

CHAPTER 3

REVIEW OF LITERATURE

The chapter includes review of relevant concepts and theories and review of previous research findings

3.1 Consumer Behavior:

From a cognitive perspective, consumer behavior can be defined as the activities that people engage in when selecting, purchasing and using products and services to satisfy needs and desires (Zanoli and Naspetti, 2002).

Consumer food purchasing behaviour is influenced by many factors as a result of food's emotive nature. These factors, supported by a considerable amount of research, can be classified into economic and non-economic factors (Arthey, 1989). Economic theory has shown some limits in explaining the complexity and multidimensionality of consumer behavior. Most economic models use relative prices and disposable incomes as explanatory variables of consumer behavior and treat all other influences (e.g. social, economic and cultural factors) as latent or unobservable variables: quality perception is one of them (Zanoli and Naspetti, 2002). Wheelock, 1986 says, food price and personal income became the dominant factors which determined food choice after the Second World War, when the supply of food was in abundance but nowadays, however, the influence of prices on food choice is diminished.

Mitsostergios & Skiadas; 1994 conducted a survey in Chania, the 2nd largest city of Crete, to determine the factors that affect the purchasing behavior of fresh pasteurized milk and to identify the attitudes and perceptions of consumers toward it. The study revealed that the majority of households stock at least 2 types of milk simultaneously. The preferred milk is concentrated milk because of its long lifetime, availability, and low price. However, the majority of interviewees consider fresh pasteurized milk to be healthier and more nutritious, as well as having a better taste and odor, than concentrated milk. The large numbers of diseases caused by bad nutrition, and the care about slimness and fitness, have led people to pay more attention to what they eat. Consumers want to be confident that food is safe, nutritious, without additives and that it has high standards of quality (Arthey 1989, as cited in & Skiadas; 1994). Dube, 1990,

as quoted in Mitsostergios & Skiadas, 1994; also states that there is a heightened awareness of the relationship between eating, physical well-being and the desire for improved health. Senauer, 1989 as quoted in Mitsostergios & Skiadas, 1994; argued that the population is growing older, living longer and residing in smaller households, and is more concerned about nutrition and health, demanding special characteristics in food, such as low-sodium and low-fat items. Aspects linked to health and well being occupy main position in the minds of consumers of organic products.

McKenzie, 1985 as quoted in & Skiadas 1994; says that the increased proportion of working married women has resulted in the growth of demand for convenience foods. In recent years, people have reduced the amount of meat in their meals, moving towards vegetarianism, principally because of animal welfare issues. They have developed moral and ethical objections to methods of intensive animal production and slaughter (Wheelock, 1986 as quoted in Mitsostergios & Skiadas, 1994)

Deaton and Muellbaur, (1980), as cited in Zanolli and Naspetti, 2002; discuss consumer behavior in terms of preferences and opportunities for choice. Unlike preferences, the opportunities for choice are often directly observable, to the extent that the variations in behavior can be traced to variations in opportunities. Zanolli and Naspetti, 2002 argue that in marketing, the analysis of consumer behavior is dealing primarily with preferences and how preferences are formed in the mind of the consumer. They mention two marketing approaches to consumer behavior: cognitive and behavioral. Cognitive approaches emphasize constructs dealing with mental structure and thinking processes whereas behavioral approaches emphasize direct links between the characteristics of environment and behavior.

Gutman, 1982 gave a construct called “means-end-chain” model (fig.1). He argues, whenever a stimulus related to product comes in contact with this knowledge of consumer; a link is built between the product and the consumer. A network of links amongst product attributes, personal consequences and values can be revealed to give deeper insight into consumer motivation. When this network is structures in a hierarchical form, it is known as “means-end-chain”. It is a knowledge structure that links consumers’ knowledge about product attributes with their personal knowledge about consequences and values (beliefs and principles).

The means-end-chain model explicitly links consumers' needs and product characteristics and reveals his motivations in buying a product. In means-end-chain model consumer decision making is considered as a problem-solving process. Consumers exert a behavior (e.g. acquire a credit card), as a means to reach an objective or an end (e.g. not to pay cash) (Reynolds and whitlark, 1995 as quoted in Zanoli and Naspetti, 2002). Peter et.al. (1999) argue that consumers see most of the product attributes (driver of consumer value perception) as a means to some end: at conscious level this may be represented by some positive consequences and at a sub-conscious level their end is to attain values (beliefs and principles), that is “preferred end state of being and preferred modes of behavior”.

