

# Impact of television food advertising on eating behaviour of children and adolescents: A review

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**Abstract**— Recent nutritional and epidemiological transition in a developing country like India, has led to a shift in lifestyle factors, with reduced activity and increased consumption of energy dense, low nutrient foods, subsequently leading to increased rates of childhood obesity and diet related non-communicable diseases. Food advertising is one important factor affecting eating behaviour and purchasing process of individuals, with television advertising being by far the most influential medium as compared to other growing social networks. In addition, food industries worldwide with specialised advertising efforts have targeted children and adolescents for multiple reasons in recent years without considering their comprehensive ability of understanding the persuasive intent of advertising messages, further increasing concern about marketing strategies and influencing power. With most of the food related advertisements on high fat, sugar and salt items and children and adolescents living in a media-saturated environment, the purpose of this article is to examine food advertising through television and impact of food advertising on food choices and eating behaviour of children and adolescents.

**IndexTerms**—Food advertising, food marketing, childhood obesity, television

## I. INTRODUCTION

Rapid urbanisation, rising consumer incomes, changing trade and economic policies, especially in a country like India with a massive consumer force, has emerged as important market for international agribusinesses due to their huge population and growth potential. Furthermore, the food and beverage industry worldwide has targeted children and adolescents in recent years with specialised marketing and advertising efforts as they have purchasing influence, spending power and will act as future adult consumers [1].

Eating habits are established during childhood which track into adulthood and subsequently contribute to long-term health and risk of diet related non-communicable diseases [2]. In line with this, recent nutritional and epidemiological transition in a developing country like India, has shifted the intake from more healthy foods to unhealthy choices, eating out more often, snacking frequently, increased access, affordable and large portion size of food items, causing an increase in the rates of overweight and obesity among children and adolescents [3,4]. Multiple factors influence eating habits and food choices of people; however one important factor is food advertising [5]. With children and adolescents living in a media-saturated environment, the purpose of this article is to examine food advertising through television and impact of food advertising on food choices and eating behaviour of children and adolescents.

## II. FOOD ADVERTISING THROUGH TELEVISION

Advertisement is one of the most effective tools of marketing to motivate consumers to buy commodities [6,7]. Marketing is defined as an activity an organization engages in to facilitate an exchange between itself and its customers [8]. A joint World Health Organization/Food and Agriculture Organization of the United Nations (WHO/FAO) Expert Consultation concluded that the heavy marketing of fast food and energy-dense, micronutrient-poor foods and beverages is a “probable” factor resulting in weight gain and obesity [9].

Television advertising used as a mode of marketing is by far the most influential medium to affect purchasing decisions of people, despite growing strength of other social networks [10]. Furthermore, food advertising market is enormous as it is a repeat-purchase item, has a prominent percentage of consumer expenditure and involves highly branded items. Huge marketing directed towards children and adolescents is largely driven by the desire to build brand awareness, preference and loyalty, as brand preference precedes purchase behaviour [11,12].

Television viewing starts early and majority of leisure time activity of children and adolescents in India is spent in front of the screen [13]. Furthermore, similar trends have been seen in rural areas, hence television as a medium has greater exposure to food advertisements. In one study, children on an average viewed one food advertisement in every five minutes of their television viewing time which may roughly compound to three hours of food commercials every week. Furthermore, on an average, 11 out of 19 commercials per hour were for food products and of these, 44% of the advertisements promoted high fat and sugar products, such as sweets, carbonated beverages, chips, cakes, pastries and cookies [14]. Similarly, a study conducted in India, undertook content analysis of 114 food commercials broadcasted in children’s channels and found that majority of the advertisements were on confectionery, ice creams and dairy products, baked products and ready-to-cook food items and did not have any health related message [15].

Moreover, the effect of television viewing increases the risk of overweight and obesity among children and adolescents, as this behaviour detracts them from participating in more physically active leisure time pursuits, expose them to food commercials of unhealthy products and there is an increase in consumption of energy dense-low nutrient foods [16,17].

### III. INFLUENCE OF FOOD ADVERTISING ON EATING BEHAVIOUR

Changing diets and eating preferences are in part influenced by exposure to television food advertisements which predominantly focus on unhealthy high-calorie, low nutrient food items in contrast to healthy foods, further contributing to the rising epidemic of obesity and associated co-morbidities among children and adolescents [18,19]. A study conducted to compare food advertisements between children's television channels and mainstream channels in India showed that advertisements on chocolates/sweets were higher (74%) in children's television channels as compared to mainstream channels (30%). Furthermore, advertisements of other items including fast-foods, processed foods and sugar sweetened beverages were showcased more on children's television channels as compared to mainstream channels [10].

