CHAPTER IX

SUMMARY OF FINDINGS AND SUGGESTIONS

9.1 INTRODUCTION

All marketing activities focus towards the satisfaction of the consumers. An in-depth understanding of the consumer awareness becomes essential in today's marketing. This will help in identifying how the consumers are aware of the product and how can suitable marketing strategies be framed. When the consumers become aware of the importance of consuming a product, they demand more of that product. Milk is one among the various food items which is very much essential to maintain and improve the health of the human body. Milk is loaded with calcium and other nutrients and it is the easiest way for a child to get necessary amount of calcium. Milk is also a health tonic for the old people and the sick particularly during recovery after illness. In this juncture, it becomes inevitable to study the consumers' awareness of the milk. Hence the study examines consumer awareness of the milk and factors that determine it. The objectives with which the study has been carried out are: (i) To measure the level of consumers' awareness of the consumption of the milk; (ii) To find out the factors associated with consumers' level of awareness of the milk; (iii) To identify the factors that influence consumers' level of awareness of the milk on various segments of the study and (iv) To suggest suitable measures to enhance the level of the awareness of the consumption of the milk. Data required for the study have been collected through questionnaires. A total of 761 consumers belonging to Coimbatore District, Tamil Nadu forms the sample of the study.

9.2 ANALYSIS OF DATA

In this study, the consumers' awareness of the milk has been measured by constructing 'Awareness Index' for each of the consumer. Analysis of variance (ANOVA) has been used to find out whether the mean awareness of the milk index of the consumers, classified based on their attributes, differed significantly. The levels of confidence are five and one per cent. In order to examine the association which exists between each of the consumer's attributes and awareness of the milk, the Chi-square test is used. To find out the nature of relationship, the simple Correlation has been used. The Coefficient of determination has been calculated to find out the extent of variations
in the awareness of the milk explained by each of the attributes included for correlation analysis. The combined influence of consumers’ attributes on the awareness of the milk has been analysed through the Multiple Regression. The most dominant variables that influence consumers’ awareness of the milk have been ascertained through the Step-wise Regression analysis. The direct as well as indirect effects of the selected attributes on consumer awareness of the milk have been investigated through the Path analysis. Apart from the above analysis the 'Ranking Technique" has also been used to find out the consumers' preference towards the End use of milk and the factors they consider (i) for choosing the seller of milk and (ii) to decide the type of milk they buy. Friedman's Ranking Test was applied to test if there is any significant difference between the mean ranks.

9.3 SUMMARY OF FINDINGS

The profile of sample consumers are explained under various heads. It is followed by the factors associated with the consumers' awareness of the milk. Based on the results of the Chi-square test and the Analysis of Variance, the Correlation analysis has been done to highlight the nature of association that exists between the independent and dependent variables. The correlation analysis is followed by the result of the Multiple Regression to know the impact of each variable on the dependent variables. It is followed by the results of stepwise regression analysis. Finally, path analysis results are recorded. Friedman's Ranking Test has also been used to find out the significant difference between mean ranks. As a whole all the said analyses are carried out for the entire 761 sample consumers.

It is followed by the results of various analysis namely Correlation, Multiple Regression, Step-Wise and Path analysis performed on segmentwise to know the differences among the factors which influence the consumers' awareness of the milk.

9.3.1 PROFILE OF SAMPLE CONSUMERS

The descriptive profile of the sample consumers are brought out in the following paragraphs under four major headings namely social profile, economic profile, information seeking behaviour and buyer behaviour variables.
9.3.1.1 Social Profile

The results of the study portray the area of residence, age, gender, religion and educational qualification of both the consumer and the spouse.

a) **Area of Residence**: The results reveal that out of the total 761 consumers, 407 (53.48%) reside in rural areas of Coimbatore District which is found to be one among the top five milk producing Districts in the State Tamil Nadu.

b) **Age**: Though the sample consumers relate to variety of age groups, middle aged consumers ranging between 36 and 50 years are found to be large in number. Out of 761 consumers 419 (55.06%) consumers are middle aged. The age of 185 (24.31%) are upto 35 years and that of the remaining 157 (20.63%) above 50 years.

c) **Gender**: Of the total sample consumers, a majority, namely 452 (59.40%) are female consumers and male consumers amount to 309 accounting for 40.60 per cent.

d) **Religion**: India is the country which is the composition of different religions. Hinduism, Christianity and Islam are the three major religions which are spread throughout the country. Of the total sample consumers, 557 (73.19%) of them are Hindus, 149 (19.58%) Christians and remaining 55 (07.23%) Muslims.

e) **Educational Qualification**: Education is inevitable and one has to get educated to think rationally. In the study area, of the total 761 consumers, a majority, namely 280 (36.79%) are graduates followed by 201 (26.41%) who have studied upto HSC.

f) **Educational Qualification of the Spouse**: The results show that 241 (31.67%) spouses are graduates whereas 201 (26.41%) have only primary education.

9.3.1.2 Economic Profile

The level of consumption in general depends on the economic status of a consumer. Consumers’ economic status is decided by the occupation of the consumer and his spouse, family income, type of family etc.

a) **Occupation**: Of the total 761 consumers, 380 (49.93%) are salaried followed by 149 (19.58%) who are doing business. The remaining consumers are engaged in agriculture, profession and other occupations.
b) **Occupation of the Spouse**: Out of 761 spouses, a majority, namely 305 (40.08%) are salaried and 171 (22.47%) are doing business.

c) **Monthly Family Income**: The monthly family income of the consumers differ. The family income of 326 (42.84%) consumers are upto Rs.25,000 per month. Only 133 (17.48%) consumers' family income is above Rs.50,000 per month.

d) **Type of family**: A major percentage of consumers belong to nuclear families. Out of the total sample, 540 (70.96%) live in nuclear families and only 221 (29.04%) belong to joint families.

e) **Type of house**: 573 consumers constituting 75.30 per cent of 761 sample consumers live in independent houses whereas the remaining 188 (24.70%) are residing in flat/row houses.

f) **Frequency of shifting of house**: Of 761 consumers, 301 (39.55%) have not so far shifted their houses. 234 (30.75%) have shifted their houses only once, 110 (14.46%) have shifted twice and 116 (15.24%) have shifted more than twice.

### 9.3.1.3 Information Seeking Behaviour

a) **Extent of curiosity of knowing things in general**: 464 (60.97%) of the total consumers are moderately interested in knowing general things whereas 230 (30.22%) have high level of curiosity in this regard. Only 67 (08.81%) are with low level of interest in knowing the things in general.

b) **Sources of information**: The results of the study reveal that among various sources, Newspapers and Television are the two that give information to the consumers to the maximum. Of 761 consumers 473 (62.16%) and 539 (70.83%) are of the opinion that maximum information is provided by the newspapers and television respectively.

c) **Amount spent**: Out of 761 consumers, 497 (65.31%) have spent an amount of Rs101- Rs200 on newspapers where as 645 (84.76%) on television. As regards magazines, 719 (94.48%) have spent upto Rs 100 per month.

d) **Frequency of using Media**: The results of the study indicate the number of consumers who regularly use the media and gather the information. 398 (52.30%) consumers and 118 (24.70%) consumers read Newspapers and Magazines regularly.
whereas 499 (65.57%) and 176 (23.13%) consumers use Television and Radio respectively. Similarly the results also show that 319 (41.92%) and 165 (21.68%) consumers read health related matters regularly in newspapers and magazines respectively while 428 (56.24%) and 136 (17.87%) consumers listen to health related programmes regularly on Television and Radio respectively.

e) **Frequency of Discussion with Others:** Of 761 consumers, majority of them discuss about health related matters frequently with friends, relatives and doctors. They constitute 252 (33.11%), 340 (44.68%) and 273 (35.87%) respectively. Majority of the consumers discuss health related matters with neighbours and colleagues occasionally.