Chart No. 3.1: Linking values to products: the means-end chain model

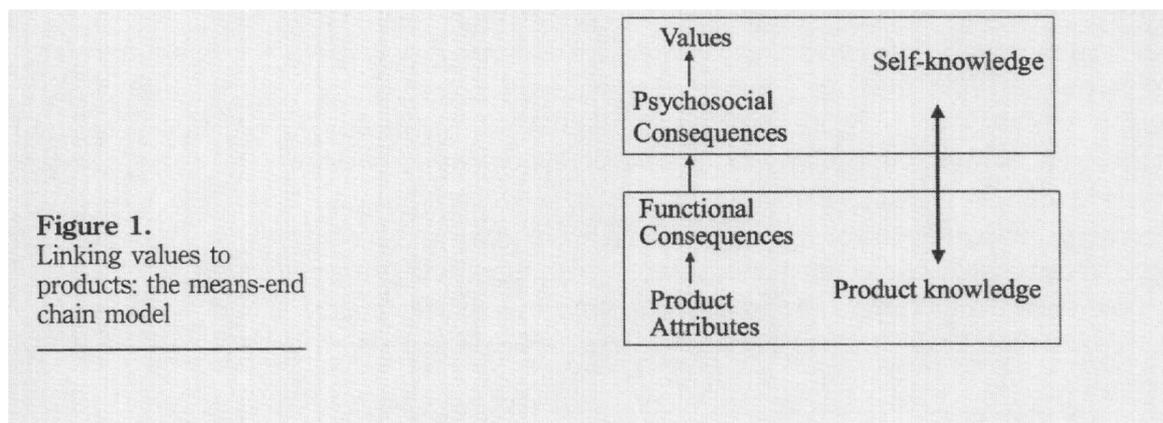


Figure 1.
Linking values to products: the means-end chain model

(Source : Zanoli & Naspetti, 2002)

3.2 Consumer Value:

Each customer is looking for solutions to his problems in every product (Kotler, Keller, Koshy A. & Jha M., 2007) Consumer Value is directly linked to the ability of the product to meet the customers' expectations as a solution to his problem. Kotler, Keller, Koshy A. & Jha M., 2007 underlines the importance of consumer value by defining Marketing as “The process and organizational function for creating, communicating and delivering the value to customer.”

Sanchez-Fernandez and Iniesta-Bonillo, 2006, have reviewed the concept of Consumer Value extensively and define it as “ a cognitive-affective evaluation of an exchange relationship carried out by a person at any stage of the process of purchase decision, characterized by a string of tangible and/or intangible elements which determine, and are also capable of, a comparative, personal, and preferential judgment conditioned by the time, place, and circumstances of the evaluation.”

3.3 Consumer Value and Satisfaction:

Sanchez-Fernandez and Iniesta-Bonillo, 2006 say that; value perceptions can be generated without the product or service being bought or used, while satisfaction depends on the experience of having used the product or service. However, Bassi and Guido, 2006 say that customer satisfaction depends not only on product performance, but also on many other aspects involved in the consumption experience, important in all stages pre-ceding and following purchase.

Spreng, Dixon and Olshavsky, 1993, as cited in Sanchez-Fernandez and Iniesta-Bonillo, 2006 conclude that perceived value is potentially of great importance since it may greatly alter the direction (satisfied or dissatisfied) and extremity of any satisfaction/dissatisfaction experienced.

In sum, 'Value tells an organization what to do ... while satisfaction tells the organization how it is doing (Woodruff and Gardial 1996, p. 95, cited in Sanchez-Fernandez and Iniesta-Bonillo, 2006).

3.4 Consumer Value and Price:

Price is defined as the amount of money consumer pays to acquire the product (Kotler, Keller, Koshy A. & Jha M., 2007). The concept of price also includes other aspects such as time, energy and efforts in search of the product. Value and price are elusive constructs that are frequently confused (Dodds, Monroe, and Grewal 1991; Woodruff and Gardial 1996 as cited in Sanchez-Fernandez and Iniesta-Bonillo, 2006,).

Price contributes to consumer value in two ways; as price can be both an indicator of the amount of sacrifice needed to purchase a product and an indicator of the level of quality (Kotler, Keller, Koshy A. & Jha M., 2007). The dual nature of price as

mentioned above, however, is more significant in the purchase of goods and services by the customer who is ignorant or illiterate about quality parameters of those goods and services. And food products are not exception to this. Price is a component of consumer value. (Fernandez, Iniesta-Bonillo, 2006)

3.5 Consumer Value and Quality:

For Band (1991), quality is the means and consumer value is the end.

In theoretical terms, it has been suggested that perceived quality is an antecedent that has a positive effect on consumer value (Oliver 1999; Parasuraman and Grewal 2000). Quality is a subcomponent of overall value (Holbrook 1999; Petrick 2002; Sweeney and Soutar, 2001 as cited in Sanchez-Fernandez and Iniesta-Bonillo, 2006).

Kotler, Keller, Koshy A. & Jha M., 2007, define value as benefits expected by the consumers for the price he pays to acquire a product. The benefits from the perspective of the consumers are nothing but the product attributes from the perspective of the company.

“Given the weight of the evidence, it would appear that it is fair to say that quality contributes to the formation of consumer value.” (Sanchez-Fernandez & Iniesta-Bonillo, 2006)

3.6 Consumer dissatisfaction and complaining behavior:

Study of consumer responses to their dissatisfaction towards products and services has significant implications for repurchase intentions and brand loyalty, market feedback mechanisms and new product development (Day, 1984; Fornell and Wernerfelt, 1987 as cited in Fernandes and Santos, 2007).

