



A STUDY ON THE CONSUMERS' AWARENESS TOWARDS MILK RELATED PRODUCTS IN TIRUPUR TOWN

K.K.Ramachandran* R.Prabakaran R.Radhakrishnan*****

**Director, G.R.D Institute of Management, G.R.D College of Science, Coimbatore, Tamil Nadu.*

***Lecturer, Chandra Matric Higher Secondary School, Coimbatore, Tamil Nadu.*

****Advisor, Maharaja Group of Institutions, Perundurai, Tamil Nadu.*

INTRODUCTION

Agriculture along with animal husbandry has been and will continue to be the lifeline of Indian economy. India is the highest milk producer in the entire globe. India is well known as the 'Oyster' of the global dairy industry. It is the most important sector of the Indian economy particularly in poverty alleviation and employment generation.

This sector contributes close to one-fourth of India's National income and total work force engaged in agriculture is about 60 per cent. The success of white revolution in India has largely been written by millions of small holders. About 70 million dairy farmers produce more than 50 per cent of the milk in the country.

The country's milk supply comes from millions of small producers, who are dispersed throughout the rural areas. Mostly, ample labour and small land base encourage farmers to practice dairying as an occupation subsidiary to agriculture. As income from crop production is seasonal, dairying provides a stable income which is a year-round income and also it is an important economic incentive for the small farmer. The growth of Indian dairy industry during the last three decades has been impressive, at more than 5% per annum; and in the 90's, the country has emerged as the largest milk producer. India had tremendous milk production in 40 years and has become the world's largest milk-producing nation with the gross output of 84.6 million tons in 2001.

The Indian dairy industry has achieved this strength of a producer-owned and professionally-managed cooperative system, despite the facts that a majority of dairy farmers are illiterate and they run small, marginal operations farmers, selling milk in their sole source of income. More than 10 million dairy farmers belong to 96,000 local dairy cooperatives, who sell their products to one of 170 milk producers' cooperative unions who in turn are supported by 15 state cooperative milk marketing federations.

In India, dairy business has been practiced as rural cottage industry over the years. Semi-commercial dairy started with the establishment of military dairy farms and co-operative milk unions throughout the country towards the end of the 19th century. Since Independence, this industry has made rapid progress. A large number of modern milk and milk product factories have since been established. The organised dairies in India have been successfully engaged in the routine commercial production of pasteurized bottled milk for Indian dairy products.

India, in the early 1950's was commercially importing around 55000 tonnes of milk powder annually to meet the urban milk demand. Most of the significant developments in dairying have taken place in India in this century only. The Indian dairy industry specializes in the procurement, production, processing, storage and distribution of dairy products. India, as a nation stands first in the dairy production in the international scenario.

The Indian dairy industry which is in the developing stage provides gainful employment to a vast majority of the rural households. It employs about 8.47 million people on yearly basis out of which 71% are women.

In India, about 60 per cent of milk is consumed in liquid form, while the remaining 40 per cent is used in the form of butter, clarified butter (desi ghee), cheese, curd, paneer, ice cream, dairy whiteners and traditional sweets. Being the world's largest milk producer and consumer of dairy products, India represents one of most lucrative dairy markets.

Dairy market in India is quite huge and according to an estimate, the unorganized milk and milk product market is about RS.470 billion while the market for processed organised dairy segment is only RS.1000 crores. The market is currently growing around 5 % pa in volume terms. There is an impressive level of processing i.e. 22% in organised sector. The dairy exports in 2007-08 rose to US\$ 210.5 million against US\$ 113.57 last fiscal, whereas the domestic dairy sector has crossed US\$ 108 billion in 2011.



STATEMENT OF THE PROBLEM

Milk and milk products are one of the important components of the Indian food industry. Consumption of milk and milk products is deeply rooted in our tradition and it is an essential item during rituals, festivals and other auspicious events. It has now emerged as the second largest agricultural produce next to rice production and contributing substantially towards the importance of agricultural produce in particular and national economy in general. In view of larger consumer of dairy product, Indian dairy has been witnessing rapid growth of liberalization and is considered as an instrument for social and economic development. Like any consumable product, dairy products captured a significant portion in the day to day life of the people. There seem to be a good response from consumers for not only milk which is essential product but also for other dairy products. In view of growing demand for dairy products, it is felt that an attempt on studying consumer awareness towards dairy product would bring out a useful piece of research work and hence, this study.

