CHAPTER-8
SUMMARY, FINDINGS AND CONCLUSIONS

Children represent a potential market segment. Marketers show extreme interest in them because of their spending power, purchasing influence and their treatment as future adult consumers (Story and French, 2004). They are customers, buyers, spenders, shoppers and consumers. They sometimes either purchase a product themselves or select the product before it is purchased by the parents. Therefore, food marketing companies spend a huge amount of money to entice children. They use mass media such as television, internet, radio, newspapers, magazines and periodicals to deliver messages and stimulate purchases among children. However, television advertising is seen to be the most effective medium for targeting children.

An average child views over 40,000 commercials per year (Kaiser Family Foundation, 2004). In developed nations such as the USA, UK and Australia, the proportion of food advertisements varies between 20-46 per cent of all advertisements broadcast during children’s programs (Byrd-Bredbenner and Grasso, 1999; Zuppa et al., 2003; Chapman et al., 2006; Stitt and Kunkel, 2008; Powell et al., 2011; Castonguay et al., 2013). Furthermore, a child views on an average, 5-13 food commercials per hour in developed nations such as the USA, UK and Australia. Some children also view twenty five food advertisements per hour daily in Germany (Effertz and Wilcke, 2012).

As regards the nature of foods advertised to children, it has been found that fast foods are most frequently advertised (Byrd-Bredbenner and Grasso, 1999; Zuppa et al., 2003; Harrison and Marske, 2005; Chapman et al., 2006; Connor, 2006; Kelly et al., 2007; Powell et al., 2007b; Stitt and Kunkel, 2008; Warren et al., 2008; Castonguay et al., 2013). Other frequently advertised foods on children’s television networks are breakfast cereals (Page and Brewster, 2007; Powell et al., 2007a; Castonguay et al., 2013), candy and confectionery (Consumers International, 1999; Zuppa et al., 2003; Neville et al., 2005; Huang et al., 2012), snacks or/and soft-drinks (Kunkel and Gantz, 1992; Hastings et al., 2003; Karupaiah et al., 2008; Castonguay et al., 2013) and fats/sweets (Stitt and Kunkel, 2008; Warren et al., 2008). Contrary to this, advertisements for core/healthy foods appear in a very small proportion. Overall, the foods which predominate children’s advertising consist of high levels of fat, sugar and salt (Byrd-Bredbenner and Grasso,
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1999; Neville et al., 2005; Arnas, 2006; Dixon et al., 2006; Livingstone, 2006; Batada and Wootan, 2007; Kelly et al., 2007; Galcheva et al., 2008; Linn and Novosat, 2008; Stitt and Kunkel, 2008). Consumption of these foods in large portions leads to obesity, overweight and other diseases in children.

More so, food marketers are witnessed to advertise foods through persuasive marketing techniques such as themes/appeals (Kunkel and Gantz, 1992; Byrd-Bredbenner and Grasso, 1999; Buijzen and Valkenburg, 2002; Page and Brewster, 2007; Roberts and Pettigrew, 2007; Kelly et al., 2008; Stitt and Kunkel, 2008; Warren et al., 2008; Effertz and Wilcke, 2012). An effective advertising appeal is an important weapon to gain competitive advantage in market (Mishra, 2009) as unique themes/appeals make advertisements more fascinating to children. Appeals are generally used in food advertisements to guide the target audience regarding features of the advertised product or to arouse feelings of purchases among them. These are classified as rational, emotional and moral appeals. However, rational appeals are frequently used in food advertisements and use of moral appeals is rare in food advertisements. Themes are generally used in television advertisements to create an emotional bond with target audience. Various themes that are used in food advertisements include health-related messages, eating location, eating occasion and eating alone or with others (Harrison and Marske, 2005; Roberts and Pettigrew, 2007).

Besides themes and appeals, food advertisements also feature jingles/slogans, showing children with advertised foods and featuring real children and animal characters to promote foods (Unnikrishnan and Bajpai, 1996; Page and Brewster, 2007). The use of promotional elements such as catchy jingles/slogans, storyline, music and product newness make the advertisements entertaining for children (Panwar and Agnihotri, 2006; Unnikrishnan and Bajpai, 1996) and influence their food choice as well as brand choice. Thus, whenever, children are asked to choose between the foods with or without promotional characters on packaging, they generally select foods promoted through promotional characters (Kotler et al., 2012) or occupation specialists such as doctors, engineers etc. (Panwar and Agnihotri, 2006).

Besides television commercials, food purchase requests of children are also influenced by retail store characteristics. These retail store characteristics include—use of
attractive packaging and its attributes (bright colours, licensed characters, price promotions, free gifts and games); availability of foods in wide variety such as tastes/flavours, shapes, sizes and brands; availability of sweets, confectionery items or beverages on billing counters as well as at the entrance of a retail store; keeping foods at eye level of children; placement of foods at reachable shelf locations; presence of friendly and helpful sales personnel etc. Therefore, when children accompany parents on food shopping trips to retail stores, they generally request for advertised foods such as—cereals, candies, chips, savoury snacks, packaged foods and chocolates. However, a majority of advertised foods are unhealthy. Therefore, in order to protect well-being of children, mothers follow meal time actions and feeding practices with them. They monitor and control the types of foods that children consume, encourage them to eat a variety of healthy and novel foods, maintain a healthy food environment at home by serving healthy foods at each meal, offer favourite foods as reward to them in exchange of good behaviour, involve children in preparing and planning family meals and encourage participation in grocery shopping, pressurize them to consume more foods at meals, restrict children from eating junk/favourite foods especially the ones that might make them fat or consume healthy foods themselves to encourage them towards healthy eating and educate them about nutritional value of foods.

Thus, marketers capture attention of children through fascinating advertisements targeted at them. In addition to this, children are also bombarded with attractive promotional strategies in retail stores to influence their purchase requests. This further develops the habits of consuming unhealthy advertised foods in children. Hence, mothers follow feeding practices with them in order to mediate their food consumption habits. However, little is known about the status of food marketing activities that are directed at children, the manner in which children reciprocate to these activities and the scenario of feeding practices in Indian families. Therefore, the present study focuses on these issues in Indian settings and is based on following objectives.
OBJECTIVES OF THE STUDY

- To study the nature and extent of food commercials broadcast on children’s television networks in India.
- To investigate the manner in which different promotional elements are used in food commercials to target children.
- To investigate retail store characteristics which influence food purchase requests of children.
- To study food shopping behaviour of children in retail stores.
- To examine the nature of feeding practices used by parents to mediate food consumption habits of children.

RESEARCH METHODOLOGY

The present study has been carried out through primary data (observation as well as survey method). In order to accomplish first two objectives of the study i.e. to study the nature and extent of food commercials broadcast on children’s television networks and to study promotional elements used in food commercials to influence buying behaviour of children, data have been collected through content analysis of food advertisements. As food commercials are expected to influence purchase requests of children in retail stores, data were collected through survey method to investigate retail store characteristics which influence food purchase requests of children, food shopping behaviour of children in retail stores and the nature of feeding practices used by parents to mediate food consumption habits of children.

