

RESEARCH ARTICLE

CONSUMER PREFERENCE TOWARDS AAVIN MILK AND MILK PRODUCT

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ABSTRACT

India is the world's largest dairy producer. Dairy products demand in India has increased dramatically in both rural and urban sectors. Tamil Nadu state is the one of the ten largest milk producing states in India. Milk is whitish liquid containing proteins, fats, lactose and various vitamins and minerals that is produced by mammary glands of all mature female mammals after they have giving birth and serves as nourishment for their young. The milk of cows, goats or other animals used as food by humans. The state, major milk contributor is Aavin, a Tamil Nadu-based milk producer's union, procures milk, processes it and sells milk and milk products to consumers. This paper analyses Consumer Preference over the Aavin special reference to the Gudalur the Nilgiris Tamil Nadu State. The aim of the study is reveal consumer preference over Aavin milk products based on their age, educational qualification and monthly income of the consumers' family. It also depicts level of satisfaction about the product using chi-square test.

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INTRODUCTION

Milk

Milk is whitish liquid containing proteins, fats, lactose and various vitamins and minerals that is produced by mammary glands of all mature female mammals after they have giving birth and serves as nourishment for their young. Cow milk generally contains between 3 and 4 g of fat/100 g, although values as high as 5.5 g/100 g have been reported in raw milk. Milk and dairy product contain many nutrients and provide a quick and easy way of supplying these nutrients to the diet within relatively few calories.

Milk, cheese and yogurt all provide the following beneficial nutrients in varying quantities.

- (i) Calcium- for healthy bones and teeth
- (ii) Phosphorous- for energy release
- (iii) Magnesium- for muscle function
- (iv) Protein- for growth and repair
- (v) Vitamin B12- for production of healthy cells
- (vi) Vitamin A- for good eyesight and immune function
- (vii) Zinc- for immune function
- (viii) Ribo flavin – for healthy skin
- (ix) Folate- for production of healthy cells
- (x) Vitamin C- for formation of healthy connective tissues

- (xi) Iodine- for regulation of the body rate of metabolism (How quickly the body burns energy and the rates of growth)

Dairy product

India is the world's largest dairy producer. According to the National Dairy Development Board (NDDB), Indian dairy demand in 2021-22 is estimated to be between 200 to 210 million metric tons. Indian dairy production needs to grow approximately 5 percent per year in order meet NDDB's 2021-22 demand projection. The Indian dairy sector is estimated to be worth Rs.3.6 lakh crores, according to the Department of Animal Husbandry, Dairy & Fisheries, Ministry of Agriculture, and Government of India. Indian Dairy sector has grown significantly over the years. Dairy products demand in India has increased dramatically in both rural and urban sectors. In the year 2015 fluid milk consumption is forecast to increase 4.8 percent to 59.75 million metric tons on population growth and rising incomes, which has resulted in Indian buying more nutritious food, especially milk and dairy products.

Aavin

'Aa' or 'ஆ' in Tamil means 'cow' and 'பால்' means 'milk'. 'Aavin paal' ('ஆவின் பால்') translates to 'cow's milk' ('பசுவின் பால்')

The dairy development was established in 1958 in Tamil Nadu. The administrative and statutory controls over all the milk cooperatives in the state were transferred to the dairy development department on 1.8.1965. The commissioner for milk production and dairy development was made as the functional register under the Tamil Nadu cooperative societies Act, with the adoption of "Anand pattern" in the state of Tamil Nadu. Tamil Nadu cooperative milk producers federation limited was registered in 01.02.1981.

On February 1, 1981, the commercial activities of the cooperative were handed over to Tamil Nadu Co-operative Milk Producers' Federation Limited which sold milk and milk products under the trademark "Aavin". Tamil Nadu is one of the leading states in India in milk production with about 14.5 million liters per day.

Aavin produces 4 varieties of milk.

- (i) Toned milk (3% fat)
- (ii) Doubled toned milk (1.5% fat)
- (iii) Standardized Milk (4.5% fat)
- (iv) Full Cream Milk (6% fat)

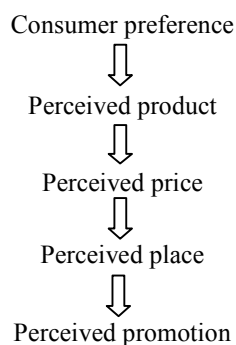
It is also engaged in the manufacture of milk products such as milk khoa, mysorepak, gulab jamun, khalakand, butter milk, Lassi, curd yoghurt and ice-creams.

