

Research paper on buying behaviour of consumers towards instant millet based food products

K. KALIDAS AND K. MAHENDRAN

Food had been one of the major categories in consumer share of spending. Indian consumers spent more than half of their income on food whereas the consumers around the world spent one third of their income on food. In the year 2002-2003 an average rural Indian household spent 55 per cent of its income on food, whereas the same was about 43 per cent for an urban household. It was estimated that the middle class segment spent Rs.37800 crore per annum on food and groceries. The processed food segment, instant food products had occupied a considerable shelf space in stores and super markets in India. The instant mix market in India was estimated to be worth approximately Rs.350 crore during the year 2003 and at the end of 2004, it was estimated to be around Rs.700 crore. Several firms had been engaging in production and marketing of instant millet based food products. Understanding the consumer behaviour would help the firms in formulating strategies to cater to the needs of the consumer and thereby increase their market share. The specific objectives of the study were; to study the consumers buying behaviour for selected instant millet based food products in Pollachi city, to identify the factors influencing buying behaviour for selected instant millet based food products, to suggest strategies for increasing the sales of instant millet based food products of Milleteo.

Key Words : Consumer behaviour, Buying behaviour, Instant millets

How to cite this article : Kalidas, K. and Mahendran, K. (2017). Research paper on buying behaviour of consumers towards instant millet based food products. *Food Sci. Res. J.*, 8(2): 196-202, DOI : 10.15740/HAS/FSRJ/8.2/196-202.

INTRODUCTION

Traditionally, Indians preferred to consume food prepared by them. However over the years, increase in urbanization, breaking up of the traditional joint family system, desire for quality time which translates into an increased need for convenience, increasing number of working women, rise in per capita income, changing lifestyles and increasing level of affluence in the middle income group had brought about changes in food habits.

In the last two decades the share of urban population has increased from 27.8 per cent in 2001 to 31.15 per cent in 2011. During the same period the female work participation rate had increased from 25.7 per cent to 35.3 per cent. The per capita income increased from Rs. 10,306 in 2000-2001 to Rs. 93,293 in 2015-16. The change in food habits was evident from the growth of food processing industries.

According to Ministry of Food Processing Industries, the size of the food processing industry was about Rs. 3,15,000 crores and included Rs. 99,000 crores of value added products. The size of the semi-processed or ready to eat food segment was over Rs. 4000 crores. In this the ready to cook segment had a growth rate of 20-25 per cent per annum. The food processing industry was expected to grow to nine to 12 per cent in the year 2014

MEMBERS OF RESEARCH FORUM

Author for correspondence :

K. KALIDAS, Department of Agricultural and Rural Management, Tamil Nadu Agricultural University, COIMBATORE (T.N.) INDIA
Email : kalidas.mba@gmail.com

Associate Authors' :

K. MAHENDRAN, Department of Agricultural and Rural Management, Tamil Nadu Agricultural University, COIMBATORE (T.N.) INDIA
Email : mahenan@gmail.com

– 15. While the unorganized, small players (processing less than 0.5 tons per day) processed more than 75 per cent of the industry output in volume terms and 50 per cent in value terms, the organized segment accounted for the rest. The industry employed 1.6 million workers directly. The processed food industry accounted for 6.3 per cent of GDP, 13 per cent of the country's exports and involves six per cent of total industrial investment in the country. Rabo India Finance had projected that the Indian food processing industry would increase to Rs. 11,500 billion by 2016-17.

Instant millet based food products :

Among the processed food segment, instant food products had occupied a considerable shelf space in stores and super markets in India. Food companies through instant food products had provided high quality food choices, which would have been inconceivable to ancestors. Instant food mixes formed a range of convenience food for households, being easy to use without terminal processing and women found it very convenient to use. It helped them to save time and effort and relieves them of the tedious jobs of collecting various ingredients, cleaning them and sorting them and preparing food. Modern homes also did not offer the facilities necessary for traditional processing and hence, these products gained instant acceptance. These instant mixes can be used for preparations of various snack foods, sweets and preparations with rice. The instant mix market in India was estimated to be worth approximately Rs.150 crore during the year 2003 and at the end of 2004, it was estimated to be around Rs. 350 crore.

