

A Study on Buying Behavior of Nutri cereals among the Consumers in Coimbatore District, Tamil Nadu

Abstract

Aim: Nutri cereals are the oldest foods known to humans, but their cultivation and consumption reduced due to large-scale rice and wheat cultivation due to urbanization and industrialization. Hence, the present study aims to know the buying behavior of Nutri cereals among the people in the Coimbatore District.

Study design: Totally 100 consumers were selected by proportionate random sampling. Primary data was collected from the respondents by using well-structured interviews scheduled between October 2021 and November 2021

Methodology: Percentage analysis and Garrett's ranking techniques were used to analyze the data.

Results : Results revealed that nutrient content and better quality are the major factors influencing the purchase of Nutri cereals. Therefore, the development of customized products in Nutri cereal products category and proper promotion measures should help the policymakers to increase consumption among the people.

Keywords : Consumer, Buying behavior, Nutri cereals, Constraints

1.Introduction

India is one of the important consumer and producer of Nutri-cereals in the world. Sorghum, pearl millet, finger millet, foxtail millet, little millet, kodo millet, barnyard millet, proso millet are popularly known as Nutri-cereals (Department of Agriculture, Cooperation & Farmers Welfare, 2022). Nutri cereals are nutritionally comparable to major cereals for carbohydrates/ energy, and serve as good source of protein, micronutrients and phytochemicals. It contains 7-12% protein, 2-5% fat, 65- 75% carbohydrates and 15-20% dietary fibre. Nutri cereals as whole grain make the essential nutrients and vitamins concentrated in the outer layer of the grain or the seed coat form the part of the food and offer their nutritional and health benefits (Antony *et al.*,1996). Nutri cereals requires low water footprint, are able to survive in the hottest driest climates, and will be important in coping with climate change.

In India, Nutri cereals are grown on about 36.25 million hectares, with an annual production of 62.49 million tonnes and a yield of 4349 kg/hectare (Directorate of Economics and Statistics, 2019-20). Sorghum and Pearl millet are the major Nutri cereals crops grown, constituting 92.06 % of the world Nutri cereals production, followed by Finger millet, Foxtail millet, Proso millet, Barnyard millet, Little millet and Kodo millet which altogether constitute about 7.94%. Nutri cereals were the oldest foods known to humans but their importance and cultivation reduced due to the large scale cultivation of rice and wheat due to urbanization and industrialization (Indian Institute of Millets Research,2018). Hence, it is necessary to understand the consumer buying behaviour and also identify the factors influencing the purchase of Nutri cereals. To analyze the buying behavior of consumers for Nutri cereals, the objectives were taken as follows:

- To study the socio-demographic profile of the Nutri cereals consumers
- To analyze the factors influencing the purchase of Nutri cereals.
- To identify the willingness to pay (WTP) for Nutri cereals
- To analyze the constraints in purchase of Nutri cereals

2. Methodology

Coimbatore District was purposively selected to know the consumer buying behavior towards Nutri cereals. The sampling technique involved is proportionate random sampling. In Coimbatore District, five regions were selected. Each region consists of 20 samples and made the sample size equal to 100. From each region, ten samples from shopping areas and the remaining from household were selected. Primary data were collected by using well structured interview schedule during the period of October 2021 - November 2021. To analyze the data, tools which were used as follows,

1. Percentage analysis
2. Garret's ranking technique

2.1 Percentage analysis

Percentage analysis was used to analyze the general characteristics of the sample respondents such as age, educational status, gender, income, source of information, and willingness to pay for Nutri cereals.

2.2 Garrett's ranking technique

Garrett's ranking technique was adopted to analyze the factors influencing the purchase and constraints faced by the sample respondents while purchasing Nutri cereals. The orders of merit given by the respondents were converted into ranks by using the following formula.

$$\text{Percent Position} = \frac{100(R_{ij} - 0.05)}{N_j}$$

Where,

R_{ij} = Rank given for i^{th} attribute by j^{th} individual

N_j = Number of attributes ranked by j^{th} individual

The percent position of each rank obtained was converted into scores by referring to Garrett's table. Mean score was estimated for each attribute. The mean scores for all the constraints were arranged in descending order. The attribute with the highest mean score was given first rank. It was recognized as the most important factors influencing the purchase of Nutri cereals and constraint faced by the respondents during Nutricereals purchase.