Hirschman, 1970 as quoted in Fernandes and Santos, 2007; established the “Exit, Voice and Loyalty” model of dissatisfied customers, where Exit means that a consumer voluntarily and actively intends to terminate an exchange relationship by switching patronage to another retailer; Voice suggests an attempt to change rather than escape from the state of affairs; and Loyalty occurs when consumers neither exit nor voice but instead “suffer in silence being confident that things will soon get better”. Singh, 1988

concluded that complaint responses can be appropriately conceptualized as consisting of three distinct dimensions: voice responses, including actions directed towards the seller, private responses, i.e. actions involving stopping patronage and negative word-of-mouth communication about the offending seller and third party responses, including actions directed towards external agencies. From the point of view of most business enterprises, it is unfortunate that most dissatisfied consumers exhibit indirect behaviors (such as negative word-of-mouth or simple exit behaviors) in the face of dissatisfaction, rather than complaining directly to the offending firm (Fernandes and Santos, 2007). Empirical studies report that at least two thirds fail to inform firms of their dissatisfaction (Richins, 1983; Andreassen, 1984 as quoted in Fernandes and Santos, 2007). Dong Hwan Lee, 2003 conducted a study on complaining behavior of customers with vending machines and concluded that only about 16.2 % customers (of 251 surveyed), resorted to inform the company about their dissatisfaction. The private form of complaining behavior, “pounded or banged the machine out of frustration or anger was ranked first (19.4%), closely followed by no action (18.9%). Another prevalent type of complaining was negative word-of-mouth by “talking to other people about the incident” to express their frustration with the incident (18.3%). About 16% respondents stopped using the machine that gave the trouble (Exit).

‘Consumer alienation’ is a consumer’s global negative effect toward the dissatisfying firm’s industry. This negative effect is reflected by a negative feeling for the firm, its products/services and even its competitors. Consumers feeling alienated are more likely to develop feelings of helplessness and powerlessness (Singh, 1989; Westbrook, 1987 as quoted in Fernandes and Santos, 2007).

Fernandes and Santos, 2007 concluded that dissatisfaction level significantly and substantially enhanced negative word-of-mouth and switching intentions, but its effect on intent to complain directly to the firm is not in the same intensity. The effective focus on maintaining long term relationships and avoiding negative word-of-mouth communication depends on enhancing post purchase systems. The company should not try to hide failures and wait for the customer to register complaints, because the customers who perceive the likelihood of complaint success as low and are not self confident; probably, will not complain but will remain dissatisfied (Fernandes and Santos, 2007). They also maintain that a consumer’s perception of likelihood of

complaint success and favorable attitude towards complaining can heighten voice intention.. Both aspects can be enhanced by educating consumers about the options and the mechanisms of complaining. Companies could also simplify the exchange and refund procedures, show to consumers they are willing to admit failures, provide employees education regarding quick and efficient complaint handling, motivate them to facilitate customers' expressions of complaint and teach them to increase their willingness to listen to customers. The high impact of self confidence on complaint intention shows that the company, when handling complaints, is dealing with self confident consumers. Customer-contact employees should be trained to pay attention when dealing with this type of consumer (ibid).

3.7 Brand Switching Behavior:

Shukla Pourav, 2004 carried out study on “Effect of Product Usage, Satisfaction and Involvement on Brand Switching Behavior” and argued that a relatively small amount of literature is available discussing the issue of brand switching as most work has been carried out in the area of brand loyalty. Companies worldwide lose half their customers every five years (Shukla, 2004). Reichheld, 1996 suggests that by searching the root causes of customer departures, companies with the desire and capacity to learn can identify business practices which can win the customers back and reestablish the relationship on firmer ground.

There are different views of the scholars in this context. Kristensen, et al., 1999 argued that performance/quality is the main driver of satisfaction in most cases.

According to Richheld, 1996, what keeps a customer loyal is the value they receive and one of the reasons so many businesses fail is that too much of their learning revolves around profit and too little around value creation. Shukla, 2004 agrees with the same by arguing that how a company perceives its performance may differ from how its customers perceive it. All these views emphasize that customer's satisfaction is driven by customer's perception. The business can definitely shape up these perceptions in their favor.

Shukla's, 2004 study on brand switching behavior in ice-cream concluded that although 85.61% of customers are satisfied with their current brand; 34.53% customers are ready

to switch their brand. Quality is the most important factor making them switch the brand. Variety is other factor that is important to switching. (ibid)

Shukla, 2004 argue that the level of dissatisfaction does not possess a direct and strong relation with the brand switching behavior. This has an important implication for the market situation where many marketers have been linking brand switching behavior with the dissatisfaction generated through brand or product. At the same time, it is also observed that the factor affecting brand or product switch occurs due to various reasons related to the purchase and usage level involvement of customers. The performance, usage and product involvement have linkages with satisfaction and product involvement certainly has some amount of effect on brand switching behavior but it certainly does not explain the phenomenon on its own. Product involvement and brand switching are customer-defined phenomenon, as opposed to product-defined (ibid).