Problem focus :

Several firms had been engaging in production and marketing of instant millet based food products. Hence, the consumers had greater options to choose from. In this context, a study on consumer behaviour was deemed importance to understand the buying behaviour and preferences of different consumers. Understanding the consumer behaviour would help the firms in formulating strategies to cater to the needs of the consumer and thereby increase their market share. Consumer's taste and preference were found to change rapidly, especially in a dynamic environment. Keeping in view the importance of consumer behaviour and consumption pattern, the present study was undertaken. The study

was limited to four instant foods mixes namely idly and *Dosa* mix, idiyappam mix, flakes and sweet mix.

Objectives of the study :

The specific objectives of the study were, to study the consumers buying behaviour for selected instant millet based food products in Pollachi city, to identify the factors influencing buying behaviour for selected instant millet based food products, to suggest strategies for increasing the sales of instant millet based food products of Milleteo.

Singh (1995) examined the consumer attitude towards walnut in urban Punjab. He found that consumer preference had consistent similarity among the entire income group. But the factors influencing consumption marginally differed among income groups. Srinivasan *et al.* (2001) proposed that brand awareness could play a dominant role in brand choice if the customer had strong awareness of some brands but not of other brands, in part because brands with little awareness may not be considered for purchase. In addition to being a powerful driver of brand purchase, a high level of brand awareness in a product market will encourage the trade to stock the brand, leading to high brand availability and, in turn, high brand choice probability. Nandagopal and Chinnaiyan (2003) concluded that the level of awareness among the rural consumers about the brand of soft drinks was high which was indicated by the mode of purchase of the soft drinks by "Brand Name". The major source of brand awareness was word of mouth followed by advertisements, family members, relatives and friends. Sheeja (1998) inferred in her study that consumers in Coimbatore district considered the quality aspects like aroma, taste, freshness and purity as the major deciding the preference for a particular brand of processed spices.

METHODOLOGY

The case firm wanted to increase the sales of the four instant food products namely Idly and *Dosa* mix, Idiyappam and Seva Mix, Flakes and Sweet Mix. Hence these products were purposively selected for the present study. As indicated by the case firm, Western Tamil Nadu (Coimbatore, Tirupur, Erode) City was purposively selected for the present study. Five sample retail shops in A, B and C category indicated by the firm were purposively selected for the study. Thus the total sample size of consumers was Twenty five. In each retail outlet, five consumers (consumers who used any one of the

four products considered for the study) were selected randomly and thus the sample size of consumers was 75. Since the study pertained to use of instant millet based food products, only women consumers were selected as respondents.

Categories of retail outlet :

The A class retail outlets are those, which are modern departmental stores and retail chains where the consumers had the option of self selection of goods and its size ranges above 1500 square feet. The B class retail outlets are those of medium size retail shop with a floor space of 500-1000 square feet. The C class retail outlets are those, which are situated interior to the main road, where low-income group people resided and its size ranged from 150-500 square feet.

Data collection :

A separate well-structured interview schedule was prepared for consumers based on the objectives of the study. The data required for the study were gathered by personal interview from the selected respondents, (consumers). The data collected from the sample consumers included the general particulars like age, educational status, occupation, annual income, family size, family type, consumption of instant food products, purchase pattern of instant food products, factors influencing the purchase of instant food products, satisfaction level of the respondent regarding their present

brand.