3. Results and Discussion

3.1 Socio economic characteristics of sample respondents

The demographic details of gender, age, education and monthly income of the respondents were analyzed, and the results are presented in Table 1.

Table 1: Demographic details of sample respondents

| Characteristics | Category | Number (N=100) | Percentage |
|----------------------------------|-------------------|----------------|---------------|
| Gender | Male | 45 | 45.00 |
| | Female | 55 | 55.00 |
| Age (In years) | Upto 30 | 18 | 18.00 |
| | 31-40 | 33 | 33.00 |
| | 41-50 | 38 | 38.00 |
| | >50 | 11 | 11.00 |
| Educational status | Illiterate | 6 | 6.00 |
| | Primary Education | 17 | 17.00 |
| | High school | 25 | 25.00 |
| | Graduate | 43 | 43.00 |
| | Post graduate | 9 | 9.00 |
| Income of the respondents | □ Upto 90000 | 15 | 15.00 |
| | □ 90000-200000 | 32 | 32.00 |
| | □ 200000- 1000000 | 45 | 45.00 |
| | > □ 1000000 | 8 | 8.00 |
| Total | | 100 | 100.00 |

It could be concluded from the Table 1, the respondents were classified based on different demographic features. According to the gender character, 55% of the sample respondents were female and 45% of them male. It was observed that majority of the sample respondents were 41-50 years (38%) followed by 31-40 years (33%). Most of the respondents were graduates and the family income ranged from 2-10 Lakhs per annum. Hence, it is easy for the firms to communicate information through brochures and pamphlets, which will easily attract more consumers and frame their promotional strategies accordingly.

3.2 Source of information about Nutri cereals

Trusted sources and information are very important to buy new products. The source of information for Nutri cereals are given in Table 2.

Table 2: Source of information about Nutri cereals

| S.No | Particulars | Numbers (n=100) | Percentage |
|------|------------------------------|-----------------|------------|
| 1. | Family members/Self interest | 39 | 39.00 |
| 2. | Friends and relatives | 25 | 25.00 |
| 3. | Print media/Leaflets | 11 | 11.00 |
| 4. | Social media | 6 | 6.00 |
| 5. | Doctor/Nutritionist | 19 | 19.00 |

It could be concluded from Table 2, majority of the respondents indicated family members as the source of information about Nutri cereals which accounted for 39%, followed by friends and relatives (25%), Doctor/Nutritionist(19%), Print media/Leaflets (11%) and social media (6%). Majority of the people knew the value and health benefits of Nutri cereals, since Nutri cereals were considered as one of the traditional food from ancestor period. We believe in friends/relatives suggestions before choosing any products in the markets. Diabetes, hypertension and cardiovascular disease becoming more prevalent, as gifts of newly acquired life-styles and food habits, Nutri cereals have returned as a viable option to live healthy life and can reduce the incidence of these lifestyle diseases. Nutri cereals have many nutritional, nutraceutical and health promoting properties especially owing to the high fibre content and nature of starch play a major role in reducing the risk of diabetes other related diseases.

3.3 Factors influencing the purchase of Nutri cereals.

Factors influencing the purchase of Nutri cereals among the respondents were analyzed and presented in Table 3. Garrett's Ranking technique was used for analyzing the data.

Table 3: Factor influencing the purchase of Nutri cereals

| S.No | Particulars | Percent Score | Rank |
|------|---------------------------------|---------------|------|
| 1 | Highly nutritious | 52.38 | I |
| 2 | Better Quality | 45.37 | II |
| 3 | Influence of Friends/Neighbours | 41.11 | III |

| | | | |
|---|-------------------|-------|----|
| 4 | Easy availability | 34.68 | IV |
| 5 | Price | 30.23 | V |
| 6 | Mass media | 27.45 | VI |

It could be calculated from the Table 3, the main influencing factor for the purchase of Nutri cereal products by the sample respondents was high nutritious content (52.38%) followed by quality(45.37%), influence of friends/neighbours (41.11%), easy availability of the product(34.68%) and price(30.23%).Only less number of respondents considered mass media as an influencing factor for the purchase of Nutricereals.