**9.3.1.4 Buyer Behaviour**

a) **Decision on milk purchase:** Of 761 consumers 308 (40.47%) took their own decision on the purchase of milk. In 253 (33.25) families, the respondent and the spouse with their children jointly decide on milk purchase and only nine (1.18%) purchase milk as decided by their children.

b) **Type of milk purchased:** Based on certain factors, the consumer decides on the 'type of milk'. In the study area, 388 (50.99%) purchase branded milk and 373 (49.01%) unbranded milk.

c) **Type of Brand:** Out of 761 consumers, a major percentage of them, 226 (58.25%) purchase Aavin milk followed by Aroki with 16.75 per cent and Sakthi with 13.14 per cent.

d) **Period of using present brand of milk:** 69 (17.78%) consumers use the same brand of milk for more than ten years, 128 (32.99%) for a period of six to ten years and 191 (49.23%) are using the same brand of milk for a period upto five years.

e) **Initiator for the present brand:** The results reveal that the factors namely 'Personal preference" and 'Family members' play a vital role in purchasing the present brand. Of the total sample consumers 160 (39.31%) purchase the present brand due to their personal preference and 133 (32.68%) because of the influence of their family. Friends and neighbours contribute to 14.50 per cent and the influence of dealers, doctors and advertisements is less than 10 per cent each.
f) **Frequency of purchasing other brands:** The results reveal that, of the total sample consumers, 104 (26.80%) have not so far purchased other brands at all. They are very loyal towards their present brand and 254 (65.46%) of them occasionally purchase other brands of milk.

g) **Reason for not purchasing branded milk:** Non-existence of freshness has been the reason for not purchasing branded milk by a major percentage of (49.87%) consumers while 115 (30.50%) consumers are of the opinion that the price of branded milk is high and 74 (19.63%) of them are of the opinion that branded milk is not available in their areas.

h) **Amount spent per month:** Only 49 (06.44%) out of 761 consumers spent upto Rs.500 per month. Majority of them, 403 (52.96%) spent moderately from Rs.501 to Rs.1000 per month on milk. 309 (40.60%) consumers spent above Rs.1000 per month towards the consumption of milk.

i) **Price per Litre:** Of the total consumers, 305 (40.08%) say that the price per litre of milk ranges between Rs.26 and Rs.28 while 240 (31.54%) of them say that it ranges between Rs.22 and Rs.25 per litre.

j) **Mode of payment milk:** A major percentage of consumers purchase milk on cash and only a few of them have got monthly cards. A considerable percentage of consumers purchase milk on credit. The results reveal that 504 (66.23%) consumers make cash purchase of milk while 192 (25.23%) of them purchase on credit basis.

k) **Payment for door delivery:** 631 (82.92%) consumers do not make any payment towards door delivery whereas 130 (17.08%) pay additional amount for door delivery of milk.

l) **Usage of milk:** Out of 761 consumers, 287 (37.71%) use the milk without adding water while 474 (62.29%) of them add water before consuming the milk.

m) **Habit of purchasing milk powder:** Only a meagre percentage of consumers, 41 (05.39%) out of 761 consumers have the habit of purchasing milk powder regularly. 186 (24.44%) purchase milk powder occasionally. 534 (70.17%) do not have the habit of purchasing milk powder at all.

n) **Milk powder – Substitute for milk:** Of the total sample consumers, a major percentage, 705 (92.64%) consumers do not consider milk powder as a substitute for milk.
9.3.1.5 Friedman’s Ranking Technique

The results of the Friedman’s ranking technique indicates that there is significant difference in the mean ranks of a. End use of milk, b. Factors influencing the selection of the seller of milk c. Factors that impress the purchase of branded milk and d. Factors that impress the purchase of unbranded milk.

a) *End use of milk:* The consumers prefer milk mainly for drinking followed by its use as curd whereas their preference towards ghee is the least.

b) *Factors influencing the selection of the seller of the milk:* The consumers give preference to the seller who supplies the milk regularly. They also give importance to the availability of the milk near their residence. Availability of different brands of the milk with the seller is least considered while selecting the seller.

c) *Factors that impress the purchase of branded milk:* The consumers of branded milk consider thickness of milk and hygiene as the most important attributes that impressed them to purchase the branded milk. They give least importance to the factors such as low fat content and credit terms.

d) *Factors that impress the purchase of unbranded milk:* The consumers of unbranded milk are of the opinion that the freshness and the thickness of the milk are the most important factors that impressed them to purchase the unbranded milk. They give least importance to rich fat content and rapport with the supplier.

9.3.2 FACTORS INFLUENCING CONSUMER AWARENESS OF THE MILK

The awareness of the milk differs among the different groups of consumers. The socio-economic, information seeking behaviour and buyer behaviour cause much differences in the awareness of the milk. Twenty three consumers' attributes have been selected to test whether the awareness of the milk differs based on attributes and whether there exists any association between the attributes and awareness of the milk. Analysis of variance (ANOVA), Chi-square test, Simple Correlation, Multiple Regression, Step-wise Regression as well as Path Analysis have been made use of to examine the nature of association, magnitude of change and the order of variables that determine the level of awareness. The results of ANOVA and Chi-square test are followed by the results of other tools.
i) Area of Residence and Awareness

ANOVA results reveal that there exists a significant difference in the mean level of awareness among the consumers who are classified on the basis of their area of residence. The Chi-square results indicate that there exists a significant association between the area of residence and the awareness of the milk. Urban consumers have higher level of awareness of the milk as compared to rural consumers.

(ii) Age and Awareness

ANOVA results indicate that there exists a significant difference in the mean level of awareness among the different age group of consumers. The Chi-square results indicate that there is no association between the age and the level of awareness of the milk.

(iii) Religion and Awareness

ANOVA results reveal that there is a significant difference in the mean level of awareness among the consumers belonging to different religions. The Chi-square test reveals that there exists a significant association between the religion and the level of awareness of the milk. It is found that Christians have the higher awareness level on milk as compared to the consumers belonging to other religions.

(iv) Educational Qualification and Awareness

According to the ANOVA result, there exists a significant difference in the mean level of awareness of consumers with different levels of education. The Chi-square test reveals that there exists a significant association between the level of education and the level of awareness. It is found that the consumers who are highly educated are with a high level of awareness of the milk.

(v) Educational Qualification of the Spouse and Awareness

According to the ANOVA result, there exists a significant difference in the mean level of awareness of consumers with different educational levels of their spouses. The Chi-square test reveals that there exists a significant association between the educational level of spouses and the awareness level of the consumers of the milk.
(vi) Occupation and Awareness

ANOVA results indicate that there exists a significant difference in the mean level of awareness with the occupation of the consumers. The Chi-square results show that there exists a significant association between the occupation of the consumer and the level of awareness of the milk. It is found that the consumers whose occupation is profession have a high level of awareness of the milk than the other consumers.

(vii) Occupation of the Spouse and Awareness

ANOVA results indicate that there exists a significant difference in the mean level of awareness with the occupation of the spouse of the consumer. The Chi-square results prove that there exists a significant association between the occupation of the spouse and the level of awareness of the consumer of the milk. It is found that the consumers whose spouses are professionals have high degree of awareness than that of other consumers.

(viii) Monthly Family Income and Awareness

According to ANOVA results, there exists a significant difference in the mean level of awareness of consumers with different levels of monthly family income. The Chi-square results indicate that there exists a significant relationship between the monthly family income of the consumers and their level of awareness. It is found that the families with the income more than Rs.50,000 per month are with a high level of awareness of the milk.

(ix) Family Type and Awareness

As per the ANOVA results, there exists a significant difference in the mean level of awareness with the family type of consumers. The Chi-square results reveal that there exist a significant relationship between the family type and the awareness of the milk. It is found that consumers in joint families have a better level of awareness of the milk than those consumers whose family type is nuclear.

(x) Extent of Importance to the Opinion of the Family and Awareness

ANOVA result shows that there exists a significant difference in the mean level of awareness of consumers with the extent of importance to the opinion of family. The Chi-square result has proved that there exists a significant association between the
extent of importance given to the opinion of the family and the consumers' level of awareness. It is found that the awareness level of the milk is higher with the consumers who give importance to the opinion of the family to a maximum extent than that of other consumers.

(xi) Extent of Curiosity of Knowing things in General and Awareness

According to ANOVA result, there exists a significant difference in the mean level of awareness among the consumers who have different levels of curiosity in knowing things in general. The Chi-square test indicates that there exists a significant association between the curiosity of knowing things and the level of awareness. It is found that the consumers who are very much curious in knowing the things have better awareness of the milk.