OBSERVATIONS AND ASSESSMENT

It could be found from the Table 1, that all the sample respondents (82.67 %) consumed *Idli* and *Dosa* mix whereas 44 per cent of the sample respondents consumed Idiyappam and Seva mix, 24 per cent of the sample respondents consumed Flakes and 36 per cent of the sample respondents consumed Sweet mix. The share of consumers of *Idli* and *Dosa* mix (96 %), Idiyappam and Seva mix (72 %), Flakes (56 %) and Sweet mix (48.00 %) was high among the respondents visiting A class outlets than other retail outlets. the share of the consumers of millet based food mix also declined as one move from A, B and C class retail outlets. The respondents who did not consume millet based Flakes stated that the millet flakes were not preferred by the children. In Idiyappam and Seva mix varieties available for the consumers were less. The consumers needed more varieties in Idiyappam and Seva mix. Homemade sweets was preferred over branded items, because homemade sweets were tastier and preferred by family members. A study could be conducted by the firm to understand the “taste of homemade” in the above four products and bring about desirable changes/ varieties in their products. The firm could also provide varieties in Idiyappam and Seva mix category to increase the share of consumers. The firm could emphasize the nutritive value of Sweet mix and it could tries to market the product by highlighting benefits

Table 1 : Consumption of millet based food products

(n=75)

Sr. No.	Millet based food products	Category of retail outlets			Overall
		A (n = 25)	B(n = 25)	C (n = 25)	
1.	<i>Dosa</i> and <i>Idli</i> mix	24 (96.00)	20 (80.00)	18 (72.00)	62 (82.67)
2.	Idiyappam and Seva	18 (72.00)	13 (52.00)	2 (8.00)	33(44.00)
3.	Sweet mix	12 (48.00)	10(40.00)	5 (20.00)	27 (36.00)
4.	Flakes	14 (56.00)	4 (16.00)	0 (0.00)	18 (24.00)

Table 2 : *Idli* and *Dosa* mix brands known to the respondents

(Number of respondents)

Sr. No.	Brands	Category of retail outlets			Overall (n=75)
		A (n=25)	B (n=25)	C (n=25)	
1.	Milleto	22 (88.00)	17 (68.00)	15 (60.00)	54 (72.00)
2.	MTR	20 (80.00)	18 (72.00)	12 (48.00)	50 (66.67)
3.	Nirapara	15(60.00)	12(48.00)	10(40.00)	37(49.33)
4.	Krishna	13(52.00)	8(32.00)	10(40.00)	31(41.33)
5.	Aagaram	9(36.00)	15(60.00)	5(20.00)	29(38.67)
6.	Ecocare	20(80.00)	10(40.00)	2(8.00)	32(42.67)
7.	Amma	5(20.00)	2(8.00)	1(4.00)	8(10.67)

Figures in parentheses indicate percentage to n in each column

other than taste.

Buying behaviour of millet based food products :

The details on brand awareness, source of information about brands of millet based food products, brands purchased by the respondents quantity per purchase, pack size purchased, expectations from a brand, factors influencing the purchase of millet based food products, quality consciousness, satisfaction level of sample respondents etc., are discussed in detail in this section.

Brand awareness of millet based food products :

The respondents were asked to indicate about the brands known to them in millet based food products category. The data was analysed and the results for *Idli* and *Dosa* mix, *Idiyappam* and *Seva* mix, *Flakes* and *Sweet mix* are presented in Table 2.

It could be inferred from the Table 2, that majority of the respondents (72 %) were aware of Milleteo brand of *Idli* and *Dosa* mix, while 66.67 per cent of the respondents were aware of MTR *Idli* and *Dosa* mix. In retail outlet category wise also majority of the respondents were aware of Milleteo which was closely followed by MTR. It could be concluded that awareness about Milleteo *Idli* and *Dosa* mix was high in all the category. Milleteo *Idli* and *Dosa* mix was launched during the year 1983 in Coimbatore and also it was available across three types of retail outlets. Hence awareness about Milleteo *Idli* and *Dosa* mix was higher than other brands.

