



## Consumption Pattern and its Purchasing Behaviour of Millets in Coimbatore city.

### KEYWORDS

millets, consumption pattern, purchasing behavior, health benefits.

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**ABSTRACT** Millets are one of the oldest foods known to humans and possibly the first cereal grain to be used for domestic purposes Millet is widely used to refer to a variety of grains that are very popular for their culinary uses as well as their health promoting qualities. The area selected for the study was Coimbatore city. The study was conducted both among the Urban and Rural area to find out the under exploited millets that are commonly consumed by the population through Simple random sampling. It was found that 24 percent of urban people consumed finger millet, while in rural area 18 percent consumed pearl millet followed by barnyard and finger millet. out of 500 respondents 195 consumed millets for health benefits, and the next reason for consuming millets was found to be easy to prepare, which is at position rank second. that Health benefits rank First out of the 500 respondents. Taste is at the position of rank second.

**Introduction:** Millets are one of the oldest foods known to humans and possibly the first cereal grain to be used for domestic purposes Millet is widely used to refer to a variety of grains that are very popular for their culinary uses as well as their health promoting qualities. The grain, millet is one of the oldest foods known to humans. People in Africa and India use it in many of their recipes (Amadou *et al.*, 2011). Although millet is one of the world's most important food crops, it is cultivated mostly in the Eastern hemisphere and particularly in regions with primitive agricultural practices and high population densities. Millets are major food sources for millions of people, especially those who live in hot, dry areas of the world (Adekunle, 2012). The name millets is used to describe seeds from several taxonomically divergent species of grass Millets are mostly grown in marginal areas and under agricultural conditions in which major cereals fail to harvest substantial yield (FAO, 2008).

Millet is an exotic grain that Americans mostly feed to birds .Throughout the world there are 6,000 varieties of millet whose grains vary in color from pale yellow, to gray, white, and red. Millet is the generic name given to more than 6,000 species of wild annual grasses found throughout the world. It is mentioned in the Bible, and was used during those times to make bread. Millet has been used in Africa and India as a staple food for thousand of years. It is suggested that people were farming millet in India about 2500 B.C. It is one of the hardiest of cereals, capable of fending for itself in the wild state; but when it is cultivated it responds gratifyingly to even the most rudimentary care. It's very small seeds facilitate its spread, with the aid of birds, for instance, or even of the wind. It keeps well in storage. Millet is often stocked as a reserve good in case of famine.

Millets are store houses of nutrition .Millets are highly nutritious, non-glutinous and not acid forming foods. Millets are particularly high in the minerals such as iron, magnesium, phosphorus and potassium. They are also rich in phytochemicals, including phytic acid, believed to lower cholesterol and phytate which is associated with reduced cancer (Issoufou *et al.*, 2013).

Millet can usually be purchased as people's food in health food stores and sometimes in grocery stores that feature a bulk food section (The Hindu, 2014). It is documented that the plan was also grown by the lake dwellers of Switzerland during the Stone Age, because millet stored exceptionally well, in the past centuries. The grain was also common to store the grain during famine.

### Methodology:

### Selection of Area and consumption pattern of millets

The area selected for the study was Coimbatore city. The study was conducted both among the Urban and Rural area to find out the under exploited millets that are commonly consumed by the population through Simple random sampling.

A consumer survey was carried out where 500 households were selected to find out the consumption pattern of millets and baked products. A well structured questionnaire was used for this purpose. The questionnaire is given in Appendix- I. A questionnaire is a list of questions used in survey method for collection of data. (Paneerselvam, 2014).

Base upon the rank assigned by the household respondents the order of important factors influencing the respondents to consume millets and purchasing the millets from the super markets is identified. To find out the most significant factor which influences the respondent, Garrett's ranking technique was used. As per this method, respondents have been asked to assign the rank for all factors and the outcome of such ranking has been converted into score value with the help of the following formula:

$$\text{Percent position} = \frac{100(\text{Rij} - 0.5)}{\text{Nj}}$$

Where

Rij = Rank given for the ith variable by jth respondents

Nj = Number of variable ranked by jth respondents

With the help of Garrett's Table, the percent position estimated is converted into scores. Then for each factor, the scores of each individual are added and then total value of scores and mean values of score is calculated. The factors having highest mean value is considered to be the most important factor.