Other studies have also shown that television advertising encourages consumption of energy dense foods and beverages, increases meal frequency, promotes fast-food restaurant use and decreases the consumption of high-fibre, nutrient rich fruits and vegetables [3,20,21]. Another study examined the location, types and frequency of products requested by children (3-11 years) over a month. The most requested items were snacks/desserts (24%), candy (17%), cereal (7%), fast foods (4%) and fruits and vegetables (3%) [11]. A review examining the effect of television food advertising on food behaviour of children showed that children exposed to advertisements chose advertised food products at higher rates than children who were not exposed, higher number of attempts to influence parent purchasing pattern was observed and purchase requests for specific brands was higher among children exposed to food advertisements as compared to their non-exposed counterparts [22].

Furthermore, younger children's cognitive ability to comprehend persuasive intent of commercial messages is not fully developed [1,23]. Huge marketing of high fat, sugar and salt foods to children can be exploitative as they do not possess the ability to evaluate the purpose of advertising, further increasing concern about marketing strategies and influencing power.

### IV. NUTRIENT AND HEALTH CLAIMS IN FOOD ADVERTISEMENTS

In the Indian scenario, two categories of health and nutrition related claims can be used for food and dietary supplement labels and advertising. They are health claims related to disease risk reduction and nutrition claims related to nutritional content of the product. Studies have shown that television advertisements on children's channels most commonly claim food and drinks as 'more nutritious', 'makes taller and sharper', 'high protein', 'calcium for stronger bones', etc. In one study on Indian children and adolescents, Television Rating Points (TRP) were used to select television channels. A total of 793 food commercials were shown during the sample period. Nearly 90% of the advertisements claimed their food products to be either healthy or nutritious or both. Food advertisements that claimed nutrition benefits included chocolate/sweets, grain/fruit based food and noodles/pizza. Health claim advertisements were on health/energy drinks, dairy products, oils and nuts. Advertisements on biscuits and cakes claimed to have both health and nutrition benefits. Only advertisements on chips and miscellaneous food items claimed of not having any health or nutrition related benefits [24].

Most of these health claims seem exaggerated when they claim to improve wellbeing or health status, as they have a broad terminology, which cannot be enhanced or promoted using a single product. Only a handful of television food advertisements use ingredients which are nutritious and make the right claims [10,25].

### V. REGULATIONS ON ADVERTISING TO CHILDREN IN INDIA

Twenty-two countries have some form of regulatory or self-regulatory clause on food advertising. Television is a popular medium of advertisement and has been in the midst of much concern and debate. Several countries including India, Australia, Brazil, France, Germany Ireland, Italy, Malaysia, New Zealand, Poland and the United Kingdom have made proposals to restrict television advertising to children [12].

In India, regulation on advertisements of food products is slowly coming into force into the form of both statutory and self regulatory guidelines. There are restrictions to food advertisements under the Food Safety and Standards Act (FSSA), 2006. Advertisements of food item should not be misleading or deceiving or contravening of the provisions of the Act and will be penalised for doing so [26].

As per the Food Safety and Standards Regulation, the nutritional information per 100g or 100ml per serving size of product shall be given on the label and should contain the amount of nutrient for which a nutrition or health claim has been made *eg.* if a claim is made on cholesterol then amount must be declared on the label [27]. In its recent report, Food Safety and Standards Authority of India (FSSAI) has called for a blanket ban on advertisements on junk foods which are high in sugar and salt and beverages on children's channels or kid's television shows. They also discourage celebrities from advertising such products [28].

The government issued a notification on the amendment in the existing Infants Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992, banning all advertisements promoting baby foods for children under 24 months [29].

Advertising Standards Council of India (ASCI) is an autonomous self regulatory body that has issued guidelines on the advertisements of foods and beverages directed at children below 13years of age. The first guideline is that advertisements should not mislead consumers into believing that the consumption of the food will results in exceptional skills. There should be substantial scientific evidence to back such claims. The other guidelines focus on undermining of parental guidance, visual representation to name a few [30].

Seven major food and beverage companies Coca-Cola, PepsiCo, Nestle, Kellogg, Mars International, General Mills and Hindustan Unilever have signed a pledge committing themselves to responsible advertising and marketing to children. This is the

first such self-regulatory pledge in India. This provides a framework to promote healthy lifestyle to children. Also, these companies pledge to not directly advertise to children less than 12 years of age [31].

## VI. CONCLUSION

With the rise in childhood obesity and non communicable diseases in adults, it is important to pay attention on advertising and marketing of food products. The products usually advertised are unhealthy, energy dense foods and persuasive advertisements have found to influence the food choices in children. However, in India, research focussing on the impact of food advertisements on the eating behaviour in children is limited. Regulations on food advertisement on television are present in several countries across the world. There is a need to assess the impact of these regulations on the food behaviours of children so that they can be enforced effectively.

## LIST OF ABBREVIATIONS

1. ASCI: Advertising Standards Council of India
2. FAO: Food and Agriculture Organization of the United Nations
3. FSSA: Food Safety and Standards Act
4. FSSAI: Food Safety and Standards Authority of India
5. TRP: television rating points
6. WHO: World Health Organization

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