Content Analysis of Food Advertisements

Data have been collected for five weeks (from 18 March to 22 April, 2012) by recording advertisements and program content broadcast on children’s television networks (POGO, Hungama TV, Nick, Disney and Cartoon Network) from 9:00 am to 9:00 pm on weekdays (Tuesday to Friday) and weekends (Saturday and Sunday). As electricity supply is disrupted in Amritsar city for a long time, recording was not done on Monday. This resulted into total recording of 242 hours for both weekdays and weekends. In the
beginning, a spreadsheet was prepared in Microsoft Excel 2007 and then, whole data was exported to SPSS 19 for further analysis.

All data were initially screened and both program and non-program content (advertisements) were identified and analyzed. The non-program content included advertisements for foods/beverages and non-food products/services. A few advertisements that appeared in the form of social advertisements (advertisements of social responsibility acts performed by companies) and public service announcements (a feasible method for providing information to general public regarding any ‘forthcoming national/international event’, ‘installation of set-top box digital connection’, ‘necessary diet for children’ and ‘importance of mother’s feed for a new born baby’ etc.) were also included. Sponsorships for programs were also taken in the analysis, if they contained explicit messages indicating that the programs were being sponsored by a particular company or product (e.g. ‘sponsored by….’ or ‘brought to you by….’ or ‘presented by….’ or ‘co-sponsored by….’ or ‘associated with…..’) following the typology of Huang et al. (2012). This resulted into a total of 8971 advertisements.

Further, in order to analyze non-program content, as the first step, all advertisements appearing as ‘co-sponsored by’, ‘brought to you by’, ‘associated with’, ‘sponsored by’ and ‘presented by’ have been grouped into one advertisement category i.e. ‘sponsored by’. This resulted into nine categories of advertisements—food, non-food, co-sponsored by, brought to you by, associated with, public service announcement, sponsored by, presented by and corporate social responsibility. Further ahead, all advertisements appearing as co-sponsored by, brought to you by, associated with, public service announcement, sponsored by, presented by and corporate social responsibility have been counted as non-food advertisements. Therefore, only two categories of advertisements—food and non-food have been further analyzed. Thus, the data consist of 4091 and 4880 food and non-food advertisements respectively.

Subsequently, an insight into the nature of foods advertised on children’s television networks has been made. All food advertisements found to be appeared on children’s television networks have been grouped across food categories. It has been found that the advertisements mainly fell into eleven food categories. These food categories are—beverages and fruit juices, sugared and salty snacks, confectionery, ice-
creams and dairy products, baked products, health drinks and supplements, tea, juice concentrates, fast foods, cooking ingredients and ready-to-cook foods.

Apart from this, information have been collected for the time duration of each food advertisement broadcast on children’s television networks, promotional elements such as—themes and appeals used in food advertisements and food marketing companies that advertised foods on children’s television networks.

Subsequently, these food advertisements have been analyzed using variables such as—weekdays vs. weekends, healthy vs. unhealthy foods, child-audience vs. general-audience and low vs. high frequency of appearing advertisements on children’s television networks. Hence, the present study has been conducted under a broad framework of the following hypotheses—

“There is no significant difference in nature of food advertisements and use of themes and appeals across variables used in the study such as—weekdays vs. weekends, child-audience vs. general-audience and advertisements broadcast with low vs. high frequency”.

SPSS 19 has been used to analyze the data. The results have been presented using descriptive statistics (frequencies and percentages) and chi-square test has been used to test the hypotheses.

**Data Collection through Survey Method**

The methodology used for identifying retail store characteristics which influence food purchase requests of children, children’s behaviour in retail stores and use of parental feeding practices with children is described here. The following foods were chosen to understand the behaviour of children in retail stores. The food categories were chosen keeping into account the advertisements that children were found to be most frequently exposed to (through results of content analysis) as children are reported to request for frequently advertised foods in retail stores (Borzekowski and Robinson, 2001; Arnas, 2006). These food categories comprise of beverages and fruit juices (such as Amul flavoured milk and juices); sugared snacks (such as Kellogg’s Chocos, Britannia fruit cakes, Prime Time fruit muffin); salty snacks (such as chips, Kurkure, Haldiram
namkeens, Lehar namkeens); confectionery (such as candies, chewing gums); ready-to-cook foods (such as Maggi, pasta, soups); ice-creams and biscuits.

**Universe of the Study**

Data have been collected from three districts of Punjab—Amritsar, Jalandhar and Ludhiana. These districts have been selected because they comprise of highest overall urban population as well as population of children in age categories 4-11 years (Census of India, 2001). These districts were also selected on the basis of traditional geographical division of Punjab into Majha, Malwa and Doaba. Thus, Amritsar represents Majha region, Ludhiana represents Malwa region and Jalandhar represents Doaba region. Limitations of time and resources have been responsible for selection of these districts from within the geography of Punjab.

**Sample and Sampling Design**

Data have been collected from mothers of children in the age category 4-11 years who were enrolled in classes ranging from Kindergarten to Class V. Children in this age category have been selected because they are neither too young (to lack understanding of advertisements) nor too old (to make independent purchases) (John, 1999). They are also seen to influence food purchase decisions of the family in retail stores (Norgaard et al., 2007). The mothers were chosen as the basic sampling unit for the present study as they are seen to be the primary caregivers for children and have participated in majority of studies related to children (Wardle et al., 2005; Scaglioni et al., 2008). Thus, mothers were approached through the schools. Two schools were selected from each district. For the aforesaid purpose, a list of affiliated CBSE schools in Amritsar, Jalandhar and Ludhiana was procured from CBSE website (www.cbse.nic.in). This website revealed that 63 schools in Amritsar, 74 schools in Jalandhar and 82 schools in Ludhiana were listed with CBSE. Two schools were selected using judgmental sampling out of listed schools in each district. Only those schools were selected that enrolled students with various socio-economic and cultural backgrounds. With the permission of Principal of each school, teachers were requested to distribute the questionnaires amongst students of Kindergarten to class V. The children were then asked to take the questionnaire home and
get it filled by mother. In case two children were studying in the same school, the mother was requested to fill the questionnaire keeping in mind the child who had brought it. Of the 525 questionnaires that were distributed to children, 473 (90.1%) usable questionnaires were returned. Thus, a total sample of 473 mothers has been obtained. Data were collected between August, 2012 to November, 2012. The percentages of respondents who have participated in survey from Amritsar, Jalandhar and Ludhiana districts are 37.21, 32.77 and 31.92 respectively. This shows that proportion of respondents from each district is almost equal.

In the sample, mothers from all educational levels were represented. But most of them were relatively well educated; 44.6 per cent were graduates, 36.8 per cent were post-graduates and 3.2 per cent were doctorates. Nearly thirty two per cent mothers (31.7%) were working and a majority of them were working for 4-8 hours in a week. Nearly two third respondents reported to belong to households having income INR 20000 or more. The children came from diverse set of families—48.6 per cent came from nuclear families and 28.1 per cent hailed from joint families (husband, wife, children, grand-parents, aunts, uncles and cousins) and 23.3 per cent came from extended families (Husband, wife, children and grandparents).

