

The Influence of Junk Food Advertisements on the Eating Preferences of School Children and Childhood Obesity

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Abstract

The dietary choices of school children now show strong influence from junk food advertisements which determine their food preferences and requests and their actual food intake through television and online platforms and video games and social media sites. The current evidence base shows that exposure to unhealthy food marketing is associated with stronger preferences for high-fat, high-sugar, and high-salt products, greater short-term energy intake, and a measurable contribution to childhood obesity, especially among children aged 3–12 years. The article reviews existing research about food advertisements which study their impact on children, their effects on eating behavior through psychological and environmental mechanisms, and their effects on schools and families and public health policies. The review establishes that junk food advertising functions as a major preventable force which promotes obesity in combination with other factors that create an obesogenic environment, and restricting children's exposure should be part of any serious childhood obesity prevention strategy.

Keywords: Junk Food Advertising, Childhood Obesity, Eating Behaviour, Marketing Exposure, Public Health Policy.

I. Introduction

The worldwide public health crisis of childhood obesity exists because excess weight during childhood leads to increased chances of type 2 diabetes and hypertension and cardiovascular disease and psychological distress throughout adulthood. Children face constant marketing for products which contain high levels of fat and sugar and salt because advertisers create content which entertains children through emotional methods that make it hard for them to identify persuasive messages. People now understand that unhealthy food advertising functions as a commercial activity which determines how children will eat and their future health outcomes.

School-age children represent the main difficulty because this stage of development brings about fast automatic behavior development and increased independence in food selection and high susceptibility to the influence of brand names and social circles and television shows. Younger children lack the capacity to understand that advertisements exist to sell products which makes them susceptible to believing all advertised content represents trustworthy or desirable information. The constant depiction of sugary beverages and fast-food products and salty snacks and candy and highly processed convenience foods creates a situation where people start to consider these items as standard components of their daily meals.

This study investigates how junk food commercials affect school children eating habits which contribute to their development of obesity in childhood. The study examines how marketing influences children through evidence from systematic reviews and meta-analyses and public health research. The research identifies different groups of children who face higher risk of unhealthy weight outcomes and examines their patterns of weight management.

Understanding junk food advertising

The expression "junk food advertising" describes the marketing of high-calorie products which lack essential nutrients to the public through their advertisements of soft drinks and chocolates and confectionery items and fast food products and salty snacks and various packaged goods which contain excessive sugar and saturated fat and sodium. The World Health Organization reports that a major portion of child-targeted food advertising promotes these products which directly affect their food preferences and purchasing behavior and their eating habits.

Contemporary food advertising uses multiple methods which extend beyond standard television broadcasts to target school-age children. The advertising system uses various channels which include online video platforms and advergaming and mobile apps and influencer content and social media and product

packaging and in-store promotions and marketing activities which occur in schools and sports events. Children establish brand connections because they use various media platforms which enable them to interact with different brands throughout their daily life.

The existing research shows that marketing campaigns which target children mostly promote unhealthy food options instead of healthy food options. The American Psychological Association and WHO reviews show that most foods which advertisers promote to children belong to unhealthy food categories while advertisers provide limited exposure to healthy food options. The imbalance exists because children learn about acceptable and attractive and enjoyable foods through their family and school and media experiences which show them food content.

Effects on eating preferences

The research demonstrates that junk food commercials lead children to develop preferences for unhealthy foods which the advertisements promote. A 2022 systematic review and meta-analysis published in JAMA Pediatrics concluded that food and nonalcoholic beverage marketing was associated with increased children's intake, choice, preference, and purchase requests. Advertising affects people because it creates product awareness which directly impacts their psychological food selection methods.

Through advertising, food products become attractive to consumers because they are associated with enjoyment, entertainment, social acceptance, thrilling experiences, and beneficial outcomes. The emotional connections to unhealthy food become stronger when people see bright visuals and animated characters and famous people and interactive games and memorable songs and social status indicators which show them junk food as cool and socially important. When children repeatedly encounter these cues, they are more likely to prefer the advertised foods over healthier alternatives that lack the same emotional or promotional appeal.

