Childhood Obesity and Fast Food Marketing in the USA

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Childhood obesity is a modern-day Goliath that the world is wrestling with. In less than 50 years, from 1975 to 2016, the prevalence of obesity in children and adolescents (aged 5-19 years), referred to as childhood obesity, has increased from 0.8% to 6.8% globally (WHO, 2018, pp.15). In absolute figures this rise is 10-fold, from 11 million to 124 million. Particularly in the USA, childhood obesity has emerged as a major public health concern. According to Center for Disease Control and Prevention (CDC), USA, the prevalence of obesity among American children aged 2-19 years has more than tripled from 5.2% in 1975 to 18.5% in 2016 (Fryar et al., 2018). These figures are alarming because childhood obesity is associated with early-onset of chronic diseases such as heart disease, type-2-diabetes, cardiovascular disease and poor psychological well-being among children (Reilly and Wilson, 2006). Given the mounting evidence on childhood obesity in the USA and its threat to children's overall well-being, it is imperative to understand the factors that are related and contribute to it.

Traditional research on childhood obesity has primarily focused on the role of physical activity, however, research on nutrition is fast gaining traction and has led to major breakthroughs in apprehending the relationship between food choices and childhood obesity. Evidence from research studies has demonstrated that excessive and unregulated consumption of fast-foods is associated with weight gain and obesity among children (Andreyeva et al., 2011; Fulkerson et al., 2011; Kant et al., 2015; McGinnis et al., 2005; Cairns et al., 2009). In fact researchers have found that high amount of fats, sugar and salt (HFSS), used extensively by food industries in their products, could lead to food addiction behaviour among children(Grigson, 2002; Colantuoni et al., 2002) further increasing the risk of obesity. Moreover, food-processing techniques used by fast-food industries (FFIs) render food not only nutrient deficient but also bulk them with calories further endangering weight gain in children (Powell et al., 2007). Noting the huge burden of childhood obesity in the USA and its association

with fast food consumption, it is indispensable to identify and analyse the practices used by fast-food industries to promote/sell their products to children and to evaluate the existing regulatory actions to monitor them.

Food marketing is the most common technique used by FFIs to promote and advertise their products to children. WHO (2012) defines marketing to children as "any form of commercial communication or message that is designed or has the effect of, increasing the recognition, appeal, and/or consumption of particular products and services". Systematic review by Cairns et al. (2013) has shown that marketing of HFSS foods directly influences "children's food preferences, food requests and short-term food intake". Moreover, Institute of Medicine, USA, a national non-profit body for science-based advice on health, has categorically recognized fast-food marketing as a risk factor for unhealthy diet among children and affirmed its role in contributing to childhood obesity (RWJF, 2015). Given the evidence linking fast-food marketing to increased consumption of fast food among children, it would be logical to expect responsible marketing by food industries but the research indicates otherwise. Fulkerson (2018) notes that in 2008, \$280 million was spent on marketing healthful foods, while more than six times, \$1.7 billion, was spent on marketing unhealthful foods. In fact, in 2009, marketing of foods for children less than 12 years of age alone accounted for \$600 million (Emond et al., 2019). Taking cognizance of the two incompatible pieces of information: the threat of aggressive fast-food marketing and the increased investment by FFIs in food marketing, it is fundamental to explore the platforms exploited by the FFIs to market their products to children.

Fast food industries primarily use three platforms to market their products to children:

- 1. Television(TV)
- 2. Schools
- 3. Internet

These three platforms are explored in turn in the essay.

FFIs exploit television heavily to market their products to youth. In 2016, McDonalds, a leading national fast-food chain, spent \$32.9 million on television to advertise Happy Meals, a

premium product of McDonalds (Emond et al., 2019). Powell et al. (2011) state that on average, children in the USA are exposed to 12.7 food and beverage advertisements every day on TV, of which 86% relate to HFSS foods. Although the Federal Communication Commission, USA mandates total commercial duration for children to be 12 minutes on weekdays and 10.5 minutes on weekends there is no specific rule about total fast-food marketing duration on TV (FTC, 2017). Moreover, a lack of restriction on the number and type of advertisements could mean that a standard-length TV advertisement of 30 seconds, could allow as many as 24 advertisements to run on weekdays. Given the enormous amount of money FFIs spend on marketing, it is quite likely that they might purchase rights for major proportion of the time-frame to further increase children's exposure to their food products unless strict monitoring actions are designed.