### Results and Discussion

In most parts of the world, millet is grown as a subsistence crop for local consumption. (Millet Network of India, 2009). Millet is delicious as a cooked cereal that can be used as a side dish and can be popped like corn for use as a snack, breakfast cereal and baked products. (Michaelraj *et al.*, 2008) also cited in the literature that the millets consumption and harvesting of millets are falling from 2012 onwards. Mostly the millets are grown as subsistence crops, however in some countries or areas; the millet is the staple food of the whole population and remains an important cash crop for small farmers (David *et al.*, 2005).

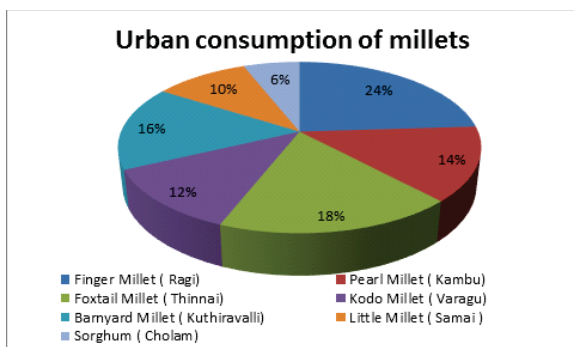
The table I represents the demographic profile of the respondents of both the urban and rural population.

**Table I Demographic profile of the respondents**

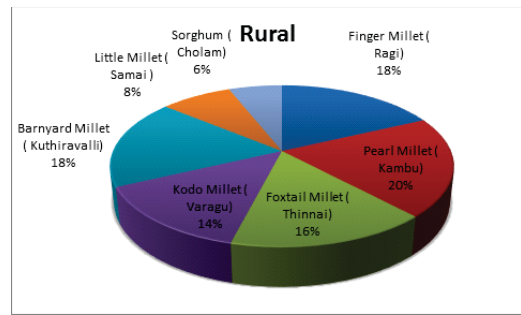
Age	Number	Percent
25-35	60	12
35-45	189	37.8
45-55	178	35.6
55 and Above	73	14.6
Total	500	100
<b>Occupation</b>		
Government Employee	110	22
Private Employee	80	16
Teaching	85	17
Home Maker	170	34
Business	55	11
Total	500	100
<b>Education</b>		
No formal Education	65	13
Higher secondary	135	27
University	160	32
Professional Course	140	28
Total	500	100
<b>Monthly Income</b>		
Below Rs.10,000	140	28
Rs.10,000- 20,000	160	32
Rs.20,000- 30,000	115	23
Above Rs.30,000	85	17
Total	500	100
<b>Type of Family</b>		
Joint	80	16
Nuclear	420	84
Total	500	100
<b>Members in the family</b>		
2 members	125	25
3 to 5 members	225	45
Above 5 members	150	30
Total	500	100

\*Multiple Response

The above given Table I indicates the demographic profile of both urban and rural population selected for the study. 250 each respondent both from the rural and urban population was collected through primary data. The majority of the respondents were in the age group of 35 -45 years of age. The respondents were mostly homemaker, followed by teaching with 17 percent, 32 percent were in college level. The income level was in between 10,000-20,000 with 32 percent of the respondents and 84 percent belong to nuclear family and 45 percent had 3 to 5 members in the family.



**Fig. 1 Millet consumption by urban Population**



**Fig. 2 Millet consumption by Rural Population**

Figure 1 and 2 show the different types of millets which are consumed by both urban and rural population. It was found that 24 percent of urban people consumed finger millet, while in rural area 18 percent consumed pearl millet followed by barnyard and finger millet. The consumption patterns of millets are very specific and continue to remain regional specific, and popularization in the broader range is essential. Specific design of foods acceptable to the population of the region specific and group specific can help in promoting the millet consumption and thereby nutritional intake of the consumers significantly (Varma *et al.*, 2013)

**Table IV Reasons for Consumption of Millets**

Rank	Health benefits	Prescribed by doctor	Advice from nutritionist	Affordable compared to other cereals	Taste	Likeness	Self awareness about health	Easy to prepare
Rank 1	195	18	25	16	90	72	32	65
Rank 2	96	34	16	23	75	86	67	171
Rank 3	67	27	97	14	112	54	47	55
Rank 4	53	40	78	17	45	120	63	36
Rank 5	37	50	115	87	77	80	70	44
Rank 6	22	70	135	106	27	32	118	59
Rank 7	17	90	21	183	40	40	58	47
Rank 8	13	171	13	54	34	16	45	23