SIGNIFICANCE OF THE STUDY

The milk industry which involved in preparing various milk products in the tirupur town face huge problems in selling their products. They could not get the income to meet the basic requirements. But most of them depend on selling various milk products in the residential area of tirupur town. They must find some alternative for their survival or they must otherwise try to know the attitudes of customer before taking a decision to buy the milk products. In other aspect even though the aavin milk products are purchased largely by the people, due to competition by arokiya milk product, hatsun milk product and some other milk products in some of the areas of tirupur district, the sales turnover of the aavinmilk product is fluctuating frequently. So the aavin milk company, the major player may be in a position to know the causes for the fluctuation of sales in the aavin milk products. The study in the consumer awareness is found to be more significant and relevant.

OBJECTIVES OF THE STUDY

The following are the main objectives of the study

- To assess the level of awareness of customer about various brand of milk and milk related products.
- To study the awareness about brands and its milk related products.
- To study the awareness of customers on the nutrients and ingredients available in milk and milk related products.
- To offer suggestions to improve the level of awareness on the various aspects relating to milk products.

LIMITATIONS OF THE STUDY

Data were collected from 500 respondents and the study has been confined to Tirupur city only.

RESEARCH METHODOLOGY

Area of the study

Area of the study refers to tirupur city which is known for textile and garments. It is known as the Knit Wear Capital of India.

Sources of data

Data were collected from customers who are buying various brands of dairy products by using interview schedule method.

Sampling design

The study has used primary data only. The data were collected from 500 customers using convenient sampling technique.

Tools for analysis

The following statistical tools were used for analysing the data.

- Percentage analysis
- Chi-square analysis
- Average score analysis
- Correlation analysis
- Factor analysis
- Z-test

ANALYSIS AND INTERPRETATION

In this section, the analysis and interpretation of the study on the consumers' awareness towards milk and milk related products is presented based on the sample of 500 respondents slated from tirupur. The data were collected from the respondents through interview schedule comprising of personal favour and study related factors. The collected information were processed and analysed using the selected tools in tune with the objectives of the study.

- Percentage analysis



- Chi-square analysis
- Average score analysis
- Correlation analysis
- Factor analysis
- Z-test

All the statistical tests are performed @ 5% level of significance.

Percentage analysis

Gender

The table 1 describes the distribution of respondents based on gender. The gender is classified as male and female.

Table 1: Gender wise distribution of the respondents

Gender	Number of respondents	Percentage
Male	181	36.2
Female	319	63.8
Total	500	100

- It is found from the table 1 that out of total respondents taken for the study, 319(63.8%) are female and 181(36.2%) are male.
- The majority (63.8%) of the respondents are female.

Age group

The table 2 describes the distribution of respondents based on age group. The age group is classified as below 20 years, 20-40 years, 40-60 years and 60 years and above.

Table 2: Age wise distribution of respondents

Age group (years)	Number of respondents	Percentage
Below 20	121	24.2
20-40	278	55.6
40-60	98	19.6
60 and above	3	0.6
Total	500	100

- It is found that out of total respondents taken for the study, 278(55.6%) of the respondents are in the age group between 20-40 years, 121(24.2) respondents are in the age group of less than 20 years and 98 (19.6%) of the respondents are in the age group between 40-60 years.
- The majority of the respondents are in group 20-40 years.

Educational level

The table 3 depicts the educational level of respondents. The educational level of respondents are classified as school level, college level, professional qualification and others such as no formal qualification.

Table 3: Educational level of respondents

Educational level	Number of respondents	Percentage
School level	100	20
College level	295	59
Professional qualification	102	20.4
Others	3	0.5
Total	500	100

- It is found that out of total respondents taken for the study, 295 (59%) of the respondents completed college education, 102 (20.4%) of the respondents are professionally qualified and 100 (20%) of the respondents have completed their school education.



- The majority (59%) of the respondents have completed college level education.

Marital status

The table 5 depicts the marital status of the respondents. The marital status of the respondents is classified as married and unmarried.

Table 5: Marital status of the respondents

Marital status	Number of respondents	Percentage
Married	269	53.8
Unmarried	231	46.2
total	500	100

- It is known from table 5 that out of the total respondents taken for the study, 269(53.8%) of the respondents were married.
- From the study, the most of 53.8% of respondents are married.