(xii) Frequency of Reading Newspapers and Awareness

ANOVA results show that there exists a significant difference in the mean level of awareness and the frequency of reading of newspapers. The Chi-square results indicate that there exists a significant association between the regular habit of reading of newspapers and the level of awareness of the milk. It is found that the consumers who read newspapers regularly are highly aware of the milk.

(xiii) Frequency of Reading Magazines and Awareness

ANOVA results show that there exists a significant difference in the mean level of awareness and the frequency of reading of magazines. The Chi-square results indicate that there exists a significant association between the regular habit of reading of magazines and the level of awareness of the milk. It is found that the consumers who read magazines regularly are highly aware of the milk.

(xiv) Frequency of Watching Television and Awareness

ANOVA results indicate that there exists a significant difference in the mean level of awareness of the milk and the frequency of watching television. The Chi-square test proves that there is no association between the frequency watching of television and the level of awareness of the milk.
(xv) Frequency of Listening to Radio and Awareness

ANOVA results indicate that there exists a significant difference in the mean level of awareness of the milk and the frequency of listening to Radio. The Chi-square test proves that there is no association between the frequency of listening to radio programmes and the level of awareness of the milk.

(xvi) Frequency of reading Health related Items in Newspapers and Awareness

ANOVA results reveal that there exists a significant difference in the mean level of awareness of the milk and the frequency of reading health related matters in newspapers. The Chi-square results indicate that there is no association between the reading of health related matters in newspapers and the level of awareness.

(xvii) Frequency of reading Health related Items in Magazines and Awareness

ANOVA results reveal that there exists a significant difference in the mean level of awareness of the milk and the frequency of reading health related matters in magazines. The Chi-square results indicate that there is no association between the reading of health related matters in magazines and the level of awareness of the milk.

(xviii) Frequency of Watching the Health Related Programmes on Television and Awareness

According to ANOVA results, there exists a significant difference in the mean level of awareness and the watching of health related programmes on television. The Chi-square results show that there is significant association between the watching of the health related programmes on Television and the level of awareness of the milk. It is found that the consumers who are watching health related programmes on television have better level of awareness of the milk.

(xix) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

According to ANOVA results, there exists a significant difference in the mean level of awareness and hearing the health related programmes on the radio. The Chi-square results show that there is significant association between hearing the
health related programmes on the Radio and the level of awareness of the milk. It is found that the consumers who are hearing the health related programmes on the radio frequently have the better level of awareness of the milk.

**(xx) Frequency of Discussion on Health Related Matters with Friends and Awareness**

ANOVA results indicate that there exists a significant difference in the mean level of awareness and the frequency of discussion on the health related matters with friends. The Chi-square results reveal that there is an association between the frequency of discussion on health related matters with friends and the level of awareness of the milk. It is found that the consumers who have regular discussions with the friends on health related matters have a higher level of awareness of the milk.

**(xxi) Frequency of Discussion on Health Related Matters with Relatives and Awareness**

ANOVA results indicate that there exists a significant difference in the mean level of awareness and the frequency of discussion on health related matters with relatives. The Chi-square results reveal that there is association between the frequency of discussion on health related matters with relatives and the level of awareness of the milk. It is found that the consumers who have regular discussions with relatives on health related matters have higher level of awareness of the milk.

**(xxii) Period of Discussion on Health Related Matters with Others and Awareness**

ANOVA results indicate that there exists a significant difference in the mean level of awareness and period of discussion on health related matters with others. The Chi-square results reveal that there is an association between the period of discussion on health related matters with others and the level of awareness of the milk. It is found that higher the period of discussion with others on health related matters, greater is the level of awareness.

**(xxiii) Frequency of Purchasing Other Brands and Awareness**

ANOVA results show that there exists a significant difference in the mean level of consumers' awareness and the frequency of purchasing other brands. The Chi-square results indicate that there is a significant association between the frequency of purchasing other brands and the level of awareness.
9.3.3 DETERMINANTS OF CONSUMER AWARENESS: FOR ALL CONSUMERS

In order to find out the factors which are associated with the awareness of the milk of the total 761 consumers, the Correlation, Multiple Regression, Step-wise Regression and Path analysis were carried out.

9.3.3.1 NATURE AND STRENGTH OF RELATIONSHIP BETWEEN CONSUMER ATTRIBUTES AND AWARENESS

In order to examine the nature and strength of relationship between the selected fourteen consumer attributes and the awareness of the entire sample size, the correlation analysis has been carried out. The nature of relationship and the extent to which each of the correlated variables accounting for the variations in the consumer awareness of the milk are brought out in the following paragraphs.

(i) Educational Qualification and Awareness

The educational qualification of the consumer and his awareness of the milk are positively correlated with each other. As the level of education increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that the educational qualification of the consumer account for 28.70 per cent of variations in the level of consumer awareness.

(ii) Educational Qualification of the Spouse and Awareness

There exists a positive correlation between the educational qualification of the spouse of the consumer and the consumers’ level of awareness. When the educational level of the spouse is higher, greater is the awareness level of the consumer. The coefficient of determination ($r^2$) shows that the educational qualification of a consumer's spouse accounts for 15.20 per cent of variations in the level of awareness of the consumer.

(iii) Monthly family Income and Awareness

The family income per month and the awareness of the milk are positively correlated with each other. As the family income increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that family income per month accounts for 7.5 per cent of the variations in the awareness level.
(iv) Family Type and Awareness

The correlation between the family type and the level of awareness is found to be positive. The coefficient of determination ($r^2$) shows that the family type accounts for 1.9 per cent of the variations in the level of consumers’ awareness of the milk.

(v) Extent of Importance to the Opinion of the Family and Awareness

The extent of importance to the opinion of the family and the awareness of the milk are positively correlated with each other. The coefficient of determination ($r^2$) shows that the extent of importance given to the opinion of the family accounts for 2.2 per cent of the variations in the level of awareness.

(vi) Extent of Curiosity of Knowing Things in General and Awareness

The correlation between the level of curiosity of knowing things in general and the level of awareness of the milk is found to be positive. When the level of curiosity is higher, the level of awareness is also greater. The coefficient of determination ($r^2$) shows that the extent of curiosity of knowing things in general accounts for 16.20 per cent of the variations in the level of awareness.

(vii) Frequency of Reading Newspapers and Awareness

The consumers’ habit of reading newspapers and the level of awareness are positively correlated with each other. Regular reading of newspapers increases the level of consumers’ awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading newspapers account for 12.20 per cent of the variations in the level of awareness of the consumers of the milk.

(viii) Frequency of Reading Magazines and Awareness

The habit of reading magazines and level of awareness of the milk are positively correlated with each other. Regular reading of magazines increases the level of consumers’ awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading magazines account for 18.10 per cent of the variations in the level of awareness of the consumers.
(ix) Frequency of Watching the Health Related Programmes on Television and Awareness

The positive correlation exists between watching of the health related programmes on Television and the awareness. The coefficient of determination ($r^2$) shows that watching of the health related programmes on television accounts for 3.3 per cent of the variations in the awareness level of the milk.

(x) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

There exists a positive correlation between hearing the health related programmes on the radio and the awareness of the milk. The coefficient of determination ($r^2$) shows that hearing the health related programmes on the radio accounts for 6.1 per cent of the variations in the awareness level.

(xi) Frequency of Discussion on Health Related Matters with Friends and Awareness

The positive correlation exists between the frequency of discussion on health related matters with friends and the extent of consumer's awareness. Regular discussions on health related matters with friends increase the awareness level of the consumers of the milk. The coefficient of determination ($r^2$) shows that the frequency of discussion on health related matters with friends account for 1.2 per cent of the variations in the level of consumer awareness of the milk.

(xii) Frequency of Discussion on Health Related Matters with Relatives and Awareness

There exists a positive correlation between the frequency of discussion on health related matters with relatives and the extent of consumers’ awareness of the milk. Regular discussions on health related matters with relatives increases the awareness level of the consumers of the milk. The coefficient of determination ($r^2$) shows that the frequency of discussion on health related matters with relatives account for 2.5 per cent of the variations in the level of consumer awareness.