The association of perceived quality as a factor with brand switching indicates that in addition to performance and satisfaction, companies should also monitor the perceived level of involvement and quality (ibid).

The marketers should also be directly concerned about product involvement and its relation to brand loyalty and switching, because brand switching behavior cannot fully be explained by manifest satisfaction. The degree of brand switching directly varies, by definition, with the degree of brand commitment in terms of usage and involvement, satisfaction generated from it as well as certain unknown factors. It means that the customer is less vulnerable to marketing actions of competitors and is more willing to stay with his or her brand. Involvement is therefore important because it prevents consumers from switching. It functions as an important exit barrier but cannot be justified as a single factor responsible for the same (ibid).

3.8 History of ice cream:

3.8.1 The origin of ice cream:

The first ice-creams were produced by the Chinese over 3000 years ago; they consisted a mixture of snow with fruit and honey; in ancient Egypt pharaohs offered their guests fruit juice cooled with snow; roman emperor Nero (37-68 A.D.) sent his slaves for

snow from the mountains and combined it with fresh fruits (ANIGA, 2008, Soni sushil, 2009). Arabs are said to be the first to utilize milk as a major ingredient in the making of ice cream. In the 10th century, the streets of Baghdad, Damascus and Cairo were lined up with kiosks selling ice cream produced from milk or cream (Soni Sushil, 2009). Sources say that Marco Polo, an Italian traveler from the 13th century, introduced ice-cream in Europe when returning from China to Italy in 1295 (Joao Pedro Dias da Costa Fontes, 2008; Soni Sushil, 2009). The word “gelato” (Italian for iced or frozen) first appeared as a reference to the product in the 16th century amidst the Medici Family from Firenze (Italy); a hundred years later Procopio, from Palermo (Italy), invented an apparatus that achieved substantial improvements on the ice-cream quality; throughout the years ice-cream suffered various changes incorporating milk, cream and eggs; over the last 400 years the discovery that a mixture of ice and salt in a container could produce temperatures below 0 degrees Celsius transforming milk, eggs, creams and sugar into ice-cream revolutionized its production; as a result the first ice-cream production utensil is created consisting of a copper container inside a wooden container and amid them ice and salt; it was not until the year 1813 that Kelvin, an American, produced the first ice-cream machines by using the principle that a gas spreading produces cold temperatures (Nosolo Gelato, 2008 as quoted in Joao Pedro Dias da Costa Fontes, 2008)

3.8.2 Time Line of the American History of Ice Cream (adopted from Donnamarie Pantaleo, 1999)

- 1559 With the discovery that ice and salt can cause freezing, ice cream first appears in Italy.
- 1744 Maryland's Governor William Bladden writes a friend telling him of this delicious frozen concoction he tasted while abroad in Europe.
- 1782 Ice cream was first served at a Philadelphia party given by the French envoy in honor of the newly formed country.
- 1790 According to the records of a New York merchant, President Washington spent about \$200 for ice cream that summer. Washington had two pewter pots made for his ice cream enjoyment.
- 1845 The first hand operated ice cream freezer was invented by Nancy Johnson. This invention allowed Americans to enjoy ice cream in their own homes.

- 1851 The first wholesale ice cream business was founded by Baltimore milk Jacob Fussell. Fussell was faced with the problem of erratic demand and was forced to sell his ice cream for half the price of his competitors.
- 1874 The ice cream soda was invented. The profession became known as a "soda jerk."
- 1890 Due to religious criticism that this "sinfully" creation should not be served on Sundays, ice cream merchants responded by leaving out the carbonated water in ice cream soda and thus invented the ice cream "Sunday." The spelling was later changed to "sundae" to avoid any connection to holy day.
- 1904 The ice cream cone was introduced at the St. Louis World's Fair by a Syrian immigrant pastry maker named Ernest A. Hamwi. Hamwi sold his wafer like pastry at the fairground serving them with sugar and other sweets. When the ice cream stand ran out of dishes, Hamwi rolled his pastry into a cone shape and the ice cream cone was born.
- 1904 Italian immigrant Italo Marchiony was issued a patent for the ice cream cone mold. Marchiony claimed that he had been making ice cream cones since 1896.
- 1921 Originally called the "I-Scream-Bar" shop owner Chris Nelson created this wonderful treat. When Douglas Ressenenden came into Nelson's store and asked for an ice cream sandwich, Nelson made him one. But the boy realized that he did not have enough money for the ice cream and a chocolate bar, so he opted for the chocolate. This gave Nelson the idea to combine the two treats and what we now know as the Eskimo Pie was born.
- 1924 Americans consume an average of 6.8 pounds of ice cream each per year. Considering that the average intake of cheese was 4.5 pounds, ice cream had established itself in the American diet. In less than 3 years the rate of ice cream consumption jumped to nine quarts annually per person.
- 1929 Ice Cream street vendors were known as the "Hokey Pokey Men" and they were soon replaced by large dairy corporations.
- 1930 Dry ice (solid carbon dioxide) was introduced to the commercial market for the purpose of keeping ice cream frozen.
- 1934 The first chocolate covered ice cream on a stick was introduced.
- 1940 The ice cream industry grows and remained a constant through the 1970's

- 1946 With the end of dairy rationing due to World War II, Americans began consuming more than 20 quarts of ice cream per person that year.
- 1970 The traditional ice cream parlor began to disappear with the advent of prepackaged ice cream sold in supermarkets.
- 1988 In response to American's obsession with diets, Eskimo Pie introduced the first reduced fat ice cream bar sweetened with aspartame, a sugar substitute.