### Consumer

Consumer makes decisions by allocating their scarce income across all possible goods in order to obtain the greatest satisfaction. Formally, we say that consumers maximize their utility subject to budget constraint. Utility is defined as the satisfaction that a consumer derives from the consumption of a good. As noted above, utility's determinants are decided by a host of noneconomic factors. Consumer value is measured in terms of the relative utilities between goods. These reflect the consumer's preferences.

### Consumer preference

Consumer preferences are defined as the subjective (individual) tastes, as measured by utility, of various bundles of goods. They permit the consumer to rank these bundles of goods according to the levels of utility they give the consumer. Note that preferences are independent of income and prices. Ability to purchase goods does not determine a consumer's likes or dislikes



### Objectives of The Study

- (i) To assess the level of consumer preference of Aavin milk and milk products.

- (ii) To know the average expenditure on milk and dairy product of the consumer.
- (iii) To identify the factors influencing in purchase decision in study area.

### Statement of The Problem

Milk is an essential commodity in human life of Indian consumers. They prefer healthy and energy drinks for consumption. Milk and Dairy products are easily available, it offered by number of milk brands. The main challenge for marketers is, to create the consumer loyalty by quality, freshness, odor and taste. Marketers are necessary to know the consumers response towards their own brand milk and dairy products of its availability, acceptability and affordability. Aavin plays a vital role in marketing. The success of the milk and milk product depends not only, the marketing but also the consumer preference pattern towards their product. To have better marketing the union needs a maximum inspiration from the consumer side. If marketing is done without the execution of consumer. It cannot run successfully for a long period of time. So an analytical study is conducted based on consumer preference with regards to market of milk and milk product.

### Area of The Study

Gudalur is a Municipality town and taluk in Nilgiris district in the Indian state of Tamil Nadu. As of 2011, the town had a population of 49,535 .Gudalur is a picturesque green valley on the way from Mysore to Ooty. It is a gateway to three states, Tamil Nadu, Kerala and Karnataka lying equidistant from both Kerala and Karnataka. Though the history of the name has been lost, it is the place where all of the three states' boundaries meet. Some even say the name originated as 'Koodal'(Joining) in Tamil and 'Ooru'(Village),and Goodal+uru as a mysterious place. As the town is located 50 km from any other nearby bigger towns, Ooty, Sulthan Bathery, and Gundalpet & Nilambur it can very well be called as the Joining-Place or Point.

### REVIEW OF LITERATURE

1. Rubaina<sup>1</sup> (2010) conducted a research on the customer preference towards dairy products. The study made an attempt to identify the customer's preference towards dairy products and to know about the factors which influence the selection of different brands of dairy products. The study revealed that the company should make survey to know the expectations of the consumers and produce that product in the manner so as to attract more customers towards their brand and advertisement can be done through mass media to increase sales and to educate customers about the product
2. Nagapani<sup>2</sup> in his study on the marketing aspects with special reference to Coimbatore district co-operative milk producer union limited made an attempt to identify the reasons for low procurement of milk and to know about the demand in that area. The study found that the reason for low procurement in the areas of shanmugapuram and sultanpet chilling centers was due to the competition in procurement from private dairies. The sale of milk in 500 ml sachet was found to be high among the available size of sachets.