It could be inferred from the Table 3, that majority

of the respondents (75.00 %) were aware of Eco care brand where as 66.67 per cent of the respondents were aware of MTR brand. Categorywise in A class outlet 74.67 per cent of the respondents were aware of Eco care brand, while in B class outlet about 76.92 per cent of the respondents were aware of MTR brand and in C class outlet only few of the respondents (100 %) were aware of MTR, Eco care and Krishna brand. It could be concluded that awareness about MTR brand was high among the respondents in B and C class outlet. The reason for low awareness about MTR *Idiyappam* and *Seva* mix brand at A, B and C retail outlets was may be less product availability in A, B and C class outlets.

From the Table 4, it could be inferred that majority of the respondents (77.78 %) were aware of Manna Flakes while 50.00 per cent of the respondents were aware of MTR, Krishna Flakes. About 71.43 per cent of the A class respondents were aware of manna flakes, while majority of the B class respondents were aware of manna Flakes. It could be concluded that majority of the respondents in B and C class outlet were unaware of MTR Flakes.

From the data, it could be inferred that 81.48 per cent of the respondents were aware of manna brand. In A class outlet majority of the sample respondents (83.33 %) were aware of manna brand, while in B class outlet only 70.00 per cent of the respondents were aware of manna brand. It could be concluded that awareness about MTR Sweet mix was low among B and C class consumers.

It could be concluded from Table 5 that in general

Table 3 : Idiyappam and Seva mix brands known to the respondents

(Number of respondents)

Sr. No.	Brands	Category of retail outlets			Overall (n=75)
		A(n = 25)	B(n = 25)	C(n = 25)	
1.	MTR	10 (55.56)	10 (76.92)	2 (100.00)	22(66.67)
2.	Eco care	14 (77.78)	9(69.23)	2(100.00)	25(75.76)
3.	Krishna	4 (22.22)	5 (38.46)	0 (0.00)	9 (27.27)
4.	Protoman	8 (44.44)	7 (53.85)	2(100.00)	17(51.52)

Figures in parentheses indicate percentage to n in each column

Table 4 : Flakes brands known to the respondents

(Number of respondents)

Sr. No.	Brands	Category of retail outlets			Overall (n=75)
		A(n = 25)	B(n = 25)	C(n = 25)	
1.	MTR	7 (50.00)	2 (50.00)	0 (0.00)	9(50.00)
2.	Manna	10 (71.43)	4 (100.00)	0 (0.00)	14 (77.78)
3.	Krishna	7 (50.00)	2 (50.00)	0 (0.00)	9 (50.00)
4.	Sippi	7 (50.00)	0 (0.00)	0 (0.00)	7 (38.89)

Figures in parentheses indicate percentage to n in each column

majority of the respondents visiting A class outlet were aware of MTR brand of products of *Idli* and *Dosa* mix, *Idiyappam* and *Seva* mix, *Sweet mix* and *Flakes*. But the market share of MTR brand is in second place when compared to *Millete* in *Idli* and *Dosa* mix, *Eco care* in *Idiyappam* and *Seva* mix, *Manna* in *Flakes* and *Sweet mix*. In contrast the awareness about the MTR brand of *Idiyappam* and *Seva* mix, *Sweet mix* and *Flakes* was low among the respondents visiting B and C class outlets. So the firm should take efforts to popularize the brand among B and C class category to increase the market share for their millet food products.

Source of information about brands of millet based food products :

The source of information will helpful to identify the media for communication. The respondents were asked to indicate about the source through which they got the information regarding various brands of millet based food products. The data were analysed and the results are presented.

It could be inferred from the Table 6, that the retail shop display was the major source of information about brands of millet based food products for 76 per cent of the respondents, which was closely followed by Friends, Relatives, Neighbors. In all the category of retail outlets display at retailer shop was the source of information for majority of the respondents. So the firm should try to improve their product display in retail shops and thereby increase awareness about the brand among consumers.

Reason for preferring particular brand :

The respondents were asked to rank about their reason for preferring particular brand and the results are presented.