(xiii) Period of Discussion on Health related Matters with Others and Awareness

There exists a positive correlation between the period of discussion on health related matters with others and the extent of consumers’ awareness. Higher the period of discussion with others, greater is the awareness level of the consumers of the milk.
The coefficient of determination ($r^2$) shows that the period of discussion on health related matters with others account for four per cent of the variations in the level of consumer awareness.

**(xiv) Frequency of Purchasing other Brands and Awareness**

The frequency of purchasing other brands and consumers’ awareness of the milk are positively correlated with each other. When the consumers purchase other brands of milk very often, it increases their level of awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of purchasing other brands accounts for 9.6 per cent of variations in the level of awareness.

### 9.3.3.2 DETERMINANTS OF AWARENESS OF THE MILK

In order to ascertain the combined influence of the selected fourteen attributes on consumer awareness of the milk, multiple regression as well as step-wise regression analysis have been carried out in the case of all sample consumers. The results of the multiple regression analysis reveals that out of the fourteen variables taken for consideration, only ten variables are significantly related with the consumer awareness of the milk. The relationship that exists significantly between the selected variables and the awareness of the milk is brought out here:

**(i) Educational Qualification and Awareness**

The educational qualification of the consumer highly influences his level of awareness. The regression coefficient indicates that for a unit of increase in the level of education, there shall be an increase of 3.927 units in the awareness level of the milk.

**(ii) Educational Qualification of the Spouse and Awareness**

The educational qualification of the spouse influences the consumer's awareness of the milk. The regression coefficient indicates that for a unit of increase in the level of education of the spouse, there shall be an increase of 0.898 units in the consumers’ awareness level.
(iii) Family Type and Awareness

The type of the family influences the level of awareness of the milk. The value of regression coefficient indicates that a unit change in the family type shall increase the awareness level by 2.153 units.

(iv) Extent of Importance to the Opinion of the Family and Awareness

The extent of importance given to the opinion of family highly influences the awareness level of the consumer. The value of regression coefficient indicates that a unit change in the level of importance given to the opinion of family members shall increase the awareness level by 2.103 units.

(v) Extent of Curiosity of Knowing things in General and Awareness

The level of curiosity in knowing the things highly influences the level of awareness. The value of regression coefficient indicates that for a unit of increase in the level of curiosity, there shall be an increase of 2.543 units in the level of awareness of the milk.

(vi) Frequency of Reading Magazines and Awareness

The frequency of reading magazines highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the frequency of reading magazines, there shall be an increase of 1.901 units in the level of awareness.

(vii) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

The health related programmes broadcast on the radio highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the hearing the health related programmes on the radio, there shall be an increase of 3.048 units in the level of awareness.

(viii) Frequency of Discussion on Health Related Matters with Friends and Awareness

The frequency of discussion on health related matters with friends highly influences the awareness level of the consumer. The value of regression
coefficient indicates that for a unit of increase in frequency of discussion of health related matters with friends, there shall be an increase of 1.285 units in the level of awareness of the milk.

(ix) Frequency of Discussion on Health Related Matters with Relatives and Awareness

The frequency of discussion on health related matters with relatives highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the frequency of discussion on health related matters with relatives, there shall be an increase of 1.316 units in the level of awareness of the milk.

(x) Frequency of Purchasing other Brands and Awareness

The frequency of purchasing other brands influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in frequency of purchasing other brands, there shall be an increase of 2.066 units in the level of awareness of the milk.

The value of $R^2$ is found to be significant at one per cent level. The value of $R^2$ indicates that around 42.50 per cent of variations in the consumers' awareness of the milk are due to the selected variables.

9.3.3.3 FACTORS PROMINENTLY ASSOCIATED WITH AWARENESS

To find out the prominent factors that account for the variations in consumers awareness of the milk, step-wise regression has been carried out for the entire sample consumers. Eight prominent variables that influence the awareness have been identified. They are (i) Educational Qualification, (ii) Frequency of Reading Magazines, (iii) Frequency of Purchasing Other Brands, (iv) Frequency of Hearing the Health related Programmes on the Radio, (v) Extent of Curiosity of Knowing Things in General, (vi) Educational Qualification of the Spouse, (vii) Family Type and (viii) Extent of Importance to the Opinion of the Family. All these variables together account for 40.70 per cent of variations in the consumers’ awareness of the milk.
9.3.3.4 DIRECT AND INDIRECT EFFECT OF THE SELECTED VARIABLES ON AWARENESS

Path analysis is carried out to examine the direct and indirect effect of the selected fourteen attributes on the awareness of the milk. It reveals that the 'Educational Qualification' has the maximum direct effect on the level of awareness of the milk while the 'Family Type' has the least direct effect. The 'Educational Qualification' has a substantial indirect effect along with the 'Extent of Curiosity of knowing things in General' and the 'Frequency of Reading Magazines' while 'Discussion of health related matters with Relatives' has the least indirect effect.

9.3.4 DETERMINANTS OF CONSUMER AWARENESS: Branded Milk Segment

With a view to find out the differences among the factors which are associated with the awareness of the milk among various segments taken for the study, the sample 761 consumers are divided into four segments namely, Branded milk segment, Unbranded milk segment, Nuclear family segment and Joint family segment. The factors which influence the awareness of the milk are explained in the following pages. Out of 761 consumers, 388(50.09%) consumers belong to the branded milk segment.

9.3.4.1 NATURE AND STRENGTH OF RELATIONSHIP BETWEEN CONSUMER ATTRIBUTES AND AWARENESS

The nature and strength of relationship between the selected fourteen consumer attributes and awareness of the milk have been identified for the Branded milk segment. It is found that out of fourteen variables, nine variables are significant. The nature and the extent of relationship to which each of the correlated variables account for the variations in consumer awareness of the milk are brought out in the following paragraphs.

(i) Educational Qualification and Awareness

The educational qualification of the consumer and the awareness are positively correlated with each other. As the level of education increases, the level of awareness of the milk also increases. The coefficient of determination ($r^2$) shows that educational qualification of the consumer accounts for 22.50 per cent of variations in the level of consumer awareness.
(ii) Educational Qualification of the Spouse and Awareness

There exists a positive correlation between the educational qualification of the spouse of the consumer and the consumer's level of awareness. When the educational level of spouse is higher, greater is the awareness level of the consumer. The coefficient of determination ($r^2$) shows that educational qualification of a consumer's spouse accounts for 16.10 per cent of variations in the level of awareness of the consumer.

(iii) Monthly family Income and Awareness

The family income per month and the awareness of the milk are positively correlated with each other. As the family income increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that monthly family income accounts for 10.0 per cent of the variations in awareness level.

(iv) Family Type and Awareness

The correlation between the family type and the level of awareness of the milk is found to be positive. The coefficient of determination ($r^2$) shows that the family type accounts for 1.2 per cent of the variations in the level of consumer awareness.

(v) Extent of Curiosity of Knowing Things in General and Awareness

The correlation between the level of curiosity of knowing things in general and the level of awareness is found to be positive. When the level of curiosity increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that the extent of curiosity of knowing things in general accounts for 7.8 per cent of the variations in the level of awareness of the milk.

(vi) Frequency of Reading Newspapers and Awareness

The consumers’ habit of reading newspapers and the level of awareness of the milk are positively correlated with each other. Regular reading of newspapers increases the level of consumers’ awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading newspapers accounts for 6.0 per cent of the variations in the level of awareness of the consumers.
(vii) Frequency of Reading Magazines and Awareness

The habit of reading magazines and the level of awareness are positively correlated with each other. Regular reading of magazines increases the level of consumers’ awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading magazines accounts for 11.20 per cent of the variations in the level of awareness of the consumers of the milk.

(viii) Frequency of Discussion on Health Related Matters with Friends and Awareness

There exists a positive correlation between the frequency of discussion on health related matters with friends and the extent of consumers’ awareness. Regular discussions on health related matters with friends increase the awareness level of the consumers of the milk. The coefficient of determination ($r^2$) shows that the frequency of the discussion on health related matters with friends account for 1.7 per cent of the variations in the level of consumer awareness.