**Questionnaire Design**

Data have been collected through a structured, pre-tested and non-disguised questionnaire. In order to develop a comprehensive questionnaire for mothers, previous literature on retail store characteristics which influence food purchase requests of children in stores, children’s behaviour in retail stores and feeding practices followed by mothers have been reviewed exhaustively. Further, in order to make the questionnaire more comprehensive and concrete, face-to-face meetings with mothers have been undertaken. Apart from this, in the process of preparing the skeleton of questionnaire, online discussions and telephonic deliberations with researchers, academicians and experts in this field on this topic have also been taken up. A pilot test of approximately 40 respondents was conducted and their view points on various segments of questionnaire were sought. This helped to make improvements in some portions of the questionnaire. With a few deletions and additions, the final questionnaire was developed. The final
questionnaire has been divided into three sections. The structure of questionnaire is discussed in detail as follows:

**Section A:** As young children are seen to accompany mothers on food shopping trips to retail stores and their food purchase requests are influenced by the frequency of visits, responses of mothers have been sought regarding frequency of mothers visiting retail stores to buy foods, frequency of children accompanying them on shopping trips, children’s behaviour while shopping in retail stores, foods mostly requested by children in retail stores and frequency of seeking opinion of children while buying foods in retail stores. Further, a battery of fifteen statements has been developed to study retail stores characteristics which influence food purchase requests of children in retail stores. The statements have been devised on the basis of review of previous literature (for example, systematic review reports of Hastings et al., 2003; Cairns et al., 2009 etc.) and other empirical research (such as Gelperowic and Beharrell, 1994; McNeal, 1999; Pettersson et al., 2004; Chapman et al., 2006; Pettigrew and Roberts, 2006; Berry and McMullen, 2008; Kelly et al., 2008; Harris et al., 2009; Ogba and Johnson, 2010). Each statement has been measured on five point scale with ‘5’ indicating ‘strongly agree’ and ‘1’ indicating ‘strongly disagree’.

Subsequently, in order to uncover children’s behaviour in retail stores, an array of twenty two statements has been prepared on the basis of dimensions described in past research (Galst and White, 1976; Atkin, 1978; Pettersson et al., 2004; O’Dougherty et al., 2006; Norgaard et al., 2007; Buijzen and Valkenburg, 2008). Each statement has been measured on five point scale with ‘5’ indicating ‘strongly agree’ and ‘1’ indicating ‘strongly disagree’.

**Section B:** Various factors such as—television viewing habits of children, food commercials broadcast on children’s television networks, retail store characteristics etc. influence meal time habits of children. In order to protect well-being of children, mothers control their eating habits through feeding practices. Therefore, responses of mothers have been sought regarding mealtime structure in families such as frequency of taking meals together by all family members, habits of watching television during lunch/dinner with family, family mealtime environment and feeding practices followed with children. Seven statements were developed to study family mealtime environment. Out of these
seven statements, five statements namely ‘We eat at least one meal a day together’, ‘I/my husband are often too busy to eat dinner with the family’, ‘I enjoy eating meals with my family’, ‘Eating brings family members together in an enjoyable way’ and ‘Mealtime is a time for talking to other family members’ were adopted from Neumark-Sztainer et al. (2000). These five statements were appended with two more statements ‘Children have their food early in the night’ and ‘We cannot have dinner together because my husband comes late to the house’ for making them suitable to Indian conditions. These statements were measured on five point scale with ‘5’ indicating ‘always’ and ‘1’ indicating ‘never’. For negative statements, responses were coded in the reverse order.

Further, in order to uncover parental feeding practices followed with children, past literature was thoroughly reviewed. The review revealed that Birch et al. (2001) Child Feeding Questionnaire (CFQ) is seminal to research in this area. CFQ is defined as a 7-factor model. However, out of seven factors, first four factors (i.e. perceived responsibility, perceived parent weight, perceived child-weight and concern about child weight) measure parental beliefs with regard to obesity problem in children and only three factors (namely restriction, pressure to eat and monitor) measure parental behaviour for controlling eating habits of children. Therefore, researchers have developed newer scales to explore feeding practices in greater detail. In this regard, Williams et al. (2008) reported six dimensions of feeding practices—set meal rules, insist food amounts are eaten, increase intake with food, use non-food rewards, become punitive and become permissive. Further, Comprehensive Feeding Practices Questionnaire (CFPQ) developed by Musher-Eizenman and Holub (2007) is also available. It consists of twelve dimensions. These dimensions are—child control, emotion regulation, encourage balance and variety, environment, food as reward, involvement, modeling, monitoring, pressure, restriction for health, restriction for weight control and teaching about nutrition. Another Parent Mealtime Action Scale (PMAS) was developed by Hendy et al. (2009) that includes nine dimensions. The dimensions of PMAS are—setting snack limits, positive persuasion, daily FV availability, use of rewards, insistence on eating, snack modeling, special meals, fat reduction and many food choices. Out of these scales (as discussed above), CFPQ developed by Musher-Eizenman and Holub (2007) has been selected for the present study because it covers a broad range of child-feeding practices and is more
comprehensive than any other scale discussed above. As CFPQ covers parental feeding practices in an extensive way, it is more suitable for the present study since this aspect is largely unexplored in Indian settings. The twelve dimensions of CFPQ are construed of forty nine items. The first thirteen items (C1 to C13) of CFPQ measure feeding practices followed by mothers with children on five point scale from ‘always’ to ‘never’ and next thirty six items measure the same on five point scale from ‘strongly agree’ to ‘strongly disagree’. For negative statements, responses have been coded in the reverse order.

**Section C:** In this section, information has been sought about various demographic characteristics of the respondents—age and gender of child, age of mother and father, number of child/ren, age of other child/ren, working status of mother, number of working hours of working mothers, occupation of mother and father, education status of mother and father, family monthly income and type of family.

**Variables used in the Study**

Appropriate demographic variables have been used to analyse the data.

**Data Analysis**

Data have been analysed using statistical techniques such as—descriptive statistics (means and standard deviations), ANOVA, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Binary Logistic Regression through SPSS 19 and AMOS 19. **Exploratory factor analysis** (Principal Component Analysis with Varimax Rotation) has been applied to the statements devised to explore retail store characteristics which influence food purchase requests of children and their shopping behaviour in retail stores. **Binary logistic regression** has been used to investigate influence of variables such as—food promotions in retail stores, frequency of the child accompanying the mother on a shopping trip and demographic variables such as—age of mother and father, education status of mother etc. on shopping behaviour of children in retail stores. Further, **Confirmatory factor analysis** has been used to explore and confirm Comprehensive Feeding Practices Questionnaire (CFPQ) developed by Musher-Eizenman and Holub in 2007 in Indian context. EFA was used to explore important constructs of feeding practices followed by mothers with children in India and CFA was
used to check the reliability and validity of those constructs. Thereafter, ANOVA has been applied to find if significant differences exist in responses of mothers with regard to feeding practices followed with children.

**FINDINGS OF THE STUDY**

The findings of the study are presented in the forthcoming paragraphs.