The evidence supports the concept that advertising generates "pester power," which refers to the way children request their parents to buy them products that they have seen in commercials. WHO guidance specifically identifies children's purchase requests as one of the domains influenced by food marketing. The requests that children make to their parents about specific media content play an important role because they lead to actual purchasing decisions which happen in homes during times when parents face work obligations or financial difficulties or when they shop in stores filled with branded products.

Television commercials do not produce effects that stop at their duration. The online advertising and advergaming that Coleman and colleagues studied through a rapid review show similar effects on children as actual commercial products. In digital spaces, promotional content.

Experimental evidence on consumption

→You have received training which includes data until October 2023. Experimental studies provide some of the strongest evidence that junk food advertisements can immediately alter children's eating behaviour. The systematic review and meta-analysis of screen advertising found that children who watched food advertising on television consumed 60.0 kilocalories more than those who watched nonfood advertising whereas food-themed advergaming increased their intake by 53.2 kilocalories. The small increases between their different values should not be underestimated because people will experience multiple exposures throughout their daily activities during several weeks. The research discovered this finding because it proved consistent through studies which involved children between the ages of 2 and 14 years. The review found that unhealthy food advertising increased immediate dietary intake in experimental conditions and that children with overweight or obesity appeared to be affected even more strongly than children with healthy weight. The research shows that advertising not only promotes unhealthy eating but also increases the existing vulnerability which affects children who already have high metabolic risk. The broader umbrella review of 18 reviews reached a similar conclusion which showed that unhealthy TV and online food advertising leads to childhood obesity because the research demonstrated this path through which advertising leads to increased calorie consumption and subsequent obesity development. The body of evidence presents experimental findings from observational studies and policy implementation together with the existing research to demonstrate that this situation exists beyond hypothetical frameworks which rely solely on correlation.

| Advertising Exposure | Extra Calories Consumed | Study Population | Source news-medical+1 |
|----------------------|-------------------------|------------------|-----------------------------------|
| 5 minutes TV ads | +130 kcal/day | Ages 7-15 | European Congress on Obesity 2025 |
| Food advergaming | +53 kcal/meal | Ages 2-14 | Systematic review/meta-analysis |
| TV food ads | +60 kcal/meal | Ages 2-14 | Systematic review/meta-analysis |
| Social media ads | +72 kcal/lunch | Ages 10-16 | Australian cohort study |

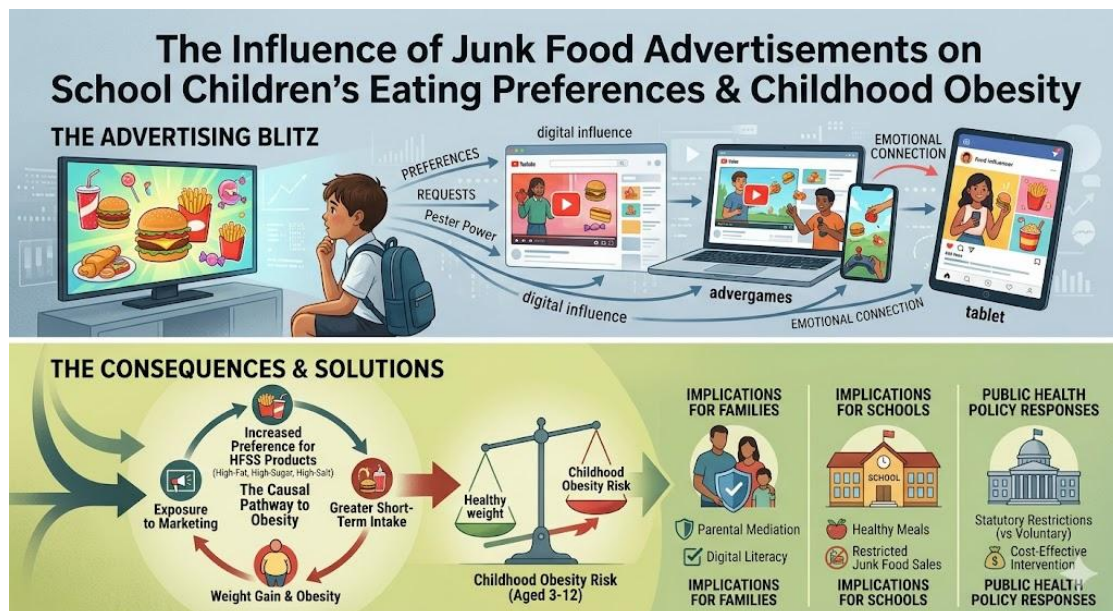
Table 1: Impact of Junk Food Advertising on Children's Calorie Intake