The sample respondents ranked quality as the first criteria for preferring a particular brand. Since the products under study were food products the consumers were very much keen about the quality of the products. The sample respondents are aware that millet based food products are good for health. The firm could print the quality certifications on the pack to attract consumers. They had given third rank to the taste, that the respondents expected 'home made taste' from the branded millet based food products. So the firm could consider these aspects while formulating the strategies. They had given forth rank to the price. This indicates the price consciousness of the respondents. Price is also a major reason for preferring branded item so the firm should also consider this factor while formulating the pricing strategies for their products.

Factors influencing the purchase of millet based food products :

The sample respondents were asked to indicate about the factors influencing the purchase of millet based food products. The responses are measured on a five point scale with score of one for "most important" and five for "most unimportant". The results are presented in the below Table 8.

From the Table 8, it could be concluded that "good for health" was considered as the most important factor

Table 5 : Sweet mix brands known to the respondents

Sr. No.	Brands	Category of retail outlets			Overall (n=75)
		A(n = 25)	B(n = 25)	C(n = 25)	
1.	Manna	10 (83.33)	7 (70.00)	5 (100.00)	22 (81.48)
2.	MTR	9 (75.00)	5 (50.00)	2 (40.00)	16 (59.26)
3.	Eco care	5 (41.67)	3 (30.00)	3 (60.00)	11 (40.74)
4.	Millet cookies	4 (33.33)	2 (20.00)	1 (20.00)	7 (25.93)
5.	Krishna	4 (33.33)	4 (40.00)	2 (40.00)	10 (37.04)

Figures in parentheses indicate percentage to n in each column

Table 6 : Source of information about brands of instant millet based products

Sr. No.	Source of information	Category of retail outlets			Overall (n=75)
		A (n = 25)	B(n = 25)	C(n = 25)	
1.	Retail shop display	24 (96.00)	18 (72.00)	15 (60.00)	57 (76.00)
2.	TV, Radio advertisement	3 (12.00)	0 (0.00)	0 (0.00)	3 (4.00)
3.	News paper, Magazine	2 (8.00)	0 (0.00)	0 (0.00)	2 (2.67)
4.	Friends, Relatives, Neighbors	12 (48.00)	2 (8.00)	3 (12.00)	17 (22.67)

Figures in parentheses indicate percentage to n in each column

Table 7 : Reason for preferring particular brand

Sr. No.	Particulars	Mean score(n=75)	Rank
1.	Good for health	86.28	I
2.	Quality	75.58	II
3.	Taste	71.50	III
4.	Price	60.58	IV
5.	Package	56.50	V
6.	Flavour	52.00	VI
7.	Colour	49.53	VII
8.	Keeping quality	34.20	VIII

Table 8 : Factors influencing the purchase of millet based food products

(n=75)

Sr. No.	Factors influencing the purchase	Mean score
1.	Good for health	1.31
2.	Saves time and reduces the workload	1.63
3.	Good taste	1.73
4.	Reasonable price	1.76
5.	Easy availability	1.82
6.	Advertisement	2.78
7.	Package attractiveness	2.78
8.	Preferred flavour	3.69
9.	Peer group influence	3.78

Table 9 : Satisfaction level of the respondent regarding their present brand

(Number of respondents)

Sr. No.	Satisfaction level	Category of retail outlets			Overall
		A	B	C	
1.	Highly satisfied	5 (20.00)	1 (4.00)	1 (4.00)	7(9.33)
2.	Satisfied	18 (72.00)	20 (80.00)	23 (92.00)	61 (81.33)
3.	Neutral	2 (8.00)	2 (8.00)	1 (4.00)	5 (6.67)
4.	Dissatisfied	0 (0.00)	2 (8.00)	0 (0.00)	2 (2.67)
5.	Highly dissatisfied	0 (0.00)	0 (0.00)	0 (0.00)	0(0.00)
6.	Total	25 (100.00)	25 (100.00)	25 (100.00)	75 (100.00)