3.9 Consumer behavior – ice cream

3.9.1 Consumption and consumption pattern:

Food has a range of functions in addition to being a source of nourishment: acting as a pastime for personal indulgences or as a focus for socializing with family, friends and others and in contributing to a general sense of individual and national well being (Wright et al., 2001). Changing demographics and life styles today drive food consumption trends. In addition to the growth of superstores, fast food chains and out of town retail shopping, there is also, particularly in Europe, a higher incident of the breakdown of family eating occasions which offers an opportunity for everyone and the younger generation in particular, to assert their own food preferences over the more traditional mealtimes (Wright et al., 2001).

The changing Indian family structure with families becoming smaller and nuclear and the increasing number of working women has forced the Indian consumer to eat outside giving a Philip to consumption of processed foods (Patil G. and Singh R., 2005). Health concerns, education, exposure to advertisements and promotions contribute to the household's perception of the benefits from consuming dairy products and tend to increase the likelihood of purchases (Fuller et al., 2007).

People begin to develop their ice cream preferences early in childhood, often associating their favorite flavor with positive experiences, says John Nihoff, an instructor at The Culinary Institute of America in Hyde Park, N.Y. "Ice cream gets set up as a reward for kids," he says. "'You did well on your report card, so let's take you for ice cream.'" (Johnson M.L., 2007). This happens in western countries. But, average Indian parents do not go beyond offering chocolate as a reward to their children.

Common sense can tell us that ice-creams are a popular and widely accepted product. Cool, creamy, smooth, and rich in flavor, ice cream is the mother of all comfort foods and in summer, ice cream rules (Cartmell Connie, 2007). Recent findings of a neuro-marketing study commissioned by Unilever at the Centre for Neuro-imaging Sciences, Institute of Psychiatry, London, using Functional Magnetic Resonance Imaging, allowed researchers to see which areas of the brain were activated when participants consumed Vanilla Carte D'Or ice cream; The results showed that eating ice cream has an immediate effect on the pleasure areas - which include a major processing area at the front of the brain, the orbito-frontal cortex (Unilever, 2008 as cited by João Pedro Dias Fontes da Costa,).

Ice cream will always remain a children's favorite, but today's trends denote that teenagers, young professionals and whole families hang out at ice cream shops like they would at cafes. And the fact that ice cream shops have taken on the culture of cafes denotes that people go to these shops not just to enjoy ice cream, but also to socialize or "hang out." (Koay Allan, 2005)

The marketers of ice cream are continuously looking for new formats to increase the consumption opportunities. The US based Olá brand's efforts in rebranding (radical logo and symbol changes its ice cream have proved to have converted the ice cream to all time product from seasonal one (João Pedro Dias Fontes da Costa), Olá's street selling kiosks are now called Hot&Go after rebranding. This Anglicism reflects the effort to transform this channel into an all season selling point complementing ice-cream selling with Knorr soups and Lipton teas (ibid). The mini snack versions of existing products (Maxibon Mini, Magnum Sandwich Snack Size) and single-serve 100ml mini-tubs of bulk ice cream (Häagen Dazs) are the results of ice cream manufacturers efforts (Benkouider C., 2004).

A very less amount of literature is available on consumption and consumer behavior of ice cream. Vaswani L.K., 2005 feels significant investments will be required in understanding consumer behavior and preferences. He further mentions, the dairy professionals feel that milk is the most wholesome single food available in nature but consumer across the country may not think so. Grunert and Sorensen, 1996 as quoted in Verbeke & Viaene, 1998, emphasize the interest of the dairy sector as a research subject due to its characteristics of change and dynamism. The introduction of milk

quotas, the challenges of the single market and the impact of new trends in food consumption made it a topic of high interest in the EU.

Focus-groups discussions in a study conducted by João Pedro Dias Fontes da Costa conclude that variety and novelty are two features very much appreciated. Availability does not seem to be a central worry and price is a factor more related to the Take-home distribution channels than the Impulse channel (HORECA or similar).