Pathways to obesity

The problem of childhood obesity occurs when children consume more food than their bodies need to function while their social environment and business activities determine how much food they will consume. Junk food advertising enables people to develop obesity through its various mechanisms which include directing them to eat more caloric food items and making them prefer ultra-processed products while building their brand loyalty and creating a habit of eating foods that contain high levels of sugar and salt and fat. People who develop these behavioral patterns which will develop into permanent habits will gain excess weight when they combine their time spent sitting and watching screens with their ability to access unhealthy food items without restrictions.

The rapid review in Preventive Medicine Reports states that the relationship between unhealthy food advertising and childhood obesity meets the commonly used epidemiological criteria for causality including consistency and plausibility and temporal sequence and dose-response evidence. Researchers in public health use strong language in their statements because they reserve causal terms for research findings that have received multiple types of evidence from different scientific fields. The review demonstrates that advertising serves as one element within the complete system that produces obesity while showing that it is not the exclusive factor responsible for weight gain.

Balanced interpretation requires this point to be understood. Advertising causes some children to eat more food than they need but it cannot account for every instance of childhood obesity. The research demonstrates that advertising consistently causes people to develop unhealthy eating habits which results in significant health problems when millions of children repeatedly watch cross multiple media channels.



The Influence of Junk Food Advertisements on School Children's Eating Preferences & Childhood Obesity, source: Author Generated

Why school children are vulnerable

Food marketing targets school children as its most effective audience because children lack developed cognitive control and impulse regulation and critical media literacy skills. The review evidence indicates that younger children, especially those aged 8 years and under, are less able to understand the persuasive intent of advertising and are therefore more susceptible to its influence on both the quantity and quality of calories consumed. The developmental stage of children creates a vulnerability that causes them to perceive standard advertising practices as special behavioral training methods which adults view as normal advertisements.

The school years serve as a period when students start making autonomous choices about their food consumption. Children begin carrying pocket money, buying snacks near school, choosing items from cafeterias or shops, and negotiating household food purchases with their parents. Advertising practices in this context show direct effects because they prepare children for making actual choices which they have just gotten the right to make.

Marketing reaches a higher level of effectiveness because peer pressure amplifies its effects on consumers. Children view branded foods as social symbols because they think that popular packaged snacks and fast-food brands will help them gain friendship and social status and enjoy fun experiences while belonging to a

group. School becomes a space where advertised foods acquire special meaning through classroom reinforcement which extends their value beyond taste.

Socioeconomic and media inequalities

The distribution of junk food advertising effects results in unequal impact to different populations. The rapid review established that children from low-income families and racial minority groups experience increased exposure to unhealthy food advertisements which leads to higher chances of developing obesity. The reason for this situation is that these communities tend to spend longer periods in media spaces which show more advertisements while they also reside in areas where unhealthy food products receive stronger marketing and easier access.

The situation becomes worse due to income-related pressures which act as additional stressors. The systematic review included nonexperimental studies which showed that lower-income families increased their food intake after watching advertisements while parental limits on advertising decreased its impact on their young children. The research findings demonstrate that marketing pressure combines with existing structural inequalities to determine which individuals face the highest exposure levels and have the least ability to resist marketing tactics.

Digital media has introduced a new form of digital inequality because online advertisements use personalized targeting and maintain constant visibility while becoming hard to track. Children experience food marketing through multiple platforms which include video content and video games and influencer content and social media platforms and these platforms create a more powerful marketing experience than standard television advertisements. Children who spend extensive time with screens experience continuous exposure to brand marketing cues which occurs more frequently than standard advertisement breaks.