Occupational status

The table 4 depicts the occupational status of the respondents. The occupational status of the respondents are classified as agriculture, Business/Professional, Public sector employee, private sector employee, home maker and others such as students, pensioners,etc

Table 4: Occupational status of the respondents

Occupational status	Number of respondents	Percentage
Agriculture	12	2.4
Business	138	27.6
Public sector employee	95	19
Private sector employee	106	21.2
Home maker	93	18.6
Others	56	11.2
Total	100	100

- It is identified from table 4 that out of total respondents taken for the study, 138(27.6%) of the respondents fall under the category business/professional, 106(21.2) of the respondents were private sector employees and 95 (19%) of the respondents are public sector employees.
- From the above table, that most of 27.6% of the respondents fall under the categories business/professional.

Type of family

The table 6 describes the type of family of the respondents. The type of family is classified as joint family and nuclear family.

Table 6: Type of family of respondents

Type of family	Number of respondents	Percentage
Joint family	151	30.2
Nuclear family	349	69.8
Total	500	100

- It is clear from table 6 that out of the total respondents taken for the study, 349(69.8%) of the respondents belong to the nuclear family and 151 (30.2%) of the respondents belong to the joint family.
- The majority (69.8%) of the respondents belong to the nuclear family.

Number of children

The table 8 describes the number of children in the respondent's family. The number of children in a family is classified as 1, 2, 3 and above.



Table 8: Number of children

Number of children	Number of respondents	Percentage
1	103	23.9
2	271	63
3 and above	56	13.1
Total	430	100

- It is identified from table 8 that out of the respondents who have children (430) in their family, 271 (63%) respondents family consists of 2 children, 103 (23.9%) respondents family have 1 child in their family and 56 (13.1%) respondents have 3 and above children.
- The majority (63%) of the respondent's family consists of 2 children.

Family monthly income

The table 9 describes the monthly income of the respondents' family. The monthly income in a family is classified as less than Rs 10,000, Rs 10000-20000, Rs 20000 – 30000 and Rs 30000 above.

Table 9: Family monthly income of the respondents

Family monthly income (Rs)	Number of respondents	Percentage
Less than 10000	60	12
10000-20000	146	29.2
20000-30000	112	22.4
30000 and above	182	36.4
Total	500	100

- It is identified from table 9 that out of total respondents taken for the study 182 (36.4%) of the respondents' family monthly income is Rs 30,000 and above, 146 (29.2%) of the respondents' family income is between 10000-20000 and 112 (22.4%) of the respondents' family income is between Rs 20,000-Rs 30000, 36.4% of the respondents family monthly income is 30000 and above.
- From the study, the majority 36.4% of the respondents family monthly income is 30000 and above.

Awareness level of respondents

The table 10 describes the awareness level of the respondents towards different brands of dairy products. The awareness level is classified as very high awareness, high awareness, moderate awareness, low awareness, very low awareness.

Table 10: Awareness level of respondents towards different brands of dairy product

Brands awareness	Aavin	Amul	Arokia/hutsun	Aroma	Cakin	Sakthi
Very high	309(61.8)	93(18.6)	70(14)	119(23.8)	41(8.2)	58(11.6)
High awareness	125(25)	180(36)	271(54.2)	128(25.6)	77(15.4)	67(13.4)
Moderate awareness	66 (13.2)	176(35.2)	111(22.2)	144(28.8)	138(27.6)	102(20.4)
Low awareness		49(9.78)	11(2.2)	97(19.4)	165(33)	132(26.4)
Very low awareness		2(0.4)	37(7.4)	12(2.4)	79(15.8)	141(28.2)
Total	500	500	500	500	500	500

Note: The values in brackets are in percentages

- It is observed from the table 10 that among the total respondents taken for the study, 309(61.8%) respondents awareness level is very high for aavin next comes aroma 119 (23.8%) followed by amul 93(19.6%) followed by arokiya/hatsun 70 (14%), sakthi 58(11.6%) and cavin 41 (8.1%).
- The awareness level of respondents is very high for aavin (61.8%) than any other brands for dairy products.



Awareness about the brands and its products

The table 11 describes the awareness of the respondents towards different brands of dairy products. The response is classified in the brands as aavin, amul, arokia/hutsun, aroma, cavin and sakthi and in the products as milk, ghee and curd.

Table 11: Awareness about brands and its products

Brands/products	Milk	Ghee	Curd
Aavin	500(100)	362(72.4)	307(61.4)
Amul	325(65)	383(76.6)	230(46)
Arokia/hutsun	471(94.2)	277(55.4)	366(73.2)
Aroma	456(91.2)	142(28.4)	220(44)
Cavin	380(76)	15(3)	226(45.2)
sakthi	439(87.8)	169(33.8)	174(34.6)

Note: The values in brackets are in percentages.