Most people eat ice cream at a temperature of about 5 degrees above zero (Gurchiek Kathy, 2003). João Pedro Dias Fontes da Costa argues that the ice cream consumption is not limited to summers only but has become year round phenomenon and consumption at home is on rise pushing ice-cream, which used to be a party product, into indulgence category. Product innovation and changes in consumer habits have paved the way for year-round consumption of ice cream in Western Europe (Benkouider C., 2004)

Cristine A. et. al, 1990; Carried a research on Alcohol Consumption patterns among Mexican American mothers and among children from single and dual headed households. He defined consumption pattern in terms of frequency of consumption and quantity consumed per occasion. Fuller et al., 2007 carried a research on consumption of dairy products in urban China and concluded that households in closer proximity to fast-food outlets have a higher probability of ice cream purchases. The proximity of convenient food outlets increases the level of consumption of ice cream. The survey results indicate that households in the sample typically purchased ice cream in single-serve quantities (50 g). Information collected about the brands purchased by households reveals that only a handful of households in the sample (all located in Guangzhou) actually preferred to purchase ice cream at McDonalds. A doctor's advice positively influences ice cream consumption levels. Similarly, the intensity of advertisements has a positive impact on ice cream consumption (ibid).

In countries like UK, where the summers don't guarantee hot weather, the manufacturers have started promoting in-home consumption of ice cream. Ice –cream is no more an impulse item now and has become a part of the weekly shopping list and can be consumed in front of TV or as after-dinner dessert. The indulgence factor has helped the brands like Ben & Jerry's or Häagen-Dazs grow in UK market (Benkouider

C., 2003). Impulse ice cream will rely heavily on good weather, and therefore the safest approach for manufacturers in the UK is to continue to capitalize on the ‘sofa snacking’ i.e. focusing on “Indulgence” (ibid). “Now that we know the trends, and are busy developing frozen desserts to meet them, let’s cross our fingers that Mr. Sun cooperates with temperatures above 90⁰ F (320 celsius).” Says Gary Foy, Director of Marketing, Jackson & Co., US (Gorski, 1998)

Today’s consumer is equally concerned about health and safety with the indulgence and convenience (Benkouider C., 2004, Fuller et al., 2007) The diet-oriented ice creams are growing in prominence, particularly in the developed regional markets of Australasia, North America and Western Europe (ibid). There is a need to generate and disseminate scientific proof to create more favorable impressions on consumers, negate their unscientific beliefs and address genuine concerns with regard to consumption of milk and milk products and this can be done by communicating the right consumer message on dairy products (Vaswani L.K. 2005, Sardana & Dokras, 2005)). ‘Health’ and ‘functional’ foods are the mantra today (Vaswani L.K., 2005; Sardana & Dokras, 2005; Patil G. and Singh R., 2005). The products in the health category would include products for weight management, sports nutrition and fun products with low calorie, high protein or calcium. The functional product category would include pro-biotic, reduced-fat/carbohydrate and enriched milk products whereas the nutraceutical category is also likely to pick up by the year 2010 (ibid).

“Calcium fortification” is a new trend emerging particularly in developed markets. Most nutritionists agree that it’s very difficult to meet the Recommended Daily Allowance (RDA) (which is 1000 mg as proposed by National Academy of Sciences, US) for calcium when dairy products are not included in the daily diet and frozen dairy desserts especially those that are low in fat are a perfect carrier for additional calcium. Unfortunately dairy products are often the first foods cut when trying to lose weight (Gorski, 1998). However, the reality is that 80% of the US women aged 25-50 do not even meet the old standard of 800mg; yet they typically list calcium as their No.2 health concern, second only to fat (Gorski, 1998).

3.9.2 Quality Attributes and Preferences – Ice cream:

An organization must first understand how the customer defines the quality of the product or service and then work to boost on its product or service quality on those

customer defined parameters (Kotler & Armstrong, 1998). Quality is an elusive, multidimensional, complex and dynamic concept and it may be culture specific. Customers can define quality as dependability, durability, ease of servicing, features or aesthetic appeal, Garvin 1987 as quoted in Bacon et al., 1996). The concept of quality and determinants of consumer acceptance of ice cream remain elusive (Guinard et al., 1996). The physical, functional and sensory properties of ice cream influence the consumer's perception and acceptance of an ice cream (Udabage and Augustin, 2003). Ice cream has wide variety of quality dimensions such as creaminess, color, sweetness, temperature, after-taste feeling, flavor, taste, how it melts in bowl and the attractiveness of packaging, brand name (Bacon et al., 1996). A desirable ice cream has good flavor, body and texture, color and melting characteristics and should be of good microbial quality (Rothwell, 1985; Marshall and Arbuckle, 1996 as quoted in Udabage and Augustin, 2003) Other influential factors include the consumer's judgment of the freshness of the product, and "credence quality attributes" such as the naturalness and exclusiveness of the product, (Wandel and Bunge, 1996 as cited in Bower & Baxter, 2000).

Sugar and milk fat are widely recognized as key contributors to quality of ice cream (Pearson, 1979, Bodyfelt, 1983, Pick, 1990 as cited in Guinard et al., 1996).

3.9.2 (i)Taste:

'Taste' is colored not just by the gustatory properties of the food itself, but its smell, sound and appearance as well as by expectations generated by marketing communications and even country of origin (Jacoby et al., 1971& Leclerc et al., 1994 as quoted in Wright et al., 2001).