**Nature and Extent of Food Advertisements Broadcast on Children’s Television Networks**

An analysis of food advertisements broadcast on children’s television networks reveals that the proportion of appearing food advertisements is higher on weekends than on weekdays and also more food advertisements per hour are appeared on children’s television networks during weekends as compared to weekdays. It is simultaneously seen that the advertisements appeared on children’s television networks are of shorter duration and are repeated more frequently during weekends. Further, it is seen that not just direct advertising, but sponsorships by food marketing companies also escalate during weekends to influence eating preferences and consumption behaviour of children.

An insight into the types of foods advertised to children also reveals that a significant difference exists in the types of foods advertised across weekdays and weekends. ‘Sugared and salty snacks’ and ‘confectionery’ are the most frequently advertised foods during weekdays. Whereas, advertisements for health drinks and supplements are most frequently appeared during weekends. Another interesting finding of this study is that overall, advertisements for fast foods are shown less frequently on children’s television networks in India but advertising frequency for ready-to-cook foods doubles during weekends.

A classification of all food advertisements into healthy and unhealthy categories according to NIN (2010) guidelines for Indians shows that almost all the advertised foods are unhealthy. More so, advertisements for healthy foods are rarely appeared during weekdays and only two per cent of advertisements for healthy foods appear during weekends. An interesting finding is that not even a single advertisement of carbonated
beverages (soft drinks) or potato chips appeared on above mentioned children’s television networks.

Further, an investigation of food commercials reveals that a majority of food advertisements broadcast during children’s programs are framed to target children. All the sample advertisements for sugared and salty snacks are directed at children. Further, advertisements for baked products (such as biscuits and cakes) are also frequently appeared during children’s programs and a majority of these advertisements are aimed at children. However, fast foods are the least frequently advertised foods targeted at children. It is further observed that a majority of advertisements for beverages and fruit juices are targeted at general-audience. Interestingly, advertisements for confectionery are found to be more frequently targeted at general-audience in comparison to child-audience.

**Promotional Elements (Themes/Apeals) Used in Food Advertisements**

Food marketers use promotional elements such as themes and appeals to make food advertisements fascinating for children. Thus, an analysis of food advertisements regarding use of themes/appeals reveals that a majority of food advertisements do not display any health-related message. Further, the percentages of highlighting presence of ‘vitamins/minerals’ or ‘other’ health-related messages are more common in food advertisements targeted at child-audience in comparison to general-audience. Contrary to this, the percentage of featuring health-related messages of ‘real/natural ingredients’ is more prevalent in general-audience targeted advertisements than commercials aimed at children.

An understanding of occasion of consumption of advertised foods shows that most foods are advertised as breakfast foods (for child-audience as well as general-audience). However, a majority of commercials directed at child-audience also show the food being consumed as snack food. Further, the findings reveal that use of eating occasion theme is not clear in more than three fourth of food advertisements (overall as well as for child-audience and general-audience). In other advertisements, foods are consumed at breakfast time more frequently than at lunch, dinner and snack time. These patterns are also held for both child-audience and general-audience targeted
advertisements. The theme of consuming the advertised food during lunch time is rarely used in general-audience targeted advertisements. Further, proportion of consuming advertised foods during snack time is almost double in child-audience advertisements than general-audience advertisements. More so, the theme of eating foods during dinner time is never displayed in child-audience targeted advertisements.

As regards ‘eating location’ theme, it is found that ‘outside home’ location is most frequently used as compared to ‘inside home’ location in overall as well as child-audience or general-audience targeted food advertisements.

Another theme which is used in television food advertisements is showing children eating the advertised food alone, along with other family members, with peers/friends, with siblings, and with family, peers and friends together. The findings reveal that nearly forty percent of food advertisements focus on theme of ‘solitary eating’ i.e. showing a child eating the advertised food ‘alone’ in the absence of parents or other family members in the advertisement. The percentage of using this theme is more frequent in advertisements aimed at children as compared to general-audience. An interesting finding is that only one advertisement featured at child-audience highlighted the food being consumed as a family meal as compared to eleven general-audience advertisements. A few advertisements in the overall sample also show the advertised food being consumed by a child ‘with siblings’.

A comparison of themes used in food advertisements appeared on children’s television networks targeting child-audience and general-audience shows that statistically significant differences exist for ‘vitamins/minerals’ health-related message used in food advertisements targeted at child-audience and general-audience. For all other health-related messages, no statistically significant differences have been observed between food advertisements targeted at child-audience and general-audience. As regards ‘eating occasion’ theme, statistically, a significant difference exists for use of theme of ‘eating during dinner time’ between food advertisements directed at child-audience and general-audience. Whereas, for themes based on other eating occasions such as (breakfast, lunch and snack), no statistically significant differences have been observed. Besides, no statistically significant differences have been observed for ‘eating location’ theme (inside home, outside home and inside and outside home) used in food advertisements targeted at
child-audience and general-audience. But statistically, significant differences have been observed for using themes of ‘eating alone’, ‘eating with family’ and ‘eating with family, peers and friends’ between child-audience and general-audience advertisements. However, for other themes of eating alone or with others (such as eating with peers/friends, eating with siblings and display only), no statistically significant differences have been observed.

The most prominent appeals seen to be used in food advertisements (overall) are—grazing, taste/flavour/smell/texture, fun/happiness, being ‘cool’ and adult approval/disapproval. Corresponding to this, appeals like grazing, fun/happiness and taste/flavour/smell/texture are mostly used in food advertisements targeted at child-audience. Moreover, these appeals are also frequently used in commercials aimed at general-audience. Hence, emotional appeals are mostly used in food advertisements directed at child-audience as compared to general-audience. Product appeals are used in similar proportion in food advertisements targeted at child-audience and general-audience. Further, on comparing appeals used in food commercials across audience (child-audience versus general-audience), it has been found statistically significant differences exist for use of appeals namely performance/speed/strength, mood alteration, promotional characters, taste/flavour/smell/texture, premium offers, newness, play, nurturing, capability/achievement/enablement, adult approval/disapproval and trickery/deceit. However, for all other appeals, no statistically significant differences have been observed in advertisements across target audience.

Further, themes/ appeals used in food advertisements broadcast with low and high frequency on children’s television networks across weekdays and weekends as well as child-audience and general-audience respectively were analyzed. As regards themes used in food advertisements broadcast with low and high frequency on weekdays, it is found that no statistically significant differences exist with regard to themes used in food advertisements broadcast with low and high frequency on weekdays. Similar patterns have been observed for food advertisements broadcast with low and high frequency on weekends.

As regards appeals used in food advertisements broadcast with low and high frequency on weekdays, it is found that appeals that differ significantly by frequency of
advertisements broadcast on children’s television networks are—popularity, variety/choice, price, premium offers, family ties, seizing opportunity/competition, adult approval/disapproval. However, for all other appeals, no statistically significant differences have been observed in advertisements appeared with low and high frequency on weekdays.

On the other hand, on comparing appeals used in food advertisements broadcast with low and high frequency on weekends, it is found that statistically, significant differences exist for appeals ‘having the best’ and ‘seizing opportunity/competition’. For all other appeals, no statistically significant differences have been observed between food advertisements appeared with low and high frequency on weekends.