- It is known from the table 11 that out of the total respondents taken for the study, 500(100%) of the respondents aware of the brand aavin, 471 (94.2%) of the respondents aware of the brand arokia/hatsun in milk and 383(76.6%) of the respondents aware of the brand amul, 362(73.2%) of the respondents aware of the brand arokia/hatsun, 307(61.4%) of the respondents aware of the brand aavin in curd.
- All respondents are aware of milk in aavin, majority (76.6%) of the respondents are aware of ghee in the brand amul and majority (73.2%) of the respondents are aware of curd in the brand arokia/hatsun.

Awareness about the active ingredients in the dairy products

The table 13 depicts the awareness of the respondents about the active ingredients available in dairy products. The active ingredients are classified as lactose, casein, whey, fat and minerals.

Table 13: Awareness about the active ingredients available in the dairy products

Active ingredients	Aware	Not aware
Lactose	211(42.2)	285(57.8)
Casein	348(69.6)	152(30.4)
Whey	283(56.6)	217(43.4)
Fat	454(90.8)	46(9.2)
minerals	283(56.6)	217(43.4)

Note: The values in brackets are in percentages.

- It is identified from the table 13 that out of the total respondents taken for the study, 454(90.8%) of the respondents are aware of fat, 348(69.6%) of the respondents are aware of casein, 283(56.6%) of the respondents are aware of whey and minerals.
- From the study, the majority (90.8%) of the respondents are aware of fat available in milk and majority (57.8%) of the respondents are not aware of lactose available in dairy products.

Awareness about the nutrients available in the dairy products

The table 12 depicts the awareness of the respondents about the nutrients available in dairy products. The nutrients are classified as calcium, protein, vitamin A, vitamin B, vitamin B 12 and riboflavin, vitamin D, vitamin K, potassium, selenium and thiamin.



Table 12: Awareness about the nutrients available in the dairy products

Nutrients	Aware	Not aware
Calcium	468(93.6)	32(6.4)
Protein	393(78.6)	107(21.4)
Vitamin A	318(63.6)	181(36.2)
Vitamin B	273(54.6)	227(45.4)
Vitamin B12 and riboflavin	86(17.2)	414(82.8)
Vitamin D	174(34.8)	326(65.2)
Vitamin K	152(30.4)	348(69.6)
Potassium	119(23.8)	381(76.2)
Selenium	27(5.4)	473(94.6)
Thiamin	39(7.8)	461(92.2)

Note: The values in brackets are in percentages.

- It is defined from the table 12 that out of the total respondents taken for the study, 468(93.6%) of the respondents are aware of calcium, 393(78.6%) of the respondents are aware of protein, 318(63.6%) of the respondents are aware of vitamin A,
- From study, majority (93.6%) of the respondents are aware of calcium available in milk and the majority (94.6%) are not aware of selenium in the milk.

Sources of awareness of the respondents

The table 14 depicts the sources of awareness of the respondents towards various brands of dairy products. The source of awareness is classified as self, family members, neighbours, friends and relatives, dealers/representatives and others.

Table 14: Sources of awareness of different brands of dairy product

Sources of awareness	Number of respondents	Percentage
Self	79	15.8
Family members	62	12.4
Neighbours, friends & relatives	75	15
Advertisement	282	56.4
Dealers/representatives	2	0.4
Total	500	100

- It is clear from the table 14 that out of the total respondents taken for the study, 282 (56.4%) of the respondents are aware of dairy products through advertisements, 79(15.8%) of the respondents are aware of dairy products by themselves, 75(15%) of the respondents are aware of dairy products through neighbour, friends and relatives.
- From the study, the majority (56.4%) of the respondents are aware of dairy products through advertisements.

Media of advertisers

The table 15 depicts the media of advertisement through which the respondents are aware of various brands of dairy product if their awareness is through advertisements. The media of awareness is classified as television, radio, newspapers & magazines and notices and pamphlets, poster & banners and others.

Table 15: Media awareness of different brands of dairy products

Media of awareness	No of respondents	Percentage
Television	241	85.4
Radio	7	2.5
Newspapers & magazines and notices and pamphlets	25	8.9
Posters and banners	9	3.2
Total	282	100



- It is clear from the table that out of the respondents who are aware of the various brands dairy products through advertisements, 141 (85.4%) of the respondents aware of different brands of dairy products through the media television, 25(8.9%) of the respondents aware of different brands of dairy products through media newspapers & magazines and notices and pamphlets and 9 (3.2%) of the respondents aware of different brands of dairy products through media posters and banners.
- From the study, the majority (85.4%) of the respondents aware of different brands of dairy products through the media television.