Bourdieu, 1984 (as quoted in Wright et al., 2001), attributes the taste for sweet, filling and fatty food to the working class. He says it's a taste of necessity arising from the lack of choice and enjoyment of the sensation of filling full. He argues the taste itself is a middle class concept since it presupposes freedom of choice. He noted "Taste classifies and it classifies the classifier" A taste for sweet food is today linked to overweight body shape. In contemporary western societies, sweetness is associated with excess indulgence, unhealthiness, rotten teeth and obesity – working class rather than middle class weaknesses. Mintz, 1985, as cited by Wright et al., 2001, says, in

England, they tend to associate sweet milky tea with builders and unsweetened Earl grey or espresso with the professional classes.

3.9.2 (ii) Creaminess & Sweetness:

The US definition and standard of identity for ice cream specifies that it must contain a minimum of 10% (wt/wt) of milk fat and 20% of milk solids. A gallon (3.785 L) must weigh at least 4.5 lb (2.04 kg) and contain no less than 1.6 lb (0.73 kg) of food solids (Guinard et al., 1996). Based on the milk fat content, ice cream is classified as super premium (16 to 18% fat), premium (14% fat), regular (12% fat), and economy (10% fat). The overrun typically varies from 95 to 100% for the economy ice cream to about 30% for the super premium ice cream (Kilara A. & P.G.Keeney, 1989as cited in Guinard et al., 1996).

Guinard et al., 1996 conducted blind – taste tests of ice cream on 73 men and 73 women of Pennsylvania State University Campus and concluded that sugar and fat were key determinants of ice cream acceptability and that too little or too much sugar was detrimental to quality of ice cream. The study suggested that for the students population tested, the ideal vanilla ice cream should contain moderated amounts of sugar (14.3% wt/wt) and fat (14.8% wt/wt) which is found to be close to the contents in super-premium ice cream. The study also suggested that sugar was a more important contributor to the degree of liking of vanilla ice cream than was fat.

A study of effect of fat content on hedonic responses of US consumers to dairy products found that high fat ice cream was liked significantly more than low fat ice cream and that making the consumers aware of the higher fat in the regular ice cream (nutrition label) actually increased their liking for it (Light A. et al., 1992 as cited in Guinard et al., 1996). A recent survey commissioned by Denali Flavors Moose Tracks™ ice cream (Michigan – based leading inventors and marketers of specialty flavors for ice cream industry) and conducted by Harris Interactive® (a market research firm from US) suggests that 67% of US adults agree full fat ice cream is worth the guilt and more than half of US adults say they don't believe decadent flavors such as Moose Tracks and Rocky Road can be low fat and still taste good. But, the blind taste – tests indicate that average consumer cannot distinguish between low- fat and high-fat ice creams currently on the market. The survey also shows nearly 73% of men and 66% of women

would rather eat full-fat ice cream than full-fat varieties of other snacks (Wayland Milch, 2007).

International Dairy Foods Association (IDFA) concluded in their survey in 2006 that low-fat ice cream is the fastest growing ice cream category. Yet, according to 2005 US production data (source: USDA), the regular full-fat ice cream still accounts for the largest share of 63.8% frozen dessert market (Wayland Milch, 2007).

Barr, 1998 as quoted in Wright et al., 2001, argues, in the nineteenth century to be fat was a mark of prosperity and proper nourishment. But nowadays, in the era of sufficiency of food; to be thin is considered a mark of sophistication. Thinness is esteemed because it shows a self restraint and indicate one can afford to consume expensive, delicate food rather than relying on a simple calorific diet based on starch and fat. The disadvantaged classes can only have 'taste for what they are anyway condemned to. The pretext for a class racism which associates the populace with everything heavy, thick and fat (Bourdieu, 1984 as quoted in Wright et al., 2001).

3.9.2 (iii) Flavor:

A survey conducted by Baskin Robbins in USA revealed that 'Vanilla' is the most favorite brand of the country with an overwhelming 32 states report Vanilla to be the best selling ice cream at Baskin-Robbins locations (PR Newswire. New York: Jul 14, 2006). Outside USA, 'Pralines n Cream' is the most popular flavor worldwide.

Regardless of whether ice cream is full fat, premium or economy, the world's favorite flavor is still vanilla. According to Euromonitor 2007, in the US, by far the world's largest market nearly 30% of volume sales are vanilla. Vanilla represents 55% of volume sales in the UK while in Japan the figure is nearly 40%. Canada, Germany, France and Italy, all among the top 10 markets for ice cream, prefer vanilla. In fact, only three of the top 10 countries prefer something different, with Australia and Brazil favoring chocolate, while in Russia the preference is for 'plombir', a high fat butter cream. Chocolate and its many variants, including chocolate chip, is the second most popular flavor on a global level, representing 12% of volume sales in the US and 25% in the UK.