Figures in parentheses indicate percentage to total

Table 10 : Suggestions given by the respondents for Idli and Dosa mix

(Number of respondents)

Sr. No.	Suggestion	Category of retail outlets			Overall (n=75)
		A(n = 25)	B(n = 25)	C(n = 25)	
1.	Offer extra quantity	17 (68.00)	19 (76.00)	20 (80.00)	56 (74.67)
2.	Offer some kitchen items	16 (64.00)	15 (60.00)	15 (60.00)	46 (61.33)
3.	Some value added taste	10 (40.00)	8 (32.00)	7 (28.00)	25 (33.33)
4.	Price to be reduced	18 (72.00)	11 (44.00)	15 (60.00)	44 (58.67)

Figures in the parentheses indicate percentage to n in each column

Table 11 : Consumers' perception about millet based food products

(n=75)

Sr. No.	Statement	Mean score
1.	Millet based food mix are safe for health	1.86
2.	Millet based food mix saves time	3.76
3.	We can totally rely on millet based food products	2.86
4.	Eating millet based food is a symbol of status	3.66
5.	Millet based food mix are delicious	2.01
6.	Millet based food mix are tastier than homemade mixes	3.00

which influenced the purchase of millet based food products among the respondents, other factors like “saves time and reduces the workload”, “good taste”, “reasonable price” and “easy availability” were considered as important factor for preferring millet based food products. “Advertisement” and “package attractiveness” were consider to be the neutral factors for the purchase of millet based food products by the respondents.

Satisfaction level of the respondent :

The sample respondents were asked about their satisfaction level regarding their present brand. The details are presented here.

It could be inferred that majority of the respondents (81.33 %) were satisfied with their present brand. In A, B and C class outlets 72.00, 80.00 per cent and 92.00 per cent, respectively were satisfied with their present brand.

Suggestions given by the respondent :

The suggestions of the respondents for promoting sales of each of the four millet based food products covered in the study was analysed and the results are presented.

From the Table 10, it could be inferred that majority of the respondents (74.67 %) suggested that extra quantity in the pack will be better than offering kitchen items. About 61.33 per cent of the respondents told that the items that could useful in kitchen like knife may be given with the pack. 58.67 per cent of the respondents suggesting reducing the price will make them purchasing more quantities.

Consumers' perception about millet based food products :

The consumers were asked about their perception regarding various millet based food products. They were asked to indicate their opinion in a five point scale ranging from strongly agree (1) to strongly disagree (5) and their opinion was analysed. The results are analysed and presented in the Table 11.

The consumers were neutral with regard to whether they can totally rely on millet based food products and “millet based food mixes are tastier than homemade millet mixes”. The consumers did not agree with the statements “ eating millet based food is a symbol of status” and “ millet based food mixes are safe for health”. The consumers view that “they are delicious” are favorable for the firm and this will lead to the growth of the market. Since consumption of millet based food mix did not connate status symbol, it will be consumed by consumers across income categories.

LITERATURE CITED

- Nandagopal, R. and Chinnaiyan, P. (2003).** Brand preference of soft drinks in Rural Tamil Nadu. *Indian J. Mktg.*, **12**(12-14): 14-17.
- Rupkumar, V.N., Autkar and Mahalla, Y.P. (1995).** Family consumption pattern in rural sector : A case study of Vidharba region. *Bihar J. Agric. Mktg.*, **3** (2): 205-218.
- Sheeja (1998).** Consumer buying. Eighth Edition. New Jersey: Prentice Hall, 570
- Singh, G. (1995).** Consumption of Walnut: Consumer's Views, Pattern and Determinants. *Indian J. Agric. Mktg.*, **9**(1): 16-26.
- Srinivasan, V., Park, C.S. and Chang, D.R. (2001).** “EQUITYMAP: Measurement, analysis and prediction of brand equity and its sources, Research Paper Series, Graduate School of Business, Stanford University.

Received : 24.03.2017; Revised: 29.07.2017; Accepted : 15.08.2017