Further, on comparing themes used in food advertisements broadcast with low and high frequency targeting child-audience, the results reveal that statistically, significant differences have been observed for the theme of health-related message of vitamins/minerals used in food advertisements broadcast with low and high frequency. For other health-related messages (such as presence of low fat, real/natural ingredients, low calories and other health-related messages), no statistically significant differences have been observed in food advertisements broadcast with low and high frequency. Similar to this, no statistically significant differences have been observed for themes of ‘eating occasion’, ‘eating location’, ‘eating alone or with others’ used in food advertisements broadcast with low and high frequency targeting child-audience.

As regards themes used in food advertisements broadcast with low and high frequency targeting general-audience, the findings reveal that no statistically significant differences have been observed with respect to ‘health-related messages’ used in advertisements broadcast with low and high frequency. For theme of eating occasion during ‘dinner’, statistically, significant differences exist in advertisements appeared with low and high frequency targeting general-audience. Whereas, no statistically significant differences exist in advertisements appeared with low and high frequency with regard to other eating occasion themes. Correspondingly, no statistically significant differences exist with regard to ‘eating location’ theme used in advertisements appeared with low and high frequency. However, significant difference has been observed for theme of ‘eating with family’ used in food advertisements appeared with low and high frequency targeting
general-audience. For all other themes of ‘eating alone or with others’, no statistically significant differences exist in advertisements appeared with low and high frequency.

Further, significant differences have been observed for the appeals such as—variety/choice, economy and seizing opportunity/competition used in food advertisements broadcast with low and high frequency targeted at child-audience. This suggests that these appeals are used differently in food advertisements broadcast with low and high frequency. However, for all other appeals, no statistically significant differences have been observed in food advertisements broadcast with low and high frequency. On comparing use of appeals in food advertisements broadcast with low and high frequency targeting general-audience, the findings reveal that statistically, significant differences have been observed for the appeals such as—price and economy. However, for all other appeals, no statistically significant differences have been observed in food advertisements broadcast with low and high frequency targeting general-audience.

Thus, the above discussion points to the fact that food advertisements broadcast with low frequency (targeting child-audience/general audience or appeared on weekends) use themes of eating during ‘breakfast’, ‘outside home’ and ‘eating alone’. Whereas, advertisements broadcast with low frequency during weekdays use themes of eating during ‘breakfast’, ‘inside home’ and ‘eating alone’. The themes of eating during ‘breakfast’, ‘outside home’ and ‘eating alone’ are also used in all food advertisements broadcast with high frequency across weekdays and weekends as well as food advertisements targeted at child-audience and general-audience. However, most of food advertisements broadcast with either low or high frequency do not display any health-related message. Appeals which are predominately used in food advertisements broadcast with low and high frequency (across weekdays and weekends as well as targeted at child-audience and general-audience) include grazing, taste/flavour/smell/texture and fun/happiness. Whereas, adult approval/disapproval appeal is also used in food advertisements broadcast either with low or high frequency and targeted at general-audience.

The aforesaid findings have been obtained through content analysis using primary data. Further, in order to investigate retail store characteristics which influence children’s
food purchase requests, food shopping behaviour of children in retail stores and nature of feeding practices used by parents to mediate food consumption habits of children, a survey was conducted with mothers. The responses of mothers are explained in subsequent paragraphs.

At the outset, the mothers were asked to specify the frequency of visiting retail stores to buy foods. Their responses revealed that a majority of respondents (61.5%) visit retail stores ‘according to need’ to buy foods. Nearly twenty two per cent of respondents visit retail stores either once a week or once in two weeks.

The mothers were further asked to report the frequencies with which children accompany them on shopping trips on five point scale from always to never. Sixty per cent of them expressed that they take their children with them for shopping ‘sometimes’. More than one fourth of respondents (29.8%) also reported that they ‘always’ or ‘frequently’ take their children along on shopping trips. The mean values of responses of mothers (3.33) also show that mothers take their children on shopping trips ‘sometimes’ to retail stores.

The mothers were further questioned about the role of children while shopping for foods in retail stores. Three fourth of respondents affirmed that children assisted them in food purchases in retail stores and twenty three per cent respondents also agreed that children bought foods themselves. From these responses, it can be held that children actively participate in food purchases made in retail stores.

As mothers may also sometimes ask children to specify their opinion while buying foods, they were asked to state the frequency of asking children’s opinion while buying foods on five point scale from always to never. Their responses reveal that more than half of respondents (56.9%) ask children to express their opinion ‘sometimes’ while buying foods in retail stores. Nearly, fifteen per cent of respondents ask their children’s opinion ‘always’ or ‘frequently’ with regard to foods shopping. Very few respondents (2.5%) ‘never’ ask for children’s opinion while purchasing foods. The mean value of responses of mothers (3.35) also explicates that a majority of parents ask for children’s opinion ‘sometimes’ while buying foods in retail stores.

As children may also request parents to buy foods in retail stores, the mothers were asked to specify the foods most frequently requested by children in retail stores out
of the listed foods—beverages and fruit juices; sugared snacks (such as Kellogg’s Chocos, Britannia fruit cakes, Prime Time fruit muffin); salty snacks (such as chips, Kurkure, Haldiram namkeens, Lehar namkeens); confectionery (such as candies, chewing gums); ready-to-cook foods (such as Maggi, pasta, soups); ice-creams and biscuits. They expressed that a majority of children (76.1%) request ‘salty snacks’. Other foods which are mostly requested by children are ‘ready-to-cook foods’, ‘beverages and fruit juices’, ‘biscuits’ and ‘ice-creams’. Their respective percentages are—64.3 per cent, 63.0 per cent, 58.1 per cent and 55.2 per cent. More than forty per cent of mothers also specify that their children request ‘sugared snacks’ and ‘confectionery’.

Further, mothers were asked to specify the characteristics of retail stores which influence food purchase requests of children in retail stores and food shopping behaviour of children in retail stores. Findings for the same are discussed below.

**Retail Store Characteristics Influencing Food Purchase Requests of Children**

In order to understand as to how retail store characteristics influence food purchase requests of children in retail stores, a battery of fifteen statements was prepared. The responses of mothers was measured on five point scale with ‘5’ indicating ‘strongly agree’ and ‘1’ indicating ‘strongly disagree’. These statements were analyzed in two steps. In the first step, mean values and standard deviations of responses of mothers were calculated. In the second step, these responses were analyzed using factor analysis. The mean values of responses of mothers show that foods which are available with free gifts highlighted on the package in retail stores often attract children. They also express their agreement with statements—‘most of the time, packaged food items are available in the store’ and ‘my child prefers to go to a store where foods of his/her choice are easily accessible’, ‘my child often prefers to go to a store where he/she gets a wide variety of products’, ‘my child’s product preferences in the store are influenced by games depicted on the package’ and ‘availability of food items in many tastes/flavours increase the chances of purchase requests by my child’.