(ix) Period of Discussion on Health related Matters with Others and Awareness

There exists a positive correlation between the period of discussion on health related matters with others and the extent of consumers’ awareness of the milk. Higher the period of discussion with others, greater is the awareness level of the consumers on milk. The coefficient of determination ($r^2$) shows that the period of discussion on health related matters with others account for 3.2 per cent of the variations in the level of consumers’ awareness.

9.3.4.2 DETERMINANTS OF AWARENESS

In order to ascertain the combined influence of the selected fourteen attributes on consumer awareness for the branded milk segment, multiple regression as well as step-wise regression analysis have been carried out. The results of multiple regression analysis reveals that out of fourteen variables taken for consideration, only five variables are significantly related to consumer awareness of the milk. The relationship that exists between such significantly related variables and awareness of the milk is brought out in the succeeding paragraphs.
(i) Educational Qualification and Awareness

The educational Qualification of the consumer highly influences his level of the awareness of the milk. The regression coefficient indicates that for a unit of increase in the level of education, there shall be an increase of 2.976 units in the awareness level.

(ii) Educational Qualification of the Spouse and Awareness

The educational qualification of the spouse influences the consumer's awareness. The regression coefficient indicates that for a unit of increase in the level of education, there shall be an increase of 1.087 units in the awareness level of the milk.

(iii) Frequency of Reading Magazines and Awareness

The frequency of reading magazines highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the frequency of reading magazines there shall be an increase of 1.723 units in the level of awareness of the milk.

(iv) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

The health related programmes broadcast on the radio highly influence the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the hearing the health related programmes on the radio, there shall be an increase of 2.774 units in the level of awareness of the milk.

(v) Frequency of Discussion on Health Related Matters with Friends and Awareness

The health related discussions with friends influence the awareness level of the milk. The value of regression coefficient indicates that for a unit of increase in the frequency of discussion on the health related matters with friends, there shall be an increase of 1.931 units in the level of awareness.

The value of \( R^2 \) is found to be significant at one per cent level. The value of \( R^2 \) indicates that around 35.50 per cent of variations in consumers' awareness of the milk are due to the selected variables.
9.3.4.3 FACTORS PROMINENTLY ASSOCIATED WITH AWARENESS

To find out the prominent factors that account for the variations in consumers' awareness, step-wise regression has been carried out for the Branded milk segment. Five prominent variables that influence awareness level of the milk have been identified. They are (i) Educational Qualification, (ii) Frequency of Reading Magazines, (iii) Frequency of Hearing the Health-related Programmes on the Radio, (iv) Frequency of Discussion on Health Related Matters with Friends (v) Educational Qualification of the Spouse. These five variables together account for 32.60 per cent of variations on the consumers’ awareness of the milk.

9.3.4.4 DIRECT AND INDIRECT EFFECT OF THE SELECTED VARIABLES ON AWARENESS

Path analysis is carried out to examine the direct and indirect effect of the selected fourteen attributes on the awareness of the milk of the consumers who belong to the Branded milk segment. It reveals that the 'Educational Qualification' has the maximum direct effect on the level of awareness of the milk while the 'Monthly Family Income' has the least direct effect. The 'Educational Qualification' has a substantial indirect effect along with the 'Extent of Curiosity of Knowing Things in General' and the 'Frequency of Reading Magazines' while the 'Discussion of Health Related Matters with Relatives' has the least indirect effect.

9.3.5 DETERMINANTS OF CONSUMER AWARENESS: Unbranded Milk Segment

In order to find out the factors which are associated with the awareness of the milk of the consumers of unbranded milk segment, the Correlation, Multiple Regression, Step-wise and Path analysis were carried out. Of the total 761 sample consumers, 373 (49.01%) belong to this segment. The results of this segment are as follows:

9.3.5.1 NATURE AND STRENGTH OF RELATIONSHIP BETWEEN CONSUMER ATTRIBUTES AND AWARENESS

In order to examine the nature and strength of relationship between the selected thirteen consumer attributes and the awareness of the milk in the Unbranded milk segment, the correlation analysis has been carried out. The nature of relationship that exists between the selected variables and the consumer awareness are brought out in the following paragraphs.
(i) Educational Qualification and Awareness

The educational qualification of the consumer and the awareness are positively correlated with each other. As the level of education increases, the level of awareness of the milk also increases. The coefficient of determination ($r^2$) shows that educational qualification of the consumer accounts for 27.90 per cent of variations in the level of consumer awareness of the milk.

(ii) Educational Qualification of the Spouse and Awareness

There exists a positive correlation between the educational qualification of the spouse of the consumer and consumer's level of awareness of the milk. When the educational level of spouse is higher, greater is the awareness level of the consumer. The coefficient of determination ($r^2$) shows that the educational qualification of a consumer's spouse accounts for 12.10 per cent of variations in the level of awareness of the consumer.

(iii) Monthly family Income and Awareness

The family income per month and the awareness of the milk are positively correlated with each other. When the family income increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that the family income per month accounts for 3.2 per cent of the variations in the awareness level.

(iv) Family Type and Awareness

The correlation between the family type and the level of awareness of the milk is found to be positive. The coefficient of determination ($r^2$) shows that the family type accounts for 2.6 per cent of the variations in the level of consumers’ awareness.

(v) Extent of Importance to the Opinion of the Family and Awareness

The extent of importance to the opinion of family and awareness are positively correlated with each other. The coefficient of determination ($r^2$) shows that the extent of importance given to the opinion of the family accounts for 4.1 per cent of the variations in the level of the awareness of the milk.
(vi) Extent of Curiosity of Knowing Things in General and Awareness

The correlation between the level of curiosity of knowing things in general and the level of awareness of the milk is found to be positive. When the level of curiosity is higher, the level of awareness is also greater. The coefficient of determination ($r^2$) shows that the extent of curiosity of knowing things in general accounts for 19.20 per cent variations in the level of awareness.

(vii) Frequency of Reading Newspapers and Awareness

The consumers’ habit of reading newspapers and the level of awareness of the milk are positively correlated with each other. Regular reading of newspapers increases the level of consumers’ awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading newspapers account for 13.80 per cent of the variations in the level of awareness of the consumers.

(viii) Frequency of Reading Magazines and Awareness

The habit of reading magazines and the level of awareness of the milk are positively correlated with each other. The regular reading of magazines increases the level of consumers' awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading magazines account for 17.60 per cent of the variations in the level of awareness of the consumers of the milk.

(ix) Frequency of Watching the health related programmes on television and Awareness

There exists a positive correlation between watching the health related programmes on Television and the awareness of the milk. The coefficient of determination ($r^2$) shows that watching the health related programmes on television accounts for 5.4 per cent of the variations in the awareness level of the milk.

(x) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

The positive correlation exists between hearing the health related programmes on the radio and awareness of the milk. The coefficient of determination ($r^2$) shows that hearing the health related programmes on the radio accounts for 9.4 per cent of the variations in the awareness level of the milk.
(xi) Frequency of Discussion on Health Related Matters with Friends and Awareness

The positive correlation exists between the frequency of the discussion on health related matters with friends and the extent of consumers’ awareness of the milk. The regular discussions on health related matters with friends increase the awareness level of the consumers. The coefficient of determination ($r^2$) shows that the frequency of discussion on health related matters with friends account for 5.2 per cent of the variations in the level of consumer awareness.

(xii) Frequency of Discussion on Health Related Matters with Relatives and Awareness

There exists a positive correlation between the frequency of the discussion on health related matters with relatives and the extent of consumers' awareness. The regular discussions on health related matters with relatives increase the awareness level of the consumers. The coefficient of determination ($r^2$) shows that the frequency of the discussion on health related matters with relatives accounts for 6.2 per cent of the variations in the level of consumer awareness of the milk.

(xiii) Period of Discussion on Health Related Matters with Others and Awareness

There exists a positive correlation between the period of the discussion on health related matters with others and the extent of consumers’ awareness. Higher the period of discussion with others, greater is the awareness level of the consumers of the milk. The coefficient of determination ($r^2$) shows that the period of the discussion on health related matters with others account for 2.3 per cent of the variations in the level of the consumer awareness.

