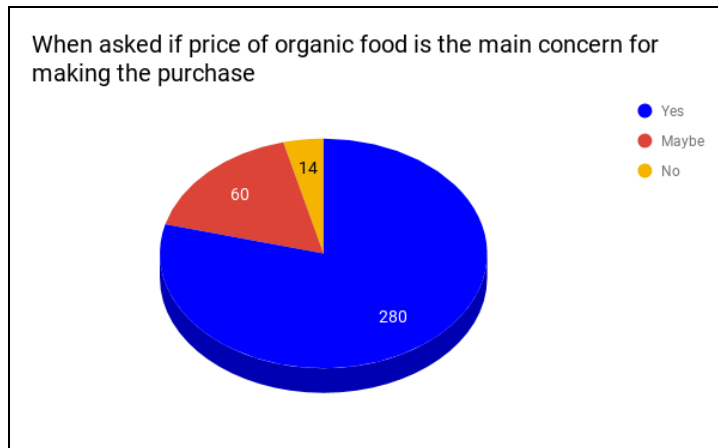


Fig 14: When asked if price of organic food is the main concern for making the purchase.

The above pie chart marks the responses of the respondents When asked if price of organic food is the main concern for making the purchase. 280 respondents said that price was the main concern. 14 respondents said that price of organic

food is not the main concern for making the purchase whereas 60 respondents said that price maybe the main concern when purchasing the organic products.

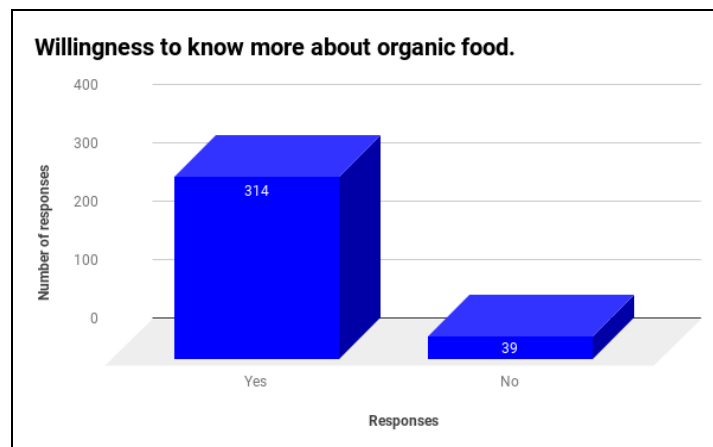


Fig 15: Willingness to know more about organic food.

The above graph depicts the willingness of the respondents to know more about organic food. 314 respondents said they were willing to know more about organic food. 39

respondents said they were not willing to know more about organic food.

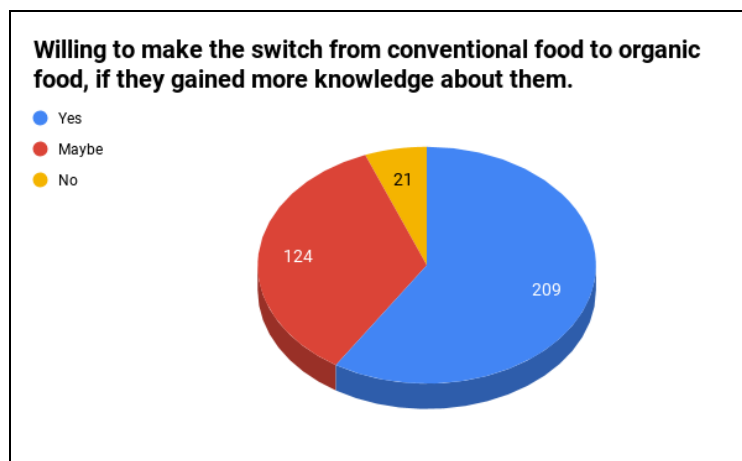


Fig 16: Willing to make the switch from conventional food to organic food, if they gained more knowledge about them.

The above pie chart depicts the responses of the respondents if they are willing to make the switch from conventional food to organic food, if they gained more knowledge about them. 209 respondents said they were willing to make the switch from conventional food to organic food, if they gained more knowledge about them.

124 respondents said they may be willing to make the switch from conventional food to organic food, if they gained more knowledge about them. 21 respondents said they are not willing to make the switch from conventional food to organic food, if they gained more knowledge about them.

3.3 Statistical Analysis

The data was subjected to Chi square analysis to analyse the correlation between 3 sets of parameters. The first set was of income and purchase. The data was subjected to analysis and it was found that the p value was less than the tabulated value and hence it can be concluded that for the given sample, the correlation is not significant and maybe significant if the sample size or any other parameter was altered.

The second set was of awareness and purchase. The data

was subjected to analysis and it was found that the p value was less than the tabulated value and hence it can be concluded that for the given sample, the correlation is not significant and maybe significant if the sample size or any other parameter was altered.

The third set was of availability and purchase. The data was subjected to analysis and it was found that the p value was less than the tabulated value and hence it can be concluded that for the given sample, the correlation is not significant and maybe significant if the sample size or any other parameter was altered.

The fourth set was of Awareness and will to know more. The data was subjected to analysis and it was found that the p value was less than the tabulated value and hence it can be concluded that for the given sample, the correlation is not significant and maybe significant if the sample size or any other parameter was altered.

The fifth set was of Awareness and will to make the switch availability. The data was subjected to analysis and it was found that the p value was less than the tabulated value and hence it can be concluded that for the given sample, the correlation is not significant and maybe significant if the sample size or any other parameter was altered.