Subsequently, factor analysis has been used on these fifteen statements to extract dimensions of retail stores characteristics which influence food purchase requests of children in retail stores. The responses of mothers reveal that food promotional strategies
used by marketers to target children generally influence their food purchase requests in retail stores. The most peculiar promotional strategy that attracts attention of children in retail stores is use of ‘seiotics and price promotions on food packages’. This is followed by ‘easy accessibility of variety of foods of child’s choice’, ‘co-operative sales personnel’, ‘favourable merchandise’, ‘marketing through premiums’ and ‘availability and placement of packaged foods’. The above factors suggest that use of bright colours, licensed characters, price promotions, free gifts and games on food packages capture attention of children in retail stores. Besides, availability of foods in many tastes/flavours/brands in retail stores also gives a wide choice to children to buy foods according to their taste/brand preferences. The study also emphasizes that presence of well-trained sales personnel in retail stores, who have in-depth and updated information about the features of foods available in retail stores can help children in finding foods of their choice. Further, if these foods are kept at eye level of children and at reachable shelf locations, it becomes easier for children to find favourite foods at appropriate places.

**Food Shopping Behaviour of Children in Retail Stores**

In order to uncover food shopping behaviour of children in retail stores, an array of twenty two statements has been prepared. The mothers were asked to response on five point scale from ‘strongly agree’ to ‘strongly disagree’. These statements were analyzed in two steps. In the first step, mean values and standard deviations of responses of mothers have been calculated. In the second step, the responses were analyzed using factor analysis. From the mean values, it has been found that children either shop for foods actively or strongly assist their parents in food shopping in retail stores. Their active participation in retail stores is seen to be reinforced through advertisements as they request their parents to buy advertised foods or put advertised foods in shopping carts themselves. Children are seen to make frequent requests for those foods which have games on its packages and select foods according to their tastes and preferences. The point to be noted here is that not only older children influence food purchase decisions of their parents while standing up or moving around the store, but younger children, while sitting in shopping carts also make verbal food purchase requests or catch foods themselves. An interesting finding is that if children do not find advertised foods in a
retail store, they prefer to go to another store than buy anything that is available in the store. More so, children also recall jingles/slogans or celebrities associated with advertised foods, if they find advertised foods in retail stores. They generally do not show interest in foods which are available in simple packages in retail stores. Rather, they tend to buy foods which are available in attractive colourful packages. This implies that food promotions play a pivotal role in shaping food preferences of children. More so, availability of foods in retail stores in different brands, shapes/varieties, tastes/flavours and colours also escalate food purchase requests of children. Thus, ‘impact of food promotions on children’s purchases’ is the most important factor followed by other factors—‘children as active shoppers’, ‘influence of television food advertisements on children’s purchases’, ‘accessibility of foods and purchase requests by young children’ and ‘influence of packaging on children’s food purchases’. 

Besides retail store characteristics, food shopping behaviour of children also depends upon some other factors such as—the frequency with which they accompany mothers on shopping trips; mothers’ seeking child’s opinion while buying foods and other demographic variables. Thus, an attempt has been made to examine as to how retail store characteristics and other variables cumulatively influence shopping behaviour of children. For the aforesaid purpose, binary logistic regression has been applied. The dependent variable of the study is the child’s behaviour in retail stores. The independent variables include age of child, gender of child, age of mother and father, work status of mother, occupation of mother and father, education status of mother and father, monthly income of family, frequency of mothers taking the child along for shopping to retail stores, asking child’s opinion while buying foods and retail stores characteristics influencing purchase requests of child. Out of these variables, only those variables were considered as independent variables for binary logit modeling which were statistically significant as per chi-square test. Further, the dependent variable—child’s behaviour in retail stores measured through twenty two statements has been re-coded as a binary variable. This was done to classify mothers into two categories—mothers who think that their children behave actively in retail stores and mothers who think that their children behave passively in retail stores. The results show that mothers of 244 children respond that their children show active behaviour in retail stores. Whereas, 229 respondents show
that their children behave passively in retail stores. Independent samples t-test has been applied to identify whether a significant difference exists between the two sets of respondents with regard to children’s behaviour in retail stores. The higher t-value of independent samples t-test shows that the two sets of respondents, i.e. mothers of children who behave actively in retail stores and mothers of children who behave passively in retail stores, differ significantly at 1% level of significance.

The results of binary logistic regression reveal that statistically significant positive relationship exists between retail stores characteristics and active behaviour of children in retail store at 1 per cent level of significance. This means that retail stores characteristics often attract children’s attention and influence their behaviour. Therefore, when children visit retail stores, they get influenced by retail stores characteristics.

Further, a significant positive relationship is found between frequency of mothers taking children along for shopping to retail stores and children’s active behaviour in food shopping. This relationship is significant at 5 per cent level of significance. This means that children who accompany mothers to retail stores get more frequently exposed to the promotional cues directed at them. Due to this, they behave more actively in retail stores.

The results further indicate statistically significant positive relationship between age of mothers and children’s active behaviour in retail stores. This relationship is significant at 10 per cent level of significance. This means that older mothers view that their children behave actively in retail stores. This may be so because that as mothers’ age increases, they experience that children not only exert a stronger influence on food purchase decisions and directly make food purchase decisions/purchases themselves but also influence food consumption decisions for the family (Singh and Soni (in Press)). Therefore, these mothers express that their children behave very actively in retail stores.

In addition to this, a significant negative relationship has been revealed between age of fathers and children’s active behaviour in retail stores at 5 per cent level of significance. This may be attributed to reason that as the age of fathers progresses, they tend to feel that older children have gained reasonable maturity to make purchase decisions. Therefore, they give autonomy to children to buy foods independently. This, in turn, results into less direct purchase requests faced by fathers. Due to this, they think that children do not behave actively in retail stores.
There is also an inverse relationship (significant at 10 per cent level of significance) between mothers who are better educated and active behaviour of children in retail stores. This may be so because better educated mothers view food advertisements directed at children as unethical (Singh and Soni (*in Press*)). Therefore, they try to explain and discuss the ill-effects of consuming advertised foods to children. These meditational tendencies reduce influence of food promotions on children’s purchase requests. Thus, children behave less actively in retail stores or accept the decision of mothers about the type of foods that should be purchased.

As children tend to be influenced by food marketing strategies or other factors, mothers mediate food consumption habits of children through feeding practices. Hence, several questions were asked from mothers to explore this issue. The responses of mothers on this issue are discussed in subsequent paragraphs.

At the outset, mothers were asked to specify the frequency with which their family members take meal together on five point scale from always to never. The results reveal that more than two third of respondents (67.9%) take meals together with family members ‘always’ or ‘mostly’. More than one fourth of respondents (28.3%) take family meals together ‘sometimes’. Only four per cent of respondents (nearly) ‘rarely’ or ‘never’ take family meals together with all members. The mean values of responses of mothers (3.93) on this dimension also point to the fact that most of time, the family members take meal together.

Further, mothers were asked to report whether family members watch television during lunch/dinner. Nearly one fifth mothers respond that their family members ‘always’ watch television during lunch/dinner. However, more than one third mothers (36.4%) also report that they watch television ‘mostly’ during lunch/dinner with family. Further, almost thirty one per cent mothers watch television ‘sometimes’ during family meals. Only 4.4 per cent mothers respond that they ‘never’ watch television during lunch/dinner with family. Thus, overall mean values of responses of mothers (3.58) point to the fact that their family members generally watch television during lunch/dinner.

After questioning mothers about frequency with which family members take meals together and watch television during lunch/dinner with family, the next question was raised about family mealtime environment. Family mealtime environment is the time
when all family members sit together and take meals. It is the time to discuss important matters with all family members. Seven statements were developed to study family mealtime environment. These statements were measured on five point scale with ‘5’ indicating ‘always’ and ‘1’ indicating ‘never’. For negative statements, responses were coded in the reverse order.