9.3.5.2 DETERMINANTS OF AWARENESS

In order to ascertain the combined influence of the selected thirteen attributes on the consumer awareness, the multiple regression as well as the step-wise regression analysis have been carried out in the unbranded milk segment. The results of the Multiple Regression analysis reveal that out of the thirteen variables taken for consideration, only seven variables are significantly related with the consumer awareness of the milk. The relationship that exists significantly between the selected variables and the awareness of the milk is brought out here.
(i) Educational Qualification and Awareness

The educational Qualification of the consumer highly influences his level of awareness of the milk. The regression coefficient indicates that for a unit of increase in the level of education, there shall be an increase of 4.682 units in the awareness level.

(ii) Family Type and Awareness

The type of the family influences the level of awareness of the milk. The value of regression coefficient indicates that a unit change in the family type shall increase the awareness level by 3.257 units.

(iii) Extent of Importance to the Opinion of the Family and Awareness

The extent of importance given to the opinion of the family influences the awareness level of the consumer. The value of regression coefficient indicates that a unit change in the level of importance given to the opinion of the family shall increase the awareness level by 2.819 units.

(iv) Extent of Curiosity of Knowing Things in General and Awareness

The level of curiosity in knowing the things highly influences the level of awareness. The value of regression coefficient indicates that for a unit of increase in the level of curiosity, there shall be an increase of 3.014 units in the level of awareness of the milk.

(v) Frequency of Reading Magazines and Awareness

The frequency of reading magazines highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the frequency of reading magazines there shall be an increase of 2.870 units in the level of awareness.

(vi) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

The health related programmes broadcast through radio highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the hearing the health related programmes on the radio, there shall be an increase of 3.558 units in the level of awareness.
(vii) Frequency of Discussion on Health Related Matters with Relatives and Awareness

Health related discussions with relatives influence the awareness level of the milk. The value of regression coefficient indicates that for a unit of increase in the frequency of discussion on health related matters with relatives, there shall be an increase of 2.344 units in the level of awareness.

The value of $R^2$ is found to be significant at one per cent level. The value of $R^2$ indicates that around 41.70 per cent of variations in the consumers' awareness of the milk are due to the selected variables.

9.3.5.3 FACTORS PROMINENTLY ASSOCIATED WITH AWARENESS

To find out the prominent factors that account for the variations in consumers awareness of the milk, the step-wise regression has been carried out for the unbranded milk segment. Six prominent variables that influence the awareness have been identified. They are (i) Educational Qualification, (ii) Frequency of Hearing the Health Related Programmes on the Radio, (iii) Frequency of Reading Magazines, (iv) Extent of Curiosity of Knowing Things in General,(v)Frequency of Discussion on Health Related Matters with Friends and (vi) Family Type. All these variables together account for 39.10 per cent variations on the consumers’ awareness of the milk.

9.3.5.4 DIRECT AND INDIRECT EFFECT OF THE SELECTED VARIABLES ON AWARENESS

Path analysis is carried out to examine the direct and indirect effect of the selected thirteen attributes of the awareness. It reveals that 'Educational Qualification’ has the highest direct effect on the level of awareness of the milk while the 'Frequency of reading newspapers' has the least direct effect.

9.3.6 DETERMINANTS OF CONSUMER AWARENESS: NUCLEAR FAMILY SEGMENT

In order to find out the factors which are associated with the level of awareness of the milk of the consumers of nuclear family segment, the Correlation, Multiple
Regression, Step-wise Regression analysis and Path analysis were carried out. Out of the total 761 consumers, 540 (70.96%) represent this segment. The important findings of the various analysis are presented below.

9.3.6.1 NATURE AND STRENGTH OF RELATIONSHIP BETWEEN CONSUMER ATTRIBUTES AND AWARENESS

In order to examine the nature and strength of relationship between the selected thirteen consumer attributes and the awareness of the milk in the third segment, Nuclear family segment, correlation analysis has been carried out. The nature of relationship and the extent to which each of the correlated variables accounts for the variations in the consumer awareness are brought out below.

(i) Educational Qualification and Awareness

The educational qualification of the consumer and the awareness are positively correlated with each other. As the level of education increases, the level of awareness of the consumer also increases. The coefficient of determination ($r^2$) shows that educational qualification of the consumer account for 26.90 per cent variations in the level of the consumer awareness of the milk.

(ii) Educational Qualification of the Spouse and Awareness

There exists a positive correlation between the educational qualification of the spouse of the consumer and the consumer's level of awareness of the milk. When the educational level of spouse is higher, greater is the awareness level of the consumer. The coefficient of determination ($r^2$) shows that the educational qualification of a consumer's spouse accounts for 14.20 per cent of variations in the level of awareness of the consumer.

(iii) Monthly family Income and Awareness

The family income per month and the awareness of the milk are positively correlated with each other. As the family income increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that the monthly family income accounts for 11.0 per cent of the variations in awareness level.
(iv) Extent of Importance to the Opinion of the Family and Awareness

The extent of importance to the opinion of the family and the awareness of the milk are positively correlated with each other. The coefficient of determination \( (r^2) \) shows that the extent of importance given to the opinion of the family accounts for 2.2 per cent of the variations in the level of awareness.

(v) Extent of Curiosity of Knowing Things in General and Awareness

The correlation between the level of curiosity of knowing things in general and the level of awareness of the milk is found to be positive. When the level of the curiosity is higher, the level of awareness is also greater. The coefficient of determination \( (r^2) \) shows that the extent of curiosity of knowing things in general accounts for 17.40 per cent of the variations in the level of awareness.

(vi) Frequency of Reading Newspapers and Awareness

The consumers’ habit of reading newspapers and the level of awareness of the milk are positively correlated with each other. The regular reading of newspapers enhances the level of consumers’ awareness. The coefficient of determination \( (r^2) \) shows that the frequency of reading newspapers account for 12.40 per cent of the variations in the level of awareness of the consumers of the milk.

(vii) Frequency of Reading Magazines and Awareness

The habit of reading magazines and the level of awareness are positively correlated with each other. The regular reading of magazines increases the level of consumers’ awareness of the milk. The coefficient of determination \( (r^2) \) shows that the frequency of reading magazines account for 21.50 per cent of the variations in the level of awareness of the consumers.

(viii) Frequency of Watching the Health Related Programmes on Television and Awareness

There exists a positive correlation between watching the health related programmes on Television and the awareness of the milk. The coefficient of determination \( (r^2) \) shows that watching the health related programmes on television accounts for 4.7 per cent of the variations in the awareness level.
(ix) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

There exists a positive correlation between hearing the health related programmes on the radio and awareness. The coefficient of determination ($r^2$) shows that hearing the health related programmes on the radio accounts for 7.4 per cent of the variations in the awareness level of the milk.

(x) Frequency of Discussion on Health Related Matters with Friends and Awareness

There exists a positive correlation between the frequency of discussion on health related matters with the friends and the extent of consumers’ awareness. The regular discussions on health related matters with friends increase the awareness level of the consumers of the milk. The coefficient of determination ($r^2$) shows that the frequency of discussion on health related matters with friends account for 1.8 per cent of the variations in the level of consumers’ awareness.

(xi) Frequency of Discussion on Health Related Matters with Relatives and Awareness

There exists a positive correlation between the frequency of discussion on health related matters with relatives and the extent of consumers’ awareness. The regular discussions on health related matters with relatives increase the awareness level of the consumers. The coefficient of determination ($r^2$) shows that the frequency of discussion on health related matters with relatives accounts for 2.6 per cent variations in the level of consumers’ awareness of the milk.

(xii) Period of Discussion on Health Related Matters with Others and Awareness

There exists a positive correlation between the period of discussion on health related matters with others and the extent of consumers’ awareness of the milk. Higher the period of discussion with others, greater is the awareness level of the consumers. The coefficient of determination ($r^2$) shows that the period of discussion on health related matters with others account for 5.8 per cent of the variations in the level of consumer awareness.
(xiii) Frequency of Purchasing Other Brands

Positive correlation exists between the frequency of purchasing other brands and the extent of consumer's awareness. The regular purchase of other brands increases the awareness level of the consumers of the milk. The coefficient of determination \(r^2\) shows that the frequency of purchasing other brands accounts for 10.8 per cent variations in the level of consumers’ awareness.