Schools present an ideal, less-competitive and uncluttered environment for FFIs to market their food products and provide an opportunity to create brand loyalty among impressionable children (Velazquez et al., 2017) right from a young age. Research has shown that school nutrition environment is markedly affected by sales of fast-food inside the premises (Story and French, 2004; TerryMcElrath et al., 2014). Moreover, the type of food available in the school also influences children's food choices outside of the schools (Velazquez et al., 2017). Food industries often also participate in extracurricular school activities such as sports day, annual day or cultural day. In such situations, the intention of brands is to plant an image in young minds which closely links fun to their brand name. Thomson and Shouse (2010) notes in "Clowning around with Ronald":

"This performance was the most persuasive McDonalds commercial I have ever seen, even though at no point did Ronald tell his captive kids that they should go eat at McDonald's".

The author asserts that selling fast-food to children is no longer a pre-requisite to lure them because selling an idea, a "hyper-real word of Americana, family fun and good times" is sufficient to achieve that. Such strategies of marketing are often successful because of children's under-developed ability in distinguishing selling intent from persuasive intent (Carter et al., 2011). To address the issue of food-marketing in schools, US Department of Agricul-

ture (USDA) in 2016 passed the Smart Snacks in Schools regulation which mandates all food sold in schools to meet pre-specified nutrition standards (USDA, 2016). This is a positive step in the right direction but it must be borne in mind that research teams at FFIs are generally one-step ahead of the government and have already conquered a space beyond TV sets and schools – the Internet.

Internet platform is heavily used for marketing fast foods to children and adolescents. Digital advertising on children's websites has emerged as the biggest platform for internet-based fast food marketing. Four popular children websites, NeoPets.com, Nick.com, CartoonNetwork.com and Disney.com account for 80% of the total food marketing, 84% of which is heavily concentrated on HFSS foods (Emond et al., 2019). More than 3 billion display advertisements for food and beverages were viewed on popular children's websites from July 2009 to June 2010 (ibid). Moreover, in 2009 US companies spent \$113 million on internet fast-food advertising to children and adolescents (ibid). Unlike the food advertised on TV and inside school premises, food advertised on internet is not mandated to meet nutrition guidelines. This unfettered fast-food marketing poses particularly grave risk due to ubiquity of smartphones and increased focus on Internet of Things (IoT) which tailors promotional content based on user's interaction with the advertisements. Turns out, being connected, although favourable to FFIs, could be detrimental to the health of children who spend prolonged time online as shown by a 2019 research by Common Sense Census (CSM, 2019). The report, titled, Media Use by Tweens and Teens has pointed out that US teens spend on average, outside of their school work, seven hours on screen-time daily (ibid). Given the huge amount of time spent by youth on internet, unregulated advertising of fast-food online and the ubiquity of smart-phones, internet as a platform for fast-food marketing presents a distinct challenge in curbing the epidemic of childhood obesity.

Having described the three major platforms on which fast-food is advertised to American youth, it is vital to understand the steps taken at the Federal level to mitigate fast-food marketing to children on a broad scale. Most prominent among these is the Children's Food and Beverage Advertising Initiative (CFBAI), a voluntary program for self-regulation by food industries, formed in 2007 (CFBAI, 2014). Currently it has 19 companies as its members. CFBAI's self-regulation pledge entails advertising and marketing of food products

to children and adolescents which strictly meet the nutritional standards set by CFBAI. Uniform Nutrition Standard of CFBAI specify the permissible amount of salt, sugar and added sugars in the product category per serving amount. For instance, a minimum size of fruit/vegetable juice must be greater than 114mL, constituting a total of 160 calories without any added sugar and less than 140mg of sodium. These specifications are laid quite differently from the Dietary Guidelines for Americans specified by USDA (USDA, 2015) which makes the comparison difficult. While USDA guidelines specify permissible daily calorie intake for specific food components (salt, sugar, fats) CFBAI lists restrictions on (calorie, fat, salt, sugar) per item. Notwithstanding the discrepancy, it can be easily discerned using elementary mathematics that a combination of multiple items validated for sale by CFBAI could exceed the permissible daily calorie intake of food groups specified by the USDA.

It seems that CFBAI serves to falsely project FFIs as responsible stakeholders in children's health, even vindicating them from child-targeted persuasive food marketing practices. In fact, public health experts have criticized the CFBAI regulations and pointed out their insufficiency in addressing the epidemic of childhood obesity (Emond et al., 2019). Also, the definition of child-targetted marketing adopted by CFBAI has gathered a lot of flak. CFBAI companies consider TV, radio, print and third-party websites as the only platforms for regulation. Platforms such as hospitals settings, interactive digital media, schools, sponsorship events, contests/prizes events and even charity events are not recognised as potential marketing spaces for fast-food. A deeper investigation reveals that these limitations are partly due to CFBAI's adoption of food marketing definition by Federal Trade Commission (FTC), USA which are not appropriate from policy-intervention point of view (RWJF, 2015). Moreover, some CFBAI principles indicate that they might have been designed with industry-interests in mind rather than those of children and their health. These are explained below:

1. CFBAI explicitly projects its initiative as voluntary assistance to parents in their primary responsibility of taking care of the healthy nutrition and lifestyle for their children (CFBAI, 2014). This stance reinforces the food industries' long-held ideology that it is not them who are responsible for the health of children but the parents. To a great extent their claim can be defended but parental monitoring of their children's diet suffers in the marketing blitz created by the fast-food companies. Research has shown that

children constantly nag and pester their parents for fast-food products marketed by food companies. In fact, Mere Exposure Effect theory has demonstrated that repeated exposure to "a neutral, unknown object will result in preference for the previously neutral object" (Monahan et al., 2000). Given the theory and its evidence, the voluntary assistance by FFIs through CFBAI appears as a charade to evade public attention from their aggressive child-targeted food marketing practices.

2. Secondly, CFBAI takes responsibility for marketing only for children up to the age of 12 years while evidence shows that American youth aged 11-18 years of age eat fast-food twice a week on average and on a typical day one-third of youth aged 4-19 years consume fast food (Grier et al., 2007). In fact, close to \$30 billion of their personal money is spent to purchase junk food (Nestle, 2006). Adolescents are specifically vulnerable to marketing by food-industries because eating fast-food with friends is an indicator and extension of their social life (Lems et al., 2020). Another loophole in the specified age-limit is that it fails to consider the recommendation made by American Psychological Association which prohibits advertisements for children below seven years of age because of their under-developed cognitive ability to differentiate selling intention and persuasive intention (Wilcox et al., 2004; RWJF, 2015). Young children and pre-school children are particularly enticed by the happiness that child-themed advertisements project and develop an attraction for the food products which have child-appealing packaging, usually in forms of cartoons, brand-licensed characters or mascots (Herédia et al., 2017). Given the threshold of age adopted by CFBAI for its regulations, it appears that participating companies' resolve is half-hearted with regard to the rising childhood obesity in the USA and their behaviour disproportionate to their utterly vocal voluntary assistance to parents in maintaining the health of children.

Generally speaking, self-regulation practices suffer from a loophole - an incongruence between marketed food items and those exhibited for purchase. For instance, a food product validated for marketing might meet nutritional standards but it does not ensure that the food items in its range, available for purchase either online or at the outlet, would too. This exposure to unhealthy foods at the outlets or point-of-sale could actually outweigh the benefits associated with regulated marketing (RWJF, 2015). Labelling of calories could serve as

a potential solution in such situations but a prospective cohort study which investigated the efficacy of menu-labelling regulation in Seattle, USA versus no regulation in San Diego, USA found no decrease in the caloric intake either of parents or children (Tandon et al., 2011). Although menu-labelling led to increased awareness it did not trigger lower calorie-intake decision. Thus, the study shows that the discrepancy between the advertised food products and non-advertised products may not be solved by caloric information and that stricter guidelines are necessary.

Notwithstanding the insufficiency and loopholes in the existing approaches to tackle fast-food marketing targetted at children, it would be unfair to conclude that the situation of childhood obesity in the USA is in a state of deadlock. National School Lunch Program, a nationwide program established in 1946, has been successful in ensuring nutritionally balanced meals to students in public, non-profit private and child care institutions (USDA, 1946). Two jurisdictions in California have mandated sale of toy-premiums only with food that meet a certain nutritional criterion (Otten et al., 2012). In January 2012, McDonald's, the major fast-food chain in the USA, announced addition of apple slices in its menu and reduction in the size of French fries' servings (News, 2011). These are constructive steps and reflective of some progress but their effect in reducing childhood obesity remains to be ascertained.

Finally, given the high burden of childhood obesity, wide-spread marketing of fast-food and inefficient fast-food industry self-regulations in the USA, it is natural to ask whether a solution exists at all. It appears that only time can demystify the enigma of American Childhood Obesity, but as the research to identify the solutions continues, it is crucial to remember that victory on childhood obesity would entail consistent aggregated efforts of all stakeholders (government, food industries, parents, schools, physicians) in which mutual antagonism, spirit of cut-throat competition and ulterior motives are put aside for the larger national good. Parallelly, it must never be forgotten that there exists no substitute for nutrition education and awareness and in that context schools and parents have a huge responsibility upon their shoulders. With evidence-based, significant and consistent steps in the right direction, it is possible to flatten the curve of childhood obesity in the USA and eventually reverse it.



An advertisement at bus-stop. Produced here to demonstrate the use of cartoon characters (bunny, in this image) to attract children to purchase the product. A type of child-targetted food marketing. (Photo taken by the author)

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