Brands of dairy products purchased

The table 16 depicts the Brands of dairy products purchased by the respondents. The different brands of dairy products are classified as milk, ghee, curd.

Table 16: Brands of dairy products purchased by the respondents

Brands awareness	Aavin	Amul	Arokia or Hatsun	Aroma	Cakin	Sakthi
Milk	426(85.2)	89(17.8)	154(30.8)	219(43.8)	82(16.4)	200(40)
Ghee	18(3.6)	185(37)	45(9)	13(2.6)	11(2.2)	59(11.8)
Curd	7(1.4)	60(21.6)	216(43.2)	18(3.6)	94(18.8)	35(7)
Total	451	334	415	250	187	294

Note: The values in brackets are in percentages.

- It is known from the table 16 that out of the total respondents take for the study, 426(85.2%) of the respondents purchase the brand aavin, 219 (43.8%) of the respondents purchase the brand aroma in milk. 185 (37%) of the respondents purchase the brand amul, 59(11.8%) of the respondents purchase the brand sakthi in ghee. 216(43.2%) of the respondents purchase the brand arokia/hatsun, 94(18.8%) of the respondents purchase the brand cavin in milk.
- From the study, the majority (85.2%) of the respondents purchase the brand aavin in milk, most of 37 % of the respondents purchase the brand amul in ghee and maximum of 43.2% of the respondents purchase the brand arokia/hatsun in curd.

Chi square analysis

The chi square test is used to test the independence of two attributes. In this section, the results of chi square analysis is presented to identify the personal factors which influence the awareness related factors.

Personal factors and sources of awareness

Hypothesis: The personal factors of the respondents have no significant influence on the sources of awareness of the various brands of dairy products. The table 17 describes the results of chi-square analysis in terms of personal factor, chi-square values, p-values and their significance on the sources of awareness of various brands of dairy products.

Table 17: Chi-square value – personal factor and resources of awareness of various brands of dairy products

Personal factors	Chi square values	p-values	Significant/not significant
Gender	11.643	0.020	S
Age (years)	57.922	0.000	S
Educational qualification	115.100	0.000	S
Occupational status	119.796	0.000	S
Marital status	33.6421	0.000	S
Type of family	52.078	0.000	S
No of earning members in the family	81.523	0.000	S
No of children in the family	19.129	0.014	S
Family monthly income	86.608	0.000	S

Note: S-Significant at 5% level (p-value <= 0.05) NS –Not significant (p-value > 0.05).



It is found from the table 17 that the hypothesis is rejected (significant) in all the cases.

- All the personal factors have significant influence on the source of awareness of various brands of dairy products.

Personal factors and media awareness

Hypothesis: The personal factors of the respondents have no significant influence on the media awareness of the various brands of dairy products.

The table 18 describes the results of chi-square analysis in terms of personal factor, chi-square values, p-values and their significance on the media of awareness of various brands of dairy products.

Table 18: Chi square value – personal factor and media of awareness of various brands of dairy products

Personal factors	Chi square values	p-values	Significant/not significant
Gender	9.521	0.049	S
Age (years)	176.615	0.000	S
Educational qualification	18.143	0.111	NS
Occupational status	29.268	0.083	NS
Marital status	4.057	0.398	NS
Type of family	9.003	0.061	NS
No of earning members in the family	40.119	0.000	S
No of children in the family	27.434	0.001	S
Family monthly income	30.339	0.002	S

Note: S-Significant at 5% level (p-value ≤ 0.05) NS –Not significant (p-value > 0.05).

- It is found from the table 18 that the hypothesis is rejected (significant) in 5 cases and in 4 cases the hypothesis is accepted (not significant).
- From study, the personal factors such as gender, age, number of earning numbers in the family, number of children in the family and family monthly income have significant influence on the media of awareness of various brands of dairy products.

Personal factors and source of purchase

Hypothesis: The personal factors of the respondents have no significant influence on the source of purchase of the various brands of dairy products.

The table 19 describes the results of chi-square analysis in terms of personal factor, chi-square analysis, p-values and their significance on the source of purchase of various brands of dairy products.