Table 1: statistical analysis interpretation

| S. No. | Parameters | P value | T value | Interpretation |
|--------|---------------------------------------|-------------------|---------|----------------|
| 1 | Income and purchase | Less than t value | 11.07 | Insignificant |
| 2 | Awareness and purchase | Less than t value | 9.488 | Insignificant |
| 3 | Availability and purchase | Less than t value | 15.50 | Insignificant |
| 4 | Awareness and will to know more | Less than t value | 3.841 | Insignificant |
| 5 | Awareness and will to make the switch | Less than t value | 5.991 | Insignificant |

4. Summary

Organic farming is the farming method which replaces the chemical products such as pesticides and insecticides and fertilizers with crop rotation, hand weeding, mulching and tilling whereas pests are controlled using naturally derived pesticides and the crop is fertilized with natural fertilizers such as manure and compost.

Organic meat, dairy and eggs are produced by feeding the livestock with all organic, hormone and GMO free feed. The possible diseases and infections are prevented using natural methods such as clean housing, rotational grazing, healthy diet and the livestock is made sure to have access to the outdoors.

This is a method of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, good plant nutrition, and sound soil management, produces nutritious food rich in vitality which has resistance to diseases. As per the available statistics, India’s rank in terms of World’s Organic Agricultural land was 9th and in terms of total number of producers was 1st as per 2018 data. The age range of 354 respondents. Most of the respondents belonged to the age range of 18-25 with the frequency of 285, followed by the respondents of age range 26-35 with the frequency of 36. Followed by the age group of 46-55 with the frequency of 17, whereas the respondents of the age group 36-45 were of the frequency 12 and the age group of 56-65 was of the least frequency, i.e. 3 respectively.

Majority of the respondents belonged to the age range of 18-25years.

Among the 354 respondents, the gender distribution of the was such that there were 224 females and 129 males that had responded to the survey.

The frequency distribution of the family income (per annum) of the respondents showed that least number of responses i.e. 1 was for the category of Less than 1 Lakh, followed by 146 responses for the category of Up to 3 Lakh, followed by 89 responses for the category of 3-6 Lakh. Whereas there were 65 responses for the category 6-12 Lakh, 31 responses for the category 12-18 Lakh and 14 responses for the category of More than 18 Lakh per annum, respectively. Majority of the responses were towards the income range of Up to 3 Lakhs per annum.

When asked about the awareness about organic food, majority (316 out of 354) of the respondents said they are aware about organic food.

When asked about the difference between organic and conventional foods, majority (282 out of 354) of the respondents said that they are aware about the difference between organic and conventional food.

When asked about the source of information of organic food, majority (119 out of 354) of the respondents said that it was their friends and family that gave them the information which was followed by Other (57 out of 354) sources such as billboards, banners etc.

When asked about the method of food production that utilizes the chemicals/ pesticides, insecticides, majority (258 out of 354) of the respondents said that it was conventional method of production that uses the above mentioned products.

When asked about the awareness on availability of organic stores around the area of residence, majority (153 out of 354) said that they were not aware about the availability of organic stores around the area of residence, 107 out of 354 respondents said that they were aware about the availability

of organic stores around their area of residence and rest (92 out of 354) of the respondents said that they did not know.

When asked about the frequency of purchase of the organic food in their household, majority (130 out of 354) of the respondents said that they purchase organic food few times a year, followed by the respondents (84 out of 354) who said they never purchase organic food.

When enquired about the reasons for not purchasing organic food, majority of the respondents (123 out of 354) said that they were not available at home. This response was followed by the response that they (respondents) don't have a habit at home for the purchase of organic food (93 out of 354).

The respondents were asked about the place of usual purchase of the organic products, majority (123 out of 354) of them responded saying they buy them from the super market/ retailer followed by the respondents (93 out of 354) saying that they don't buy organic food.

Respondents were asked if they believe organic food is healthier. Majority of the respondents (290 out of 354) said that they believed that organic food is healthier.

When the respondents were asked about the reason why they would trust the organic products, majority of them (225 out of 354) said that Scientific evidence on packaging would lead them to trust organic food.

The respondents were asked about the purchase of organic products even if the price further increased, a large number of the respondents (180 out of 354) said they would maybe continue to purchase the organic products.

When respondents were asked if awareness about organic food would lead them to consider the purchase of organic food, majority of the respondents (217 out of 354) said that they would consider the purchase. A few more of the respondents (111 out of 354) said that they would maybe consider the purchase of organic food.

When respondents were asked about the knowledge on pesticide residue being carcinogenic in the long run, majority of the respondents (194 out of 354) said that they knew about the carcinogenic effect of pesticide residue whereas a few other respondents (107 out of 354) said that they heard about it but are not sure if its true.

When the respondents were asked if price of organic food is the main concern for making the purchase, majority of the respondents (280 out of 354) said that price indeed was the main concern for making the purchase of organic food.

When the respondents were asked about the willingness to know more about organic food, majority (314 out of 354) of the respondents said they were willing to know more about the organic food.

When the respondents were asked about the willingness to make a switch from conventional food to organic food, if they gained more knowledge about them, majority (209 out of 354) of the respondents said yes while a few other respondents (124 out of 354) said they would not make the switch and a very few respondents (21 out of 354) said that they would maybe make the switch.

5. Conclusion

Thus, it can be concluded that, income and purchase, awareness and purchase, availability and purchase, Awareness and will to know more, Awareness and will to make the switch availability had no correlation with each other and the relationship between them was statistically insignificant.

6. Acknowledgement

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