9.3.6.2 DETERMINANTS OF AWARENESS

In order to ascertain the combined influence of the selected thirteen attributes on consumer awareness of the milk, the Multiple Regression as well as the Step-Wise Regression analysis have been carried out in the Nuclear family segment. The results of the multiple regression analysis reveal that out of the thirteen variables taken for consideration, only six variables are significantly related with consumer awareness of the milk. The relationship that exists significantly between selected variables and the awareness of the milk is brought out in the following paragraphs.

(i) Educational Qualification and Awareness

The educational Qualification of the consumer highly influences his level of awareness. The regression coefficient indicates that for a unit of increase in the level of education, there shall be an increase of 3.256 units in the awareness level of the milk.

(ii) Extent of Curiosity of Knowing Things in General and Awareness

The level of curiosity in knowing the things highly influences the level of awareness of the milk. The value of regression coefficient indicates that for a unit of increase in the level of curiosity, there shall be an increase of 2.817 units in the level of awareness.

(iii) Frequency of Reading Magazines and Awareness

The frequency of reading magazines highly influences the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the frequency of reading magazines there shall be an increase of 3.172 units in the level of awareness of the milk.
(iv) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

The health related programmes broadcast in radio highly influence the awareness level of the consumer. The value of regression coefficient indicates that for a unit of increase in the hearing the health related programmes on the radio, there shall be an increase of 2.899 units in the level of awareness of the milk.

(v) Frequency of Discussion on Health Related Matters with Friends and Awareness

The health related discussions with friends influence the awareness level of the milk. The value of regression coefficient indicates that for a unit of increase in the frequency of discussion of health related matters with friends, there shall be an increase of 1.206 units in the level of awareness.

(vi) Frequency of Purchasing Other Brands and Awareness

The regular purchase of other brands influence the awareness level. The value of regression coefficient indicates that for a unit of increase in the frequency of purchase of other brands, there shall be an increase of 2.323 units in the level of awareness of the milk.

The value of $R^2$ is found to be significant at one per cent level. The value of $R^2$ indicates that around 42.30 per cent of variations in the consumers' awareness of the milk are due to the selected variables.

9.3.6.3 FACTORS PROMINENTLY ASSOCIATED WITH AWARENESS

To find out the prominent factors that account for the variations in the consumers’ awareness of the milk, Step-wise Regression has been carried out for the Nuclear family segment. Six prominent variables that influence awareness of the milk have been identified. They are (i) Educational Qualification, (ii) Frequency of Reading Magazines, (iii) Frequency of Purchasing Other Brands, (iv) Frequency of Hearing the Health Related Programmes on the Radio, (v) Extent of Curiosity of Knowing Things in General and (vi) Educational Qualification of the Spouse. All these variables together account for 40.50 per cent of variations of the consumers’ awareness.
9.3.6.4 DIRECT AND INDIRECT EFFECT OF THE SELECTED VARIABLES ON AWARENESS

Path analysis is carried out to examine the direct and indirect effect of the selected thirteen attributes on awareness of the milk in Nuclear family segment. It reveals that the 'Educational Qualification' has the highest direct effect on consumer awareness of the milk while the 'Monthly Family Income' has the least direct effect in this segment.

9.3.7 DETERMINANTS OF CONSUMER AWARENESS: JOINT FAMILY SEGMENT

In order to find out the factors which are associated with the level of awareness of the milk of the consumers of joint family segment, the Correlation, Multiple Regression, Step-wise Regression analysis and Path analysis were carried out. Out of the total 761 consumers, 221(29.04%) belong to this segment. The important findings of the various analyses are presented below.

9.3.7.1 NATURE AND STRENGTH OF RELATIONSHIP BETWEEN CONSUMER ATTRIBUTES AND AWARENESS

In order to examine the nature and strength of relationship between the selected thirteen consumer attributes and the awareness of the milk in the Joint family segment, the correlation analysis has been carried out. Of the thirteen variables only eleven variables are significantly associated with the consumer awareness. The nature of relationship and the extent to which each of the correlated variables account for the variations in the consumer awareness of the milk are brought out below.

(i) Educational Qualification and Awareness

The educational qualification of the consumer and the awareness of the milk are positively correlated with each other. When the level of education increases, the level of awareness also increases. The coefficient of determination ($r^2$) shows that the educational qualification of the consumers account for 30.70 per cent of the variations in the level of the consumer awareness of the milk.
(ii) Educational Qualification of the Spouse and Awareness

There exists a positive correlation between the educational qualification of the spouse of the consumer and consumers’ level of awareness. When the educational level of spouse is higher, greater is the awareness level of the consumer. The coefficient of determination \( (r^2) \) shows that the educational qualification of a consumers’ spouse accounts for 16.20 per cent of variations in the level of awareness of the consumer of the milk.

(iii) Monthly family Income and Awareness

The family income per month and the awareness of the milk are positively correlated with each other. As the family income increases, the level of awareness also increases. The coefficient of determination \( (r^2) \) shows that the family income per month accounts for 1.8 per cent of the variations in awareness level.

(iv) Extent of Importance to the Opinion of the Family and Awareness

The extent of importance to the opinion of the family and the awareness of the milk are positively correlated with each other. The coefficient of determination \( (r^2) \) shows that the extent of importance given to the opinion of the family accounts for 1.9 per cent of the variations in the level of awareness.

(v) Extent of Curiosity of Knowing Things in General and Awareness

The correlation between the level of curiosity of knowing things in general and the level of awareness of the milk is found to be positive. When the level of curiosity is higher, the level of awareness is also greater. The coefficient of determination \( (r^2) \) shows that the extent of curiosity of knowing things in general accounts for 12.7 per cent of the variations in the level of awareness.

(vi) Frequency of Reading Newspapers and Awareness

The consumers’ habit of reading newspapers and the level of awareness are positively correlated with each other. Regular reading of newspapers increases the level of consumers’ awareness of the milk. The coefficient of determination \( (r^2) \) shows that the frequency of reading newspapers account for 11.8 per cent of the variations in the level of awareness of the consumers of the milk.
(vii) Frequency of Reading Magazines and Awareness

The habit of reading magazines and the level of awareness of the milk are positively correlated with each other. The regular reading of magazines increases the level of consumers’ awareness of the milk. The coefficient of determination ($r^2$) shows that the frequency of reading magazines account for 9.40 per cent of the variations in the level of awareness of the consumers of the milk.

(viii) Frequency of Hearing the Health Related Programmes on the Radio and Awareness

There exists a positive correlation between hearing the health related programmes on the radio and awareness. The coefficient of determination ($r^2$) shows that hearing the health related programmes on the radio accounts for 4.1 per cent of the variations in the awareness level on milk.

(ix) Frequency of Discussion on Health Related Matters with Relatives and Awareness

There exists a positive correlation between the frequency of the discussion on health related matters with relatives and the extent of consumer's awareness. The regular discussions on health related matters with relatives increase the awareness level of the consumers of the milk. The coefficient of determination ($r^2$) shows that the frequency of discussion on health related matters with relatives accounts for 2.6 per cent of the variations in the level of consumer awareness.

(x) Period of Discussion on Health Related Matters with Others and Awareness

There exists a positive correlation between the period of the discussion on health related matters with others and the extent of consumers’ awareness of the milk. Higher the period of discussion with others, greater is the awareness level of the consumers. The coefficient of determination ($r^2$) shows that the period of discussion on health related matters with others account for 1.7 per cent of the variations in the level of consumer awareness.

(xi) Frequency of Purchasing Other Brands and Awareness

The positive correlation exists between the frequency of purchasing other brands and the extent of consumers’ awareness of the milk. The regular purchase of other
brands increases the awareness level of the consumers of the milk. The coefficient of
determination ($r^2$) shows that the frequency of purchasing other brands account for
6.6 per cent of the variations in the level of consumer awareness of the milk.