Table 19: chi-square value – personal factor and source of purchase of various brands of dairy products

Personal factors	Chi square values	P-values	Significant/not significant
Gender	19.155	0.001	S
Age (years)	72.117	0.000	S
Educational qualification	52.878	0.000	S
Occupational status	192.100	0.000	S
Marital status	47.124	0.000	S
Type of family	23.445	0.000	S
No of earning members in the family	41.590	0.000	S
No of children in the family	42.876	0.000	S
Family monthly income	113.497	0.000	S

Note: S-Significant at 5% level (p-value ≤ 0.05) NS –Not significant (p-value > 0.05).



- It is found from table 19 that the hypothesis is rejected (significant) in all the cases.
- From study, all personal factors have significant influence on the sources of purchase of various brands of dairy products.

Average score analysis

Generally the scaling is employed in any study to convert the qualitative information in to a quantitative one in this study. 5 point scaling technique similar to likerts scaling is employed to convert the qualitative information into a quantitative one. Based on the consolidated opinion of the respondent the average score is calculated and the results are presented in a table with suitable interpretation.

Personal factor and level of awareness towards various brands of dairy products

In this section, the results of average score analysis is presented for the respondents under different personal classification on their level of awareness towards various brands of dairy products.

The table 20 describes the personal factors of the respondents, various brands and their average scores.

Table 20: Average score – Personal factors and level of awareness towards various Brands of dairy products

Personal factors		Aavin	Amul	Arokia Or hatsun	Aroma	Cavin	Sakthi	Others
Gender	Male	4.10	3.27	3.87	3.52	2.78	2.86	2.62
	Female	4.70	3.82	3.54	3.46	2.73	2.66	3.56
Age group	Below 20 years	4.61	3.83	3.83	3.47	2.64	2.54	3.33
	20-40 years	4.66	3.65	3.58	3.40	2.72	2.60	3.09
	40-60 years	3.84	3.23	3.67	3.69	3.03	3.42	3.44
	Above 60	4.33	4.33	4.00	4.00	2.00	3.50	0.00
Educational level	School level	4.61	3.51	3.85	3.64	2.53	2.57	1.50
	College level	4.44	3.63	3.58	3.54	2.59	2.61	3.52
	Professional	4.52	3.74	3.73	3.12	3.37	3.19	3.13
	Others	4.0	4.00	2.67	4.33	3.00	2.67	3.19
Occupational status	Agriculture	4.00	3.50	4.00	4.50	3.50	5.00	4.00
	Business/professional	4.44	3.42	3.22	3.42	2.91	2.59	3.29
	Public sector employee	3.99	2.78	3.58	3.85	2.42	2.91	3.73
	Private sector employee	4.69	3.97	3.85	3.42	2.86	3.22	2.56
	Home maker	4.69	3.90	3.87	3.02	2.61	2.67	3.00
	Others	4.61	3.86	3.87	3.68	2.77	2.36	2.80
Marital status	Married	4.41	3.48	3.85	3.42	2.85	2.90	3.13
	Unmarried	4.58	3.80	3.43	3.56	2.63	2.56	3.29
Family type	Joint family	4.40	3.92	3.95	3.19	2.72	2.97	2.75
	Nuclear family	4.52	3.51	3.54	3.60	2.77	2.67	3.55
No of earning members in the family	1	4.45	3.36	3.38	3.88	2.79	2.47	3.25
	2	4.51	3.81	3.88	3.11	2.91	2.76	3.33
	3 and above	4.53	3.97	4.01	3.08	2.36	3.51	2.50
Number of children in the family	1	4.51	3.80	3.87	3.28	2.73	2.99	2.54
	2	4.45	3.51	3.79	3.47	2.69	2.54	3.44
	3 and above	4.30	4.11	4.18	3.50	3.26	3.54	4.00
Family monthly income	Less than Rs 10000	4.78	3.08	3.92	4.05	2.82	2.29	2.00
	Rs 10000 – 20000	4.10	3.21	3.01	3.65	2.60	2.53	3.83
	Rs 20000 – 30000	4.69	3.58	3.79	3.71	3.03	2.29	3.11
	Rs 30000 and above	4.57	4.14	4.01	3.00	2.65	3.39	2.80



- It is found from the table 20 that the respondents irrespective of their personal classifications have high level of awareness towards aavin (D1), followed by amul (D2) and arokiya/hatsun (D3) when compared to other brands of dairy products.
- From study, the respondents have high level of awareness towards aavin (D1) when compared to other brands of dairy products.

Factor analysis

The factor analysis is an important tool used in any study relating to management science not only for factor reduction, but also to identify important factors. In this study, this analysis is employed using extraction method of principle component analysis with vary max Keizer normalisation method. The components are extracted based on eigen value greater than one. The table 21 describes the results of factor analysis in terms of various factors/statements relating to customers agreeability on various brands of dairy products and factor loadings.