3.4 Willingness to pay for Nutri cereals.

Willingness to pay (WTP) is the maximum amount a customer is willing to pay for product or service.This makes willingness to pay a crucial factor when finding the best price to sell a product for both the seller and buyer.

Table 4: Willingness to pay for Nutri cereals by the sample respondents

| S.No | Statements | Upto 10% | 10% -15% | 15%-20% | >20% | Not willing to pay extra |
|------|---------------------------------------|----------------|----------------|----------------|----------------|--------------------------|
| 1 | Food safety and quality certification | 38 (38.00%) | 20 (20.00%) | 11 (11.00%) | 7 (7.00%) | 24 (24.00%) |
| 2 | Available in well known brands | 26 (26.00%) | 19 (19.00%) | 15 (15.00%) | 8 (8.00%) | 32 (32.00%) |
| 3 | Graded and packed | 35 (35.00%) | 29 (29.00%) | 21 (21.00%) | 5 (5.00%) | 10 (10.00%) |
| 4 | Packed and Labeled | 35 (35.00%) | 21 (21.00%) | 18 (18.00%) | 12 (12.00%) | 14 (14.00%) |
| 5 | Graded, Labeled and Packed | 40 (40.00%) | 18 (18.00%) | 15 (15.00%) | 11 (11.00%) | 16 (16.00%) |
| 6 | Cleaned and Processed | 47 (47.00%) | 19 (19.00%) | 15 (15.00%) | 13 (13.00%) | 6 (6.00%) |
| 7 | Organically certified | 34 (34.00%) | 23 (23.00%) | 16 (16.00%) | 14 (14.00%) | 11 (11.00%) |

(Figures in paranthesis indicates percentage to total)

It could be concluded from Table 4, 47%,40% and 38% of the sample respondents are willing to pay extra 10% for cleaned and processed Nutri cereals, graded, labeled and packed Nutri cereals, food safety and quality certification, respectively. Only 29% of the sample

respondents were willing to pay extra 10-15% and 23% of the sample respondents were willing to pay extra 10-15% for graded and packed and organically certified Nutri cereals, respectively.

3.5 Constraints in purchasing Nutricereals

The constraints involved in purchasing Nutri cereals were analyzed by Garrett's ranking technique and are presented in Table 5.

Table 5: Constraints in purchase of Nutri cereals

| S.No | Constraints | Percent score | Rank |
|------|--|---------------|------|
| 1. | Fewer Customized products | 62.48 | I |
| 2. | Lack of promotion for Nutri cereals products | 57.91 | II |
| 3. | Different preferences among the family members | 55.23 | III |
| 4. | High price | 52.03 | IV |
| 5. | More time to cook | 45.73 | V |
| 6. | Lack of Nutri cereal products availability | 37.74 | VI |
| 7. | Not available in well known brands | 38.80 | VII |

It could be concluded from Table 5, the major constraint for purchasing Nutri cereals the availability of only fewer customized products with the percent score of 62.48 and followed by lack of promotion for Nutri cereals (57.91). The consumers faced other constraints like different preferences for food among the family members, high price and high time requirement for cooking. The Nutricereal processing firms should try to produce customized products at nominal price for all people.

4. Conclusion

The majority of the respondents buy Nutri cereals only for being high nutritional properties and better quality. Fewer customized products are the primary constraint for purchasing more Nutri cereals. The major source of information for the sample respondents was from family members/ self-interest followed by friends/relatives. Majority of the sample respondents willing to pay extra 10% for cleaned and processed Nutri cereals followed by graded, packed, and labeled products. **The Nutri cereal processing firms should concentrate on producing customized products with promotional offers, advertisement on the nutritional**

properties of the products. Development of value addition and processing technologies, marketing strategies and policy measures is needed to revalorize millets for attaining food and nutritional security.

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