The mean values of responses of mothers show that mothers are strongly agreed with statements that ‘eating brings family members together in an enjoyable way’ and ‘I enjoy eating meals with my family’. However, they express ‘agreement’ with other statements, viz., ‘We eat at least one meal a day together’, ‘Mealtime is a time for talking to other family members’, Children have their food early in the night’ and ‘We cannot have dinner together because my husband comes late to the house’. The responses of mothers reveal that a majority of family members take at least one meal a day together along with children as they opine that mealtime is an appropriate time to talk to other family members and develop the feeling of togetherness.

As the next step, mothers were asked some questions regarding how they control food consumption habits of children through feeding practices. Their responses in this regard are presented next.

**Nature of Feeding Practices Used by Parents to Mediate Food Consumption Habits of Children**

In order to explore nature of parental mediation through feeding practices on children’s food consumption habits, forty nine statements were drawn from Comprehensive Feeding Practices Questionnaire (CFPQ) developed by Musher-Eizenman and Holub (2007). The responses of mothers for thirteen statements (C1 to C13) were sought on five point scale from ‘always’ to ‘never’ (always=5 and never=1) and for thirty six statements (D1 to D36) on five point scale from ‘strongly agree’ to ‘strongly disagree’ (Strongly Agree=5 and Strongly Disagree=1). At the outset, mean values and standard deviations of responses of mothers have been calculated and then, Exploratory Factor Analysis (EFA) has been applied on CFPQ to check the uni-dimensionality of the factors and Confirmatory Factor Analysis (CFA) has been used to validate the CFPQ in Indian context. Subsequently, feeding practices of mothers have also been compared across demographic variables using ANOVA.
As regards the mean values of responses of mothers, it has been found that they ‘always’ ‘encourage their children to eat healthy foods before unhealthy ones’. However, mostly, ‘at dinner time, they let their children choose the foods they want from what is served. They rarely ‘give their children something to eat or drink if they are bored/upset even if they are not hungry’.

Further, they express agreement with statements—‘I discuss with my child the importance of eating healthy foods’, ‘If my child does not like healthy foods (such as a vegetable), I tell him/her that it tastes good’, ‘Most of the food I keep in the house is healthy’, ‘I discuss with my child the nutritional value of foods’, ‘I make available a variety of healthy foods for my child at each meal served at home’, ‘I show my child how much I enjoy eating healthy foods’, ‘I encourage my child to eat a variety of foods’, ‘I model healthy eating for my child by eating healthy foods myself’, ‘I encourage my child to try new foods’, ‘I have to be sure that my child does not eat too many sweets’ and ‘I try to show enthusiasm about eating healthy foods’.

Thus, mothers’ responses point to the fact that they always want that their children should eat healthy foods. Therefore, they always cook healthy foods and often keep a track of sweets, sugary drinks, snack foods and high-fat foods that their children eat. They also allow their children to eat foods according to their choice at dinner.

Exploratory Factor Analysis (EFA) of CFPQ resulted in a nine-factor solution with twenty eight statements. These factors are—‘restrictions for weight control’, ‘monitoring’, ‘modeling’, ‘emphasis on nutrition and healthy eating’, ‘involvement’, ‘emotion regulation’, ‘restriction for health’, ‘food as reward’ and ‘environment’. This structure depicts that these twenty eight items represent the same factor structure as in CFPQ except for one factor i.e. emphasis on nutrition and healthy eating which has been revealed in the present study. The ‘emphasis on nutrition and healthy eating’ factor consists of three items out of which one item originally belongs to the factor ‘encourage balance and variety’ and two items come from the factor ‘teaching about nutrition’ in original CFPQ. Also, two factors—‘child control’ and ‘pressure’ as depicted in original CFPQ were not identified through present EFA.

Further, CFA using maximum likelihood estimation method has been employed to examine the validity of the nine factor model as extracted through EFA in Indian
context. The validity of nine-factor model can be ascertained by comparing the theoretical measurement model with reality as represented by this sample. For the aforesaid purpose, construct validity as well as overall model fit must be checked (Hair et al., 2010). Further, in order to assess construct validity, convergent, discriminant and face validity should also be examined.

To evaluate convergent validity, standardized factor loadings, average variance extracted (AVE) and construct reliability (CR) were calculated. The present study revealed that the value of standardized factor loadings is more than 0.60 as recommended by Hair et al. (2010), AVE is greater than 0.50 which is acceptable (Hair et al., 2010). Also the value of construct reliability is more than 0.70. Thus, values of standardized factor loadings, average variance extracted and construct reliability confirm the convergent validity of the model. Further, the square root of the AVE of each construct is greater than the inter-construct correlation which illustrate that the factors are clearly distinguishable from each other (Fornell and Larcker, 1981; Zait and Bertea, 2011). The compliance with the norms of convergent and discriminant validity provide an acceptable fit to the data.

Further, in order to ascertain the model fitness, chi-square statistic and other fit indices such as—absolute fit measures, incremental fit measures and badness of fit measures were utilized. The chi-square statistic tests the hypothesis that no significant difference exists in the two covariance matrices. Though chi-square statistic is significant, it can provide a sensitive statistical test but not a practical test for model fit. However, other fit indices showed acceptable fit with Normed $\chi^2/df=1.309$, GFI=0.944, RMSEA=0.026, AGFI=0.927, CFI=0.979 and RMR=0.032. Thus, by examining values of model fit indices, it is proved that the present nine-factor model with twenty eight items is sufficient to explain child feeding practices of mothers in the Indian context.

Further, in order to investigate whether mothers’ responses for feeding practices followed with children differ on the basis of demographic variables (age of child, gender of child, mother’s education status, mother’s occupation status and monthly family income), ANOVA and Tukey-HSD paired comparisons have been used. The findings elucidate that significant differences exist in responses of mothers of older children (age category 10-11 years) and younger children (age categories 4-6 years and 7-9 years) with
respect to ‘restriction for weight control’ at 1% level of significance. Further, their responses differ significantly with regard to factors ‘involvement’ and ‘food as reward’ at 5% level of significance and ‘modeling’ and ‘environment’ at 10% level of significance. This shows that mothers use different feeding practices according to the age of children. For all other factors such as ‘monitoring’, ‘emphasis on nutrition and healthy eating’, ‘emotion regulation’ and ‘restriction for health’, no statistically significant differences exist in responses of mothers.

Further, statistically significant differences exist between responses of mothers of male and female children for using ‘food as reward’ at 10 per cent level of significance. For use of other factors such as ‘restriction for weight control’, ‘monitoring’, ‘modeling’, ‘emphasis on nutrition and healthy eating’, ‘involvement’, ‘emotion regulation’, ‘restriction for health’ and ‘environment’, no statistically significant differences have been observed between responses of mothers across child’s gender.

Subsequently, mothers’ responses for feeding practices followed with children have been cross-tabulated across education status of mothers. The results show that statistically significant differences (at 5% level of significance) have been observed in responses of mothers across educational status with regard to ‘emphasis on nutrition and healthy eating’. For all other factors, no statistically significant differences exist in responses of mothers.