3. Radder and Natalie heather smith<sup>3</sup> conducted a study on milk marketing by selected dairy companies in port Elizabeth. The objectives of the study were to determine consumers' milk consumption patterns and factors which influence consumers' milk consumption and to review the major competitors in the Port Elizabeth. The study found that most of the respondents used milk for whitening of tea or coffee and they had the opinion that the milk was very healthy and it was an enjoyable tasting beverage and they felt that quality, availability and freshness were the most influencing factors. The study also found that the increasing competitiveness in the milk industry, including the no-name brand milk was forcing dairy companies to sell the milk at very low profit margins.
4. Abinesh<sup>4</sup> made a Comparative study on consumer behavior towards loose milk and packed milk. The objective of the study was to analyses the factors influencing consumer behavior and the government intervention to change consumer's preference from loose milk to packed milk. The study found that the factors like quality, quantity, hygienic aspect and government intervention influence consumer behavior. Government agencies like, dairy development department, Kerala co-operative milk marketing federation and the dairy cooperatives societies have to play an important role, to help the milk farmers on one hand and consumer on the other hand. Further the efforts of Dairy development department and MILMA have to go a long way in the days to come to develop quality milk procurement and marketing in Kerala
5. Shanthi<sup>5</sup> in her doctoral research attempted to study on buyer behavior of urban household in fluid milk market with reference to Coimbatore district and attempted to identify the fluid milk consumption and pattern of utilization by the households with respect to price, promotion and distribution of fluid milk. The study found that the higher attitudinal strength was based on the selection of the brand of milk on fat content and other nutritional facts, the lower attitudinal strength had resulted towards lack of assurance on continuous purchase of the same brand in the future. It was also found that the organized sector dairies concentrate in marketing pasteurized branded fluid milk.

## RESEARCH METHODOLOGY

Aavin milk and dairy consumers are selected as 120 samples of the research study. Milk and dairy products are habitué food system of the humans. The reasons for selecting this topic are number of consumers available in the region and also assess the level of consumer's preference of Aavin milk and dairy products.

### Methods of Data Collection

Primary data and Secondary data

Primary data collected through questionnaire from the consumers of Aavin. The questionnaire relies on one form of questions alone. The various forms complement each other. As such questions of different forms are included in one single

questionnaire. Multiple – choice questions constitute the basis of a structured questionnaire for the purpose of research.

Secondary data are the data already been collected and analyzed by someone else. Those data may either be published or unpublished. Published data is published report, records, journals, books, internet etc.

The consumer preference level on Aavin dairy products are analyses based on the questionnaire by the following methods.

### Simple Percentage Analysis

This is a method to compare two or more serious of data. It identifies the relationship between the data's.

$$SAA = \frac{\text{No. of Respondents}}{\text{Total No of Respondents}} \times 100$$

Where SSA stands for simple average analysis

### Chi-Square Analysis

In order to the chi-square test either as a test of goodness of fit or as a test to judge the significance of association between attributes, it is necessary that the observed as well as theoretical or expected frequencies must be grouped in the same way and the theoretical distribution must be adjusted to give the same total frequency.

$$X^2 = \frac{(\text{oij} - \text{Eij})^2}{\text{Eij}}$$

Where, Oij = observed frequency of the cell in *i* the row and *j* the column.

Eij = expected frequency of the cell in *i* the row and *j* the column.

### Research Design and sample size

#### Research design

The Research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. The study notches the consumer preference of Aavin milk and milk products.

#### Sample size

Most of them were used Aavin milk in day- to - day life. Out of this 120 respondents were selected.

#### Sampling Method

The sampling method is Non-probability sampling under which convenience sampling technique were used.

## ANALYSIS AND INTERPRETATION

The result of analysis and interpretation of empirical data based on the questionnaire of 120 respondents. The primary data is collected by the way of questionnaires from various age grouped and socio-economic people of Gudalur Taluk of Nilgiris district, Tamil nadu. The questionnaire is prepared through the various levels, awareness about Aavin products and level of satisfaction of respondents. The profile of respondents include age, gender, marital status, place of resident,

educational qualification, occupation, family category, size of family, average age of family, monthly income. Percentage and Chi-square methods are using for analysis and interpretation of data.

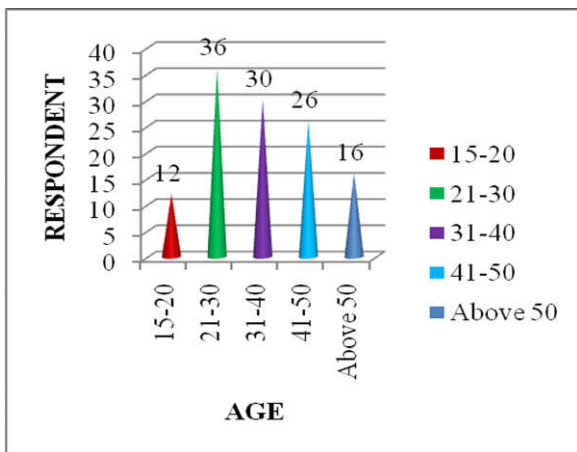
**Percentage Method**

**Table 1** Age of the Respondents

Age	No of Respondent	Percentage
15-20	12	10
21-30	36	30
31-40	30	25
41-50	26	22
Above 50	16	13
<b>TOTAL</b>	<b>120</b>	<b>100</b>