Table 21: Results of factor analysis – Level of agreeability

Statements	Group 1	Group 2	Group 3
Price of dairy products is always reasonable	0.587		
The hygienic aspects of dairy products are always good	0.711		
All dairy products are properly packed and sold	0.732		
The dairy products are always available	0.706		
The retailers attend the complaints of customers with due care	0.650		
Adequate discount is offered by the retailers		0.725	
No adulteration is done by the retailers		0.652	
The retailers supply dairy product in small quantity also		0.579	
Quality of dairy product is up to the expectation of customers			0.609
The retailers' service is always good			0.665

- It is found from table 80 that the ten aspects relating to agreeability on the purchase of dairy products can be reduced and grouped into three categories such as group 1 (product related factors), group 2 (retailers related factors), group 3(Both product and retailers related factors).
- From the study, the agreeability relating to the purchase of dairy products can be studied through

Group 1 (product related factors)

- Price of dairy products is always reasonable
- The hygienic aspects of dairy products is always good
- All dairy products are properly packed and sold
- The dairy products are always available
- The retailers attend the complaints of customers with due care.
- Further among the various aspects “All dairy products are properly packed and sold” (0.732%) is considered as the important factor.

Group 2 (Retailers related factors)

- Adequate discount is offered by the retailers
- No adulteration is done by the retailers
- The retailers supply dairy product in small quantity also
- Further among the various aspects “Adequate discount is offered by the retailers” (0.725%) is considered as the important factor.

Group 3 (both product and retailers related factors)

- Quality of dairy product is up to the expectation of customers
- The retailers' service is always good
- Further among the various aspects “The retailers' service is always good” (0.665%) is considered as the important factor.



Z test

The z test is a large sample test used to test whether there exist any significant difference between the proportions of respondents in two groups relating to particular aspect. The results are presented in tables with suitable hypothesis with relevant interpretation.

Hypothesis (milk): There is no significant difference between the proportion of respondents aware and the proportion of respondents availed various brands of milk.

The table 22 describes the results of z-test in terms of various brands of milk, proportion aware, proportion availed, z-values, p values and their significance.

Table 22: Results of Z-test – milk

Brands/Products	Milk				
	Proportion aware	Proportion availed	z-values	p-values	S/NS
Aavin	1.00	0.85	8.94	0.00	S
Amul	0.65	0.18	15.5	0.00	S
Arokia/hatsun	0.94	0.31	20.71	0.00	S
Aroma	0.91	0.44	16.00	0.00	S
Cavin	0.76	0.16	18.90	0.00	S
sakthi	0.88	0.40	15.74	0.00	S

- It is found from the table 22 that the hypothesis is rejected (significant) in all the cases.
- From the study, there exist significant difference in the proportion of the respondents aware and avail the various brands of milk in respect of aavin,amul, arokia, aroma, cavin and sakthi.

Hypothesis (Ghee): There is no significant difference in the proportion of the respondents aware and the proportion of respondents availed various brands of ghee.

The table 23 describes the results of z-test in terms of various brands of milk, proportion aware, proportion availed, z-values, p values and their significance.

Table 23: Results of z-test – Ghee

Brands/Products	Ghee				
	Proportion aware	Proportion availed	z-values	p-values	S/NS
Aavin	0.72	0.04	22.41	0.00	S
Amul	0.77	0.37	12.64	0.00	S
Arokia/hatsun	0.55	0.09	15.70	0.00	S
Aroma	0.28	0.03	11.27	0.00	S
Cavin	0.03	0.02	0.79	0.56	NS
sakthi	0.35	0.12	8.60	0.00	S

- It is found from the table 23 that the hypothesis is rejected (significant) in 5 cases and in 1 case the hypothesis is accepted (Not significant).
- From the study, there exist significant difference in the proportion of the respondents aware and avail the various brands of ghee in respect of aavin,amul, arokia, aroma, cavin and sakthi.

Hypothesis (curd): There is no significant difference in the proportion of the respondent aware and the proportion of respondents availed various brands of curd.

The table 24 describes the results of z-test in terms of various brands of curd, proportion aware, proportion availed, z-values, p values and their significance.