**9.3.7.2 DETERMINANTS OF AWARENESS**

In order to ascertain the combined influence of the selected thirteen attributes on
consumers’ awareness of the milk, the Multiple Regression as well as the Step-wise
Regression analysis have been carried out in the Joint family segment. The results of the
multiple regression analysis reveal that out of the thirteen variables taken for
consideration, only seven variables are significantly related with the consumer awareness
of the milk. The relationship that exists significantly between the selected variables and
the awareness of the milk is brought out in the subsequent paragraphs.

(i) **Educational Qualification and Awareness**

The educational Qualification of the consumer highly influences his level of
awareness of the milk. The regression coefficient indicates that for a unit of increase in
the level of education, there shall be an increase of 5.412 units in the awareness level

(ii) **Extent of Importance to the Opinion of the Family and Awareness**

The extent of importance given to the opinion of family influences the awareness
level of the consumer. The value of regression coefficient indicates that a unit change in
the level of importance given to the opinion of family shall increase the awareness level
by 3.172 units.

(iii) **Frequency of Reading News papers and Awareness**

The frequency of reading newspapers influences the awareness level of the
consumer. The value of regression coefficient indicates that for a unit of increase in the
frequency of reading news papers there shall be an increase of 2.519 units in the level of
awareness of the milk.

(iv) **Frequency of Hearing the Health Related Programmes on the Radio and Awareness**

The health related programmes broadcast on the radio highly influence the
awareness level of the consumer. The value of regression coefficient indicates that for a
unit of increase in the hearing the health related programmes on the radio, there shall be an increase of 3.113 units in the level of awareness of the milk.

(v) Frequency of Discussion on Health Related Matters with Friends and Awareness

The health related discussions with friends influence the awareness level of the milk. The value of regression coefficient indicates that for a unit of increase in the frequency of discussion on health related matters with friends, there shall be an increase of 1.787 units in the level of awareness of the milk with friends.

(vi) Frequency of Discussion on Health Related Matters with Relatives and Awareness

The health related discussions with relatives influence the awareness level of the milk. The value of regression coefficient indicates that for a unit of increase in the frequency of discussion on health related matters with relatives, there shall be an increase of 1.881 units in case of relatives.

(vii) Frequency of Purchasing Other brands

Regular purchase of other brands influence the awareness level of the milk. The value of regression coefficient indicates that for a unit of increase in the frequency of purchase of other brands, there shall be an increase of 1.421 units in the level of awareness.

The value of $R^2$ is found to be significant at one per cent level. The value of $R^2$ indicates that around 43.6 per cent of variations in the consumers' awareness of the milk are due to the selected variables.

9.3.7.3 FACTORS PROMINENTLY ASSOCIATED WITH AWARENESS

To find out the prominent factors that account for the variations in the consumers awareness of the milk, the Step-wise Regression has been carried out for the Joint family segment. Four prominent variables that influence awareness of the milk have been identified. They are (i) Educational Qualification, (ii) Frequency of Hearing the Health Related Programmes on the Radio, (iii) Frequency of Reading Newspapers and (iv) Frequency of Purchasing Other Brands. All these variables together account for 38.20 per cent of variations of the consumers’ awareness.
9.3.7.4 DIRECT AND INDIRECT EFFECT OF THE SELECTED VARIABLES ON AWARENESS

The Path analysis is carried out to examine the direct and indirect effect of the selected thirteen attributes on the awareness of the milk in Joint family segment. It reveals that the 'Educational Qualification' has the highest direct effect on the consumer awareness of the milk while the 'Frequency of Watching the Health Related Programmes on Television' has the least direct effect in this segment.

9.4 Suggestions

It has been well accepted that in today’s consumer market, consumers are the ‘king’. The consumption pattern and quantum of consumption depends upon their level of awareness. Numerous factors contribute towards their ‘awareness’. It is essential to increase the level of consumers’ awareness of the milk as it is considered as a complete food in the human life. Hence, based on the major findings of the study, a few measures have been suggested to different participants in dairy sector in order to improve consumers’ awareness of the milk.

9.4.1 To Consumers

1. Reading health related news in newspapers and magazines will enable the consumers to know more about the importance of consuming milk.
2. While watching advertisements on television or listening to radio advertisements of the milk manufacturers, consumers are advised to keenly watch the advertisements to know more about the special features of the product.
3. It is better to have discussions with the family, friends, and relatives about health so that the consumers may come to know about the nutritional values of the milk.
4. By becoming members of consumer forums, the consumers shall be made aware of the laws that protect them from adulterations of products which includes milk.

9.4.2 To Manufacturers/Distributors

1. The manufacturers shall include information such as varieties of milk they produce as well as the specialty of each variety while advertising their brands.
2. They shall offer milk with exclusive identity of cow milk and buffalo milk, so that the consumer would be able to become aware of it.
3. Product mix expansion is recommended with the innovative milk types for school children, lactating mothers, sick people etc and steps have to be taken to make the consumers become aware of such items available in the market.

4. Small hoardings shall be kept at the delivery points which may contain the need for purification of milk and the method of purification and also the suitability of milk varieties for different age groups.

5. Manufacturers can send Short Message Service (SMS) to all the subscribers of the mobile phones of various companies stressing the importance of milk.

**9.4.3 To Non Government Organisations (NGOs)**

1. They shall conduct awareness programs on milk periodically in different areas especially among rural people where the literacy level is poor.

2. The steps can be taken to conduct conferences or seminars with experts in the field.

3. To make the children know the importance of the milk and its associate products, competitions in educational institutions can be conducted.

4. Bills containing important tips like the use of milk within the prescribed time, nutritional values of milk, the type of adulterations and their harmful effects can be distributed among the public at frequent intervals.

5. The NGOs can arrange for visits by the consumers to the milk sheds to make them become aware of the hygienic conditions needed for the milk sheds and also to the milk processing units to enable them to understand purification of milk and realize the need for it.

**9.4.4 To Government**

1. Government through local bodies may popularize the nutritional values of milk among the consumers throughout the state at regular intervals.

2. Government may also ensure the Sanitary Inspectors go for regular checking on the quality of both branded and unbranded milk supplied in the market. They may be directed to visit the cow sheds frequently to ensure the hygienic conditions prevailing and consumers must be made aware of it.

3. The government may also create awareness among the consumers about milk by printing the need for consumption of milk on the bus and train tickets. Government
should take steps to educate the consumers of unbranded milk on how adulterations can be done and to purchase milk only from reliable milk vendors.

4. Awareness can be created among the consumers about the prevalence of various acts in order to safeguard them against adulteration.

5. Awareness can be created among young children by including lessons on milk consumption and its importance. The government should conduct milk awareness programmes through medias and also take steps to popularize the norms framed by the Indian Council of Medical Research (ICMR) regarding per capita consumption of milk. Promoting logo for milk of prescribed quality shall be carried out and the consumers may be made aware of it. Violation of the quality standards should bar the firm using the logo.

9.5 CONCLUSION

To succeed in buyers market, for any manufacturer understanding the consumers’ level of awareness of the product and their preference towards it becomes a must. The present study has earnestly examined the consumers’ level of awareness of the milk from different angles along with their purchase behaviour. The results of the study have brought out the socio-economic variables that determine consumers’ awareness of the milk. The present study is a pointer to potential areas of research that can be probed into by the budding research scholars. Expanding consumer geography and examining consumer awareness would enable a researcher to understand the spread of consumer awareness of the milk in different parts of India. Interregional disparities in awareness could be identified and methods could be suggested accordingly. The study can be extended to other districts and interdistrict comparison can also be undertaken. Research can be done to find out if the consumption pattern varies according to the age and the number of children in a family. Research work can also be taken up to understand the level of the awareness among rural and urban consumers separately. As today’s teenagers are the future pillars of the country, their realization towards being healthy is a must. Hence an exclusive study can also be undertaken to find out their awareness level of the healthy food items, including milk and suggestions can be given to enhance their level of awareness in the needed areas. Studies on services of organized sector dairies shall be carried out to understand their role in the development of the dairy industry. An attempt may be carried out to know the Central and State Governments' role in developing Indian dairy industry in the World dairy market. An extensive study can also be carried out to compare Indian Dairy Industry with the Dairy Industry of other countries.