Table No. 3.1: America’s favorite ice-cream flavor

Favorite flavors		
A survey ranked ice cream eating preferences among Americans, and the percentage of respondents favoring each flavor.		
Rank	Flavor	Percent
1.	Vanilla	29.0%
2.	Chocolate	8.9
3.	Butter Pecan	5.3
4.	Strawberry	5.3
5.	Neapolitan	4.2
6.	Chocolate chip	3.9
7.	French vanilla	3.8
8.	Cookies 'n' cream	3.6
9.	Fudge ripple	2.6
10.	Praline	1.7

(Source: International Ice Cream Association: adopted from “America’s favorite ice cream” by Gordon T. Anderson, CNN/Money staff writer NEW YORK (CNN/Money) July 29, 2005 (cnnmoney.com)

The type or “category,” of vanilla used determines how ice cream is labeled in the USA: Category 1: Natural vanilla extract. Two-fold vanilla is commonly used. Ice cream products must be labeled as “vanilla ice cream.” Category 2: Vanilla-vanillin extract. This is considered natural and artificial (N&A), where the natural component is the characterizing flavor. Ice cream products must be labeled as “vanilla flavored ice cream.” Category 3: Natural and artificial vanilla flavors or artificial vanilla flavors, where the artificial component predominates. Ice cream products must be labeled “artificially flavored vanilla ice cream.” (Exim Bank: Research Brief No. 17 September 2005)

Premium ice cream brands like Breyers (Unilever) and Blue Bell are offering their Vanilla variations. Essentially premium brands are capitalizing on the popularity of

basic flavor and offering added value combinations, including organic or calcium-enriched variants. By contrast, super premium brands such as Ben & Jerry's or Häagen-Dazs focus on more exotic and indulgent flavor and texture combinations. Ben & Jerry's top flavor is Cherry Garcia with vanilla ranked a poor ninth. For super-premium ice creams, which contribute a disproportionate amount to value sales, vanilla is definitely not a leading variant.

Maturity of demand and mounting consumer concern over dietary issues in US and European markets have forced the ice cream manufacturers to innovate in flavors and health. This trend is currently known in the industry as the 'premiumisation of flavor and health' and is aimed at a more demanding consumer, who is willing to both experiment with new taste sensations and pay a premium for more sophisticated products (Redruello Francisco, 2007).

Though the inclusion of exotic flavors is gaining ground in most Western European countries, its survival is highly dependent on fashion. According to a recent survey conducted by the Italian Ice Cream Trade Association (AIG), relatively unusual flavors, such as pink pepper, chilli and nutmeg, are increasing in popularity, with nuts and chocolate also being confirmed among the most in-demand. However, some exotic flavors introduced just a few years ago such as kiwi, papaya and coconut, are reportedly declining. The latter exemplifies a current trend in the industry, where recently introduced exotic flavors are tending to be short-lived and replaced immediately by new, more fashionable ones (ibid).

Haagen-Dazs of US launched their Green Tea flavor in Japan and US markets. The taste is intended to elicit the flavor of mocho, an elite strain of green tea that's been sipped in Japanese ceremonies for hundreds of years (Gorski, 1998). US Food trend analysts dubbed the year 1998 as "The year of the Smoothie" as the frozen dessert manufacturers popularized the "thaw-and-serve" smoothies in US market. Smoothie is typically fruit based frozen dessert with bananas and berries being the most common fruits and often contain active cultures, fiber, milk, minerals vitamins and/or yogurt (Gorski, 1998).

Indian market, however, is still focused on basic flavors like Vanilla, strawberry, chocolate and mango, etc. The experts say the market is totally dominated by Vanilla, Strawberry and chocolate, which together account for more than 60% of the market followed by butterscotch and other fruit flavors (Muralidharan A., 2009, Soni S., 2009). Dieter Lengauer, the executive chef at Delhi's Hyatt Regency hotel had to cut down his initial list of 12 flavors a week - three new options every day with the cycle repeating after every four days - to three (vanilla, mango and strawberry) in no time because there were no takers for the fancy new offerings. "The Indian consumer is unwilling to experiment as far as ice cream is concerned," says Lengauer (Sharma Shalini, 2009)

This may be because the market is mainly built for the pre-packed take away items being sold through kirana stores and super markets. The concept of parlor is not very widely propagated by the ice cream marketers-may be because of heavy initial investments in decorating the parlor non-availability of manpower required to prepare the mix-ins. The fresh fruit flavors offered by the companies like Naturals are widely accepted by the public. The flavors like fresh mango, coconut, custard apple and papaya are favorite in Pune. Almond and Pista Kulfi, offered by Amul have been all time favorite.

3.9.2 (iv) Color:

Walsh et al., 1989 carried out the study on "Color preference and food choice among children" and concluded that color is a significant factor in children's food choice. The review of literature by them also supports their findings. Lowenberg, 1934 noted that color in food was related to the strong appetite appeal associated with specific foods and that preschool children preferred yellow and orange. Biren, 1956 noted that red, orange and clear green were generally the most appealing food colors. Walker, Hill and Millman, 1973 concluded that colors associated with fruits were strongly linked to favorable taste expectations whereas Tourila-Ollikainen, 1982; determined that color had a more positive effect when associated with flavor.

Rolls's , 1985 as quoted in Walsh et al., 1989 findings suggest that color is an important variable in food selection and that personal preferences for colors may affect food choice