Sources: primary data

The Table I show the age wise classification of the 120 respondents, 10% of the respondents are belongs to the age group of 15-20 years. 30% of the respondents are between the age group 21-30 years, 25% of the respondents are between the age group 31-40, and 22% of the respondents are between the age group 41-50 years and 13% of the respondents are belongs to the age group of above 50.. Majority (30%) of the respondents are between the age group of 21-30 years.



**Figure 1** Age of the respondents

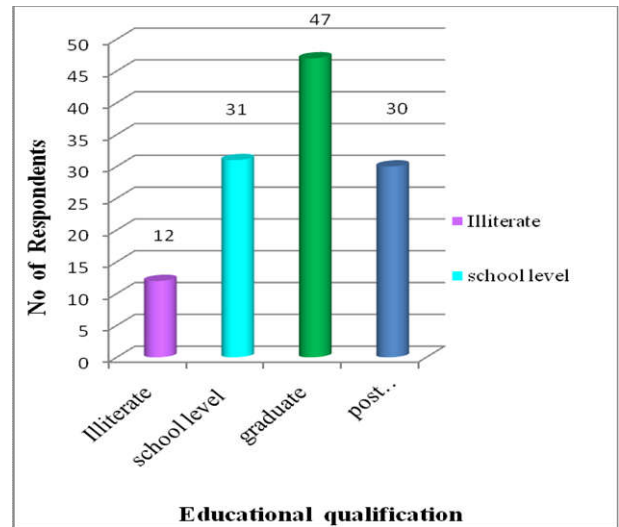
The Figure 1 show that the Majority 30% of the respondents is belongs to the age group between 21- 30.

**Table II** Educational qualification of the respondents

Educational qualification	No of Respondent	Percentage
Illiterate	12	10
School level	31	26
Graduate	47	39
Post graduate Above	30	25
<b>TOTAL</b>	<b>120</b>	<b>100</b>

Sources: of primary data

The above table shows the educational qualification of the 120 respondents, 10% of the respondents are illiterate, 26% of the respondents belongs to school level education, 39% of the respondents have completed graduate level and 25% of the respondents belongs to post graduate and above.



**Figure 2** Educational qualification of the respondents.

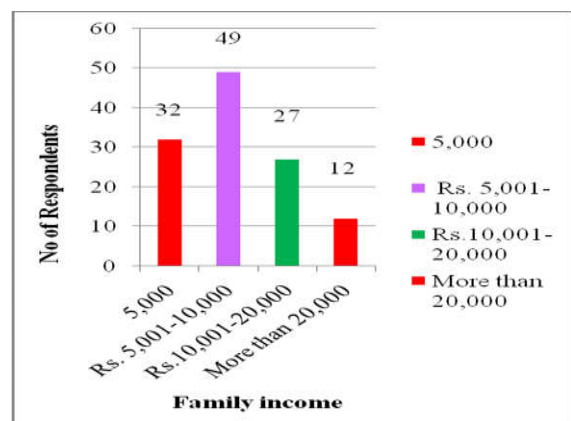
The Figure 2 shows that the Majority 39% of the respondents were graduates.

**Table III** Monthly income of the family

Monthly income of the family	No of respondents	percentage
5,000	32	27
Rs. 5,001-10,000	49	41
Rs.10,001-20,000	27	23
More than 20,000	12	10
<b>Total</b>	<b>120</b>	<b>100</b>

Sources: Primary Data

The Table III shows the monthly income of the family of the 120 respondents, 27% of the respondents, whose monthly income ranges, are Rs.5, 000. 41% of the respondents are earning monthly income between Rs.5, 001 to Rs.10, 000 23% of the respondents whose income ranges between Rs.10, 001 to Rs.20, 000 and 10% of the respondents are earning more than Rs.20, 000.