Implications for schools and families

Schools function as essential organizations which safeguard children from unhealthy food advertising because they provide both educational services and food access to students. Schools create an unintentional pattern which schools create when they give students access to sugary drinks and packaged snacks and branded fast food while providing insufficient nutrition education because students already receive unhealthy messages from these two sources. School policies which support healthy meal options and limit access to unhealthy foods and enhance media literacy programs lead to decreased effectiveness of junk food advertisements. Families remain equally important because parental mediation can buffer advertising effects, especially in younger children. The studies in the systematic review demonstrate that parents who establish advertising restrictions can decrease food marketing impact on their younger children. Advertising purposes become clear through open dialogue and parents should control their children's screen time while providing healthy snacks at home to create a better environment for their children. The system requires more than just the efforts of families because it needs collective action from the whole community. Public health agencies state that food marketing operates as a systemic problem which needs solutions that reach entire populations because children face multiple advertising situations which families cannot manage. The research literature focuses on policy interventions because they represent a primary area of study.

Policy responses

The WHO recommends that governments implement policies to reduce the impact of marketing of foods and non-alcoholic beverages on children because such marketing is widespread and influences preferences, purchase requests, and consumption patterns. Coleman and his research team found that statutory restrictions which governed food advertising showed better results than the industry self-regulation model which had not succeeded in reducing children's access to unhealthy food advertisements. The review found that voluntary bans did not work because exposure levels stayed constant before and after their implementation across multiple locations. The literature supports policy measures which include three specific advertising restrictions together with two additional digital marketing restrictions and two specific school food standards and two public health measures that enhance access to nutritious food options. The umbrella review provides cost-effectiveness evidence which demonstrates that restricting unhealthy food advertising to children will generate healthcare savings greater than the costs required for implementation. The regulation of marketing works as a protective measure for children while also serving as a cost-effective method to protect public health. The same review emphasizes that advertising restrictions work best when combined with wider actions addressing sedentary behaviour, affordability of healthy food, school food quality, and broader social determinants of diet. A whole-systems approach is therefore more realistic than expecting any single policy to reverse childhood obesity on its own.

Critical appraisal

The evidence linking junk food advertising to children developing food preferences that lead to obesity shows strong support for this relationship but has certain limitations which require recognition. Research studies typically assess short-term food consumption because they do not track how dietary choices affect weight development over time which results in researchers needing to build evidence about the link between instant eating and obesity through multiple studies. The definitions of "unhealthy" and "HFSS" food categories differ between countries and research studies, which creates challenges for scientists who want to compare results across different countries and research studies. The available evidence points toward a single consistent outcome that we can observe throughout our evidence base. Systematic reviews and meta-analyses together with public health guidance reach the same conclusion that unhealthy food marketing leads children to develop food preferences which create an increased risk of obesity. The different research methods used in this study together with its diverse population groups and various study contexts make this research finding a strong basis for establishing the relationship between the two factors.

II. Conclusion

The research demonstrates through verified studies that junk food advertisements create strong effects which lead school children to prefer unhealthy food items because they become interested in these products which results in their requests to buy the items and their increase in consumption of calories right after they see the advertisements. The harmful effects of this behavior pattern begin when children reach their first years of life and occur through repeated exposure in locations which provide easy access to inexpensive unhealthy food items that people consider to be normal. The most vulnerable group includes younger children who face obesity problems and those who come from economically disadvantaged backgrounds.

The existing research demonstrates that junk food advertising functions as a serious marketing problem which can be changed into a public health danger. The evidence-based methods for creating better eating environments for children include three main actions which involve reducing their exposure to unhealthy food advertising, strengthening nutritional support systems at schools and homes, and establishing mandatory regulations instead of using voluntary standards. The commercial system which prevents children from developing healthy eating habits must stop if effective childhood obesity prevention programs want to succeed according to researchers, educators and policymakers.

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