As regards occupational status, the findings reveal that no statistically significant differences exist in responses of mothers across occupational status. This reveals that mothers in India follow similar feeding practices with children irrespective of whether they are housewives, employed in service, professionals or self-employed.

With respect to monthly family income, the findings reveal that statistically significant differences exist in responses of mothers across family income for use of ‘restriction for weight control’, ‘monitoring’ and ‘environment’. These differences are significant at 5 per cent level of significance. Further, significant difference exists in responses of mothers across monthly family income for ‘emotion regulation’ feeding practice at 10 per cent level of significance. However, for other factors—‘modeling’, ‘emphasis on nutrition and healthy eating’, ‘involvement’, ‘restriction for health’ and ‘food as reward’, no statistically significant differences exist in responses of mothers.
RECOMMENDATIONS

On the basis of findings of the study, following recommendations are suggested for marketers, parents and government.

Recommendations for Marketers

The findings of present study shall enable marketers in understanding the current scenario of food advertising on children’s television networks. Along with this, the effectiveness of retail promotional strategies used with children can be understood. The recommendations made for marketers are as follows:

- The present study shows that food advertisements are frequently broadcast on television and targeted at children. But most of the advertised foods are unhealthy (according to NIN guidelines). Therefore, in order to mitigate negative effects of rampant food advertising, food marketers should recognize the need for self-regulation of food advertisements directed at children.

- While advertising unhealthy or low-nutrient foods, marketers should give statutory warnings to parents and children that such foods should be consumed only in limited quantities. They should also highlight the presence of excess fat, sugar and/or salt content in advertised foods and the ill-effects of consuming them in large portion sizes.

- The present study points to the fact that promotional themes and appeals are used in food advertisements to attract attention of children and are particularly successful in persuading them to buy the advertised (processed) foods. Most of the time, marketers use emotional appeals in advertisements to target children. Thus, it is suggested that marketers may shift focus to nutritional content appeal or health related messages in food advertisements to woo children and parents, as it will help them in making informed choice.

- A large proportion of food advertisements are targeted at children in comparison to general-audience. Therefore, it is recommended that food marketers should act responsibly by fortifying processed foods with essential nutrients such as
vitamins, minerals, calcium, iron etc. so that nutrient requirements of children are at least partially fulfilled.

- The findings of the present study reveal that marketers use promotional elements in food advertisements as well as promotional strategies in retail stores to increase sales of processed/packaged foods, which are largely unhealthy. But, as an important part of the society, it is also their moral duty to protect well-being of children. Hence, they may use these techniques (as discussed above) to promote healthy foods. They may allocate sufficient shelf space to healthy nutritious foods for children and these foods can be kept at eye level of children in retail stores. They may also restrict the stock of unhealthy foods in retail stores. Use of promotional techniques (collectives, freebies, promotional offers, pictures of cartoons, attractive package having attributes of different colours, shapes, sizes) to attract the children towards unhealthy products should be cut down.

- Since frequency of food advertising on children’s television networks in India is very high, the present study points to the need for use of newer media by marketers to reach children. Within retail stores, marketers can use bright coloured packages, reachable shelf locations and friendly sales personnel to influence food shopping behaviour of children.

As this study also sheds light on feeding practices used by mothers at home, some recommendations for parents are suggested next.

**Recommendations for Parents**

- It is observed that food advertisements are rampantly appeared on children’s television networks and most of the advertisements relate to unhealthy foods. Parents should therefore plan to monitor, supervise and control television viewing by children. They can mediate television viewing habits of children by imposing time or content restrictions. Moreover, they can also sit alongside children while watching television to guide them about nature of advertised foods.

- As exposure to food advertisements propels children to make frequent purchase requests and consume advertised foods, parents may also use feeding practices to mediate food consumption habits of children. Some effective feeding practices
are—restrictions for weight control (restricting children to eat more to avoid them to get fat), monitoring (keeping a track of sweets/high-fat foods/snack foods/sugary drinks), modeling (acting as role models by consuming healthy foods in their regular diet), emphasis on nutrition and healthy eating (discussing the importance of consuming healthy/nutritious foods with children), involvement (involving children in planning and preparing meals as well as participating in grocery shopping) and so on. Besides these feeding strategies, Indian mothers may also guide children about ill-effects of consuming processed (packaged) foods in large portions on their health.

Besides marketers and parents, the present study also highlights important recommendations for government as described below:

**Recommendations for Government**

- As healthy foods such as fruits, vegetables and dairy products are rarely advertised on children’s television networks, government can advertise these healthy foods through fascinating public service announcements (PSAs) to influence food consumption habits of children. Although government of India has initiated PSAs on television to eradicate malnutrition in children, yet, obesity and health related disorders can also become monstrous if timely actions are not initiated. Therefore, government should also broadcast PSAs on children’s television networks to create awareness in children about health problems, with which children can be affected due to overconsumption of unhealthy foods.

- As part of the same study, it has also been estimated that less than two per cent foods that are advertised on children’s television networks in India are healthy. Therefore, diet advertised on children’s television networks differs widely from the diet recommended by National Institute of Nutrition (2010) for Indians. The government can also give out public service announcements (PSAs) to create an awareness among parents and children that processed foods must be consumed in small proportions and publicize the recommendations of National Institute of Nutrition (NIN).
Government may formulate suitable codes/regulations for restricting food advertising directed at children. They should not only regulate the frequency of screening advertisements on children’s television networks but also regulate content of advertisements especially, aimed at children. It is found that government of India has also formulated ‘codes for commercial advertising on Doordarshan’ (a national network) for children (www.ddindia.com). Yet, these codes are general in nature and no specific guidelines are given for food commercials targeted at children like other western countries.

The present study shows that some food companies (i.e. McDonalds) are using toys to sell unhealthy (junk) foods to children. Use of toys as promotional tactic captures the attention of children. The previous research shows that while buying foods, children do not consider nutrients contents of foods. More so, after getting toys, they even lose interest in foods which are advertised using toys as a promotional strategy. Thus, in order to protect well-being of children, government should ban toys companies to join hands with food companies especially to advertise unhealthy foods.

**DIRECTIONS FOR FURTHER RESEARCH**

- The current study focuses on nature and types of food advertisements broadcast on children’s television networks only. Further study can be done on nature and types of foods advertised on other commercial channels which are directed at general-audience.

- As nature and types of foods advertised during vacations may vary, this variation in nature and types of advertised foods can also be analysed.

- A comparison of themes/appeals used in food advertisements broadcast on children’s television networks and general-audience television networks can also be done.

- A longitudinal analysis of themes/appeals used in food advertisements broadcast during weekdays and weekends or different time slots can also be possible.
This study is based on survey approach only. In future, multiple methods (such as observational and survey approach both) can be used to study food shopping behaviour of children.

This study can be replicated in metro cities where organized retail sector is much more popular.

A comparative study can be done on food shopping behaviour of children in modern versus traditional retail stores.

The present study is limited to use of parental mealtime actions and feeding practices with children. Further study can be done on investigating the influence of parental mealtime actions and feeding practices on consumption habits of children.