**Figure 3** Monthly income of the respondents.

Majority 41% of the respondents who's earning range between Rs. 5,001 to Rs.10, 000

**Table IV** Satisfaction with quality of Aavin milk and milk product

Satisfaction with Quality of Aavin milk and milk product	No of Respondents	Percentage
Satisfied	96	80
Not satisfied	24	20
Total	120	100

Sources: primary data

The Table IV shows that the satisfaction with quality of Aavin milk and milk products of the 120 respondents. It indicates 96% of the respondents are satisfied with quality of Aavin milk and milk products and rest 24% of the respondents are said that not satisfied with quality of Aavin milk and milk products. Majority (80%) of the respondents are satisfied with quality of Aavin product.



**Figure 4** Satisfaction with the Quality of Aavin milk and milk product

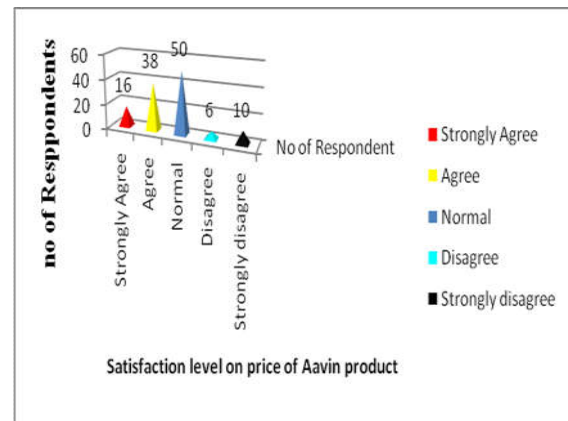
Majorities 80% of the respondents are satisfied with quality of Aavin milk and milk products.

**Table V** Satisfaction level on price of the Aavin milk and milk product

Satisfaction with price of Aavin milk and milk product	No of Respondent	percentage
Strongly Agree	16	13
Agree	38	32
Normal	50	42
Disagree	6	5
Strongly disagree	10	8
Total	120	100

Sources: primary data

The Table V: reveals the satisfaction level of price of Aavin milk and milk products of the 120 respondents. It indicates 13% of the respondents are strongly agree with the price of Aavin milk and milk products, 32% of the respondents are agree with the price of Aavin milk and milk products, 42% of the respondents are specified the normal as the price of Aavin milk and milk products, 5% of the respondents are disagree with the price of Aavin milk and milk products and remain 8% of the respondents are strongly disagree with the price of Aavin milk and milk product.



**Figure 5** Satisfaction level on price of Aavin milk and milk product.

Majorities (42%) of the respondents are satisfied with the level on price of Aavin milk and milk product.

**Chi-Square test**

**Table VI** Level of satisfaction based on place of Residence

Level of Residence	Level of satisfaction			Total
	Highly satisfied	Satisfied	Dis -satisfied	
Village	34	47	3	84
Town	5	27	4	36
<b>Total</b>	<b>39</b>	<b>74</b>	<b>7</b>	<b>120</b>

H1: There is significant relation between place of resident and level of satisfaction

O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
34	27.3	6.7	44.89	1.64
47	51.8	-4.8	23.04	0.44
3	4.9	-1.9	3.61	0.74
5	11.7	-6.7	44.89	3.84
27	22.2	4.8	23.04	1.04
4	2.1	1.9	3.61	1.72

TOTAL: 9.42  
 Degree of Freedom: 2  
 Calculated  $\chi^2$  Value: 9.42  
 Table value: Five percent level- 5.99

The above table indicates that the level of satisfaction based on place of residence of 120 respondents, 84 respondents are residing at village. From this table 34 respondents are highly satisfied, 47respondents are satisfied and rest 3 respondents are dissatisfied. 36 respondents are residing at town. From this, 5 respondents are highly satisfied, 27 respondents are satisfied and remain 4 respondents are dissatisfied.

Thus it inferred that 34 respondents are highly satisfied, under the place of resident out of 84 village residents and total of 120 respondents. Chi- square value is more than the table value at five percent level. Hence the hypothesis is rejected. There is significant relation between place of resident and level of satisfaction of Aavin milk and milk product. Thus, two attributes such as place of resident and level of satisfaction are associated and interdependent.