Table 24: Results of z-test – curd

Brands/Products	Curd				
	Proportion aware	Proportion availed	z-values	p-values	S/NS
Aavin	0.61	0.01	20.04	0.00	S
Amul	0.46	0.12	11.85	0.00	S
Arokia/hatsun	0.73	0.43	9.62	0.00	S
Aroma	0.44	0.04	15.00	0.00	S
Cavin	0.45	0.19	8.95	0.56	S
sakthi	0.00	0.07	-6.02	0.00	S

- It is found from the table 22 that the hypothesis is rejected (significant) in all the cases.
- From the study, there exist significant difference in the proportion of the respondents aware and avail the various brands of curd in respect of aavin, amul, arokia, aroma, cavin and sakthi.

Findings

In this chapter the findings of the study based on a sample of 500 respondents are presented. The findings of the study are summarised and presented below.

- From the study, it is concluded that the majority (63.8%) of the respondents are female.
- From the study, it is concluded that the majority of the respondents are in group 20-40 years.
- From the study, it is concluded that the majority (59%) of the respondents have completed college level education.
- From the study, it is concluded that the most of 27.6% of the respondents fall under the categories business/professional.
- From the study, it is concluded that the most of 53.8% of respondents are married.
- From the study, it is concluded that the majority (69.8%) of the respondents belong to the nuclear family.
- From the study, it is concluded that the most (48.8%) of the respondents have one earning member in their family.
- From the study, it is concluded that the majority (63%) of the respondent's family consists of 2 children.
- From the study, it is concluded that the majority 36.4% of the respondents family monthly income is 30000 and above.
- From the study, it is concluded that the awareness level of respondents is very high for aavin (61.8%) than any other brands for dairy products.
- From the study, it is concluded that all respondents are aware of milk in aavin, majority (76.6%) of the respondents are aware of ghee in the brand amul and majority (73.2%) of the respondents are aware of curd in the brand arokia/hatsun.
- From the study, it is concluded that majority (93.6%) of the respondents are aware of calcium available in milk and the majority (94.6%) are not aware of selenium in the milk.
- From the study, it is concluded that the majority (90.8%) of the respondents are aware of fat available in milk and majority (57.8%) of the respondents are not aware of lactose available in dairy products.
- From the study, it is concluded that the majority (85.4%) of the respondents aware of different brands of dairy products through the media television.
- From the study, it is concluded that the majority (56.4%) of the respondents are aware of dairy products through advertisements
- From the study, it is concluded that the majority (85.2%) of the respondents purchase the brand aavin in milk, most of 37 % of the respondents purchase the brand amul in ghee and maximum of 43.2% of the respondents purchase the brand arokia/hatsun in curd.
- From the study, it is concluded that all the personal factors have significant influence on the source of awareness of various brands of dairy products.
- From the study, it is concluded that, the personal factors such as gender, age, number of earning numbers in the family, number of children in the family and family monthly income have significant influence on the media of awareness of various brands of dairy products.
- From the study, it is concluded that all personal factors have significant influence on the sources of purchase of various brands of dairy products.



- From the study, it is concluded that the respondents have high level of awareness towards aavin (D1) when compared to other brands of dairy products.
- From the study, it is concluded that there exist significant difference in the proportion of the respondents aware and avail the various brands of milk in respect of aavin, amul, arokiya, aroma, cavin and sakthi.
- From the study, it is concluded that there exist significant difference in the proportion of the respondents aware and avail the various brands of ghee in respect of aavin, amul, arokiya, aroma, cavin and sakthi.
- From the study, it is concluded that there exist significant difference in the proportion of the respondents aware and avail the various brands of curd in respect of aavin, amul, arokiya, aroma, cavin and sakthi.

SUGGESTIONS

- As the study reveals that most of the respondents are aware of dairy products through television media, it is recommended that the management of the product to produce effective television advertisement.
- The management also plan for other source of awareness so that the cost of advertisement is less.
- As the proportion availed is significantly less on the proportion of respondents aware on the various brand/products it is suggested to execute more promotional activities so that, the difference in the proportion aware & availed is minimized

CONCLUSION

The dairy products are normally used by the consumer for the family use. It is very important to note that these products are used by children. So a special attention has to be given by the management of the product/brand to improve the level of awareness through different promotional activities and television media. Even though the customers are aware of various brands/products their proportion is less. There are some unbranded dairy products available in the market and in some areas their awareness is high without knowing the ingredients of the product. So it may be rejected by the respondents and hence it is the duty of the management of the product to convince the customers by explaining the various ingredients and quality of the product. If the suggestions given in the study are incorporated, then the level of awareness of the consumers towards the milk related product will reach its new height in tirupur town.

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