\*Multiple Responses

From the above given Table IV, it is clear that out of 500 respondents 195 consumed millets for health benefits, and the next reason for consuming millets was found to be easy to prepare, which is at position rank second. Followed by "Taste" and "Likeness" subsequently in the third and fourth rank. Fifth and sixth rank goes to 'Advice from Nutritionist' and "Self awareness about health". Sixth rank is obtained by the reason for Affordable compare to other cereals. The last rank goes to prescribe by doctor with 171 respondents.

The Table V indicates the relationship of respondents monthly income and purchase of millets, as it depends to the monthly income of the person in purchasing the products.

**Table – V Respondents monthly Income and Purchase of Millets**

Monthly Income	Frequency of Purchase				Total	Chi <sup>2</sup>
	Daily	Weekly	Monthly	Rarely		
Below Rs.10,000	18	37	40	45	140	12.223**
Rs.10,000- 20,000	32	45	40	43	160	2.450 <sup>NS</sup>
Rs.20,000- 30,000	11	30	37	37	115	16.641**
Above Rs.30,000	17	17	28	23	85	3.988 <sup>NS</sup>
Total	78	129	145	148	500	

**\*Multiple Response**

\*\* Significant at 1% level NS – Not significant

**Ho:** There is no association between the respondent monthly income and frequency of purchasing of millets.

The above given Table V shows the monthly income in purchasing of millets both from urban and rural areas. The chi square value is 12.223 with DF- 3,P Value < .007 and 16.641 with DF-3,P value < .001. It is clearly shown that it is statistically significant at 1 % level. Hence, there is relationship between the respondents monthly income and purchase of millets. From the studied carry out by Kalaiselvi, Parameswari and Razia, 2016, it was observed that it is statistically significant and there is a relationship between the monthly income and purchase of millets.

The above given Table VI indicates the purchasing behavior for consumption of millets of both urban and rural population. The selected population purchased the millets for different choice and views, and it has been given in Rank wise

**Table - VI Purchasing behavior for Consumption of millets**

Rank	Price	Taste	Health benefits	Seasonal Availability	Advertisements	Family Income
Rank 1	63	78	194	15	34	23
Rank 2	34	180	96	26	46	47
Rank 3	45	55	73	38	67	170
Rank 4	190	48	47	97	79	97
Rank 5	93	75	55	221	104	83
Rank 6	75	64	35	103	170	80

**\*Multiple Responses**

From the above given table it clearly indicates that Health benefits rank First out of the 500 respondents. Taste is at the position of rank second. Followed by “Family income “and” Price” in third and fourth rank. Fifth rank goes to “Seasonal Availability” with 221 respondents out of the 500 respondents. Advertisement goes to the last rank for purchasing behavior of millets. From the literature cited that out of 450 respondents 281 respondents preferred millets for the nutritional value (Kalaiselvi *et al.*,2016)

**Summary and Conclusion:** 250 each respondent both from the rural and urban population was collected through primary data. The majority of the respondents were in the age group of 35 -45 years of age. The respondents were mostly homemaker, followed by teaching with 17 percent, 32 percent were in college level. The income level was in between 10,000-20,000 with 32 percent of the respondents and 84 percent belong to nuclear family and 45 percent had 3 to 5 members in the family. it is clear that out of 500 respondents 195 consumed millets for health benefits, and the next reason for consuming millets was found to be easy to prepare, which is at position rank second. Followed by “Taste” and “Likeness” subsequently in the third and fourth rank. Fifth and sixth rank goes to 'Advice from Nutritionist' and “Self awareness about health”. Sixth rank is obtained by the reason for Affordable compare to other cereals. The last rank goes to prescribe by doctor with 171 respondents. It clearly indicates that Health benefits rank First out of the 500 respondents. Taste is at the position of rank second. Followed by “Family income “and” Price” in third and fourth rank. Fifth rank goes to “Seasonal Availability” with 221 respondents out of the 500 respondents. Advertisement goes to the last rank for purchasing behavior of millets.

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