**Table VII** Level of Satisfaction Based on Gender

Gender	Level of satisfaction			Total
	Highly satisfied	Satisfied	Dis - satisfied	
Male	19	10	3	32
Female	51	33	4	88
<b>Total</b>	<b>70</b>	<b>43</b>	<b>7</b>	<b>120</b>

Sources of primary data

Ho: There is no significant relation between Gender and level of satisfaction

O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
19	18.7	0.3	0.1	0.01
10	11.5	-1.5	2.2	0.19
3	1.9	1.1	1.3	0.69
51	51.3	-0.3	0.1	0.00
33	31.5	1.5	2.2	0.07
4	5.1	-1.1	1.3	0.25
<b>Total</b>				<b>1.21</b>

Degree of Freedom: 2  
 Calculated  $\chi^2$  Value: 1.21  
 Table value: Five percent level- 5.99

The above table indicates the level of satisfaction based on gender of 120 respondents, 32 respondents are Male. From this table 19 respondents are highly satisfied, 10 respondents are satisfied and rest 3 respondents are dissatisfied. 88 respondents are female. From this, 51 respondents are highly satisfied, 33 respondents are satisfied and rest 4 respondents are dissatisfied. Thus it inferred that 51 respondents are highly satisfied, under the female category out of 88 female respondents and total of 120 respondents. Chi- square value is less than the table value at five percent. Hence the hypothesis is accepted. There is no significant relationship between gender and level of satisfaction of Aavin product. Thus, two attributes such as gender and level of satisfaction are not associated and independent.

**Finding**

- (i) Majority 30% of the respondents belongs to the age group between 21-30.
- (ii) 47% of the respondents were Graduates.
- (iii) 49% of Respondents earning range is between 5,001 to 10,000.
- (iv) Majority 80% of the Respondents were satisfied with the Quality of Aavin milk and milk products.
- (v) 42% of the Respondents are normal in the satisfaction level on the price of the Aavin milk and milk products

**Suggestions**

- (i) The consumer is the king in the market. So all the consumers are wanted more awareness about Aavin milk and milk products; they are educated or uneducated. The milk producers have to improve promotional activities, it establishes their brand among consumers, it induces sale and build image of Aavin milk and milk products.

- (ii) 80% respondents are satisfied with the quality of milk and milk products. Many respondents opinion that the price of the Aavin products is high compare to other brands. They expect the reduction of price of product. If Aavin Company may reduce the price of products where create a positive word-of-mouth communication that improves results of sale.
- (iii) The Aavin make effort to satisfy all their consumers. It may provide with less cost, extra taste, easy availability, and perish ability of the products, festival offers and free gift coupons while the consumers purchase the Aavin products

**CONCLUSION**

This study is aims to focuses on consumer preference towards Aavin milk and milk product of Gudalur residents. Generally, the consumers change their attitude frequently on the basis of new trend and fashion. Milk producers must meet consumers' demand for milk when there is demand in order to remain competitive

They well know their needs and wants, so gather information about products and also compare its price, quality, taste and other attributes. If the consumers are not satisfied they shift to other brands. However the data shows the consumers buy the Aavin milk for its quality and taste. It has to be point out that milk consumers prefer taste over than the price. Many respondents feel the price of Aavin products is too high than other brands. If the Aavin take necessary steps to satisfy their consumers, it creates invariant place in mind

**References**

1. Rubaina, (2010) "A study on customers preference towards dairy products", April.
2. Nagapani L "A study on the marketing aspects with special reference to Coimbatore district cooperative milk producer union limited" 1998.
3. Dr. Radder. L and Natalie heather smith, "A Study on milk marketing by selected dairy companies in port Elizabeth" Dec. 1999.
4. Abinesh,"A Comparative study on consumer behavior towards loose milk and packed milk", 2004
5. .Shanthi," A study on Buyer behavior of Urban Household in fluid milk market with reference to Coimbatore district", July 2005.
6. www.Aavin.com.
7. www.agritech.tnau.ac.in
8. www.nddb.org
9. www.dairytechindia.in

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