Food-related health challenges of children and the role of the Consumer Protection Act 68 of 2008 in regulating unhealthy food advertising

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ABSTRACT

Childhood obesity and related health issues are becoming an increasing global concern. This article focuses on the role of the Consumer Protection Act 68 of 2008 (CPA) in limiting unhealthy food advertising. It examines the effect of the extensive advertising of unhealthy food products on children's dietary choices, which can lead to negative health effects. Using a quantitative research design approach, data was collected through a survey using questionnaires administered to parents with children who are twelve years old or under in the Mpophomeni township area of KwaZulu-Natal. This study examines the prevalence and content of food advertisements aimed at children in both traditional and digital media. It looks at how these advertisements influence children's dietary preferences, consumption patterns, and overall health. Furthermore, the study examines the CPA's legal provisions directed at protecting consumers, particularly children, from deceptive and harmful advertising practices. The findings reveal a concerning link between exposure to unhealthy food advertising and childhood obesity, emphasising the critical need for regulatory intervention. The CPA, with its provisions on false and misleading advertising, provides a potential legal foundation for mitigating the detrimental impact of food marketing on children. However, enforcement challenges and discrepancies in existing legislation require attention. The article concludes by emphasising the significance of comprehensive policy approaches guided by empirical research to address foodrelated health concerns amongst children. Recommendations include enhancing regulatory mechanisms under the CPA, particularly those aimed at advertising to children, encouraging industry self-regulation, and boosting media literacy programmes.

Keywords: advertising, children, Consumer Protection Act, health challenges, non-communicable diseases, unhealthy food products



INTRODUCTION

Children have been the target of food industry advertising for the past 100 years (Blades, Oates, Blumberg and Gunter 2014: 1). According to Emond, Bernhardt, Gilbert-Diamond and Sargent (2016: 158), food manufacturers frequently target children under the age of twelve. According to Wood, Williams, Nagarajan and Sacks (2021: 1), the public health community has become increasingly critical of the role that powerful corporations play in encouraging poor diets, which is one of the primary contributors to the global illness burden. Globally, about 38 million children under the age of five years old were overweight in 2019. The number of overweight children increased from 32 million in 1990 to 41 million in 2016, and if this trend continues, the number might reach 70 million globally by 2025 (World Health Organisation 2014). Furthermore, obesity rates are rising across Africa (Rossouw, Grant and Viljoen 2012: 2). According to estimates from the World Obesity Federation, 3.91 million South African children will be overweight by 2025 (Lobstein and Jackson-Leach 2016: 323).

In the past, infectious and parasitic diseases were the leading causes of death, but in recent decades, Noncommunicable diseases (NCDs) have replaced them as the leading cause of death (Budreviciute, Damiati, Sabir, Onder, Schuller-Goetzburg, Plakys, Katileviciute, Khoja, and Kodzius 2020: 4). Obesity is now considered a global health issue that has grown over the past few decades in both developing and developed countries. According to Wang and Lobstein (2006: 12), one in five children worldwide who have a body mass index of 30 or more are obese, making it the fifth biggest cause of death. In addition, the prevalence of chronic diseases amongst children has increased as a result of the promotion of harmful food products. The majority of South Africans have access to television channels, and food companies advertise on channels that are often seen by South Africans (Mchiza, Temple, Steyn, Abrahams and Clayford 2013: 2214). According to a study by Yamoah, De Man, Onagbiye and Mchiza (2021: 9), advertisers employ a variety of strategies to pique children's appetites for junk food.

One type of marketing strategy used to promote unhealthy food products is advertising (WHO 2016: 1). Advertisers are aware of how important children are to the current market. Evidence suggests that current high sugar, salt and fat (HSSF) food advertising directly influences children's food preferences and consumption, which raises their risk of obesity and NCDs (Cairns, Angus, Hastings and Caraher 2013: 209 and Moodie, Stuckler, Monteiro, Sheron, Neal, Thamrangsi, Lincoln, Casswell and Lancet NCD Action Group 2013: 670). Children are a susceptible group and readily persuaded, thus advertisements for products aimed at them use a variety of techniques (Lavrisa and Pravst 2019: 2 and Rowthorn 2019: 606). According to Harris, Haraghey, Lodolce and Semenza (2017: 2), children are more likely to eat unhealthy snacks after watching advertisements for unhealthy food items. A study by Elliott and Scime (2019: 2) found that children-directed food products may be distinguished by the following characteristics: the inclusion of the word "kid" in the brand name, the product packaging, and the child's preferred television show. Advertisers have also used creative strategies to market their food products to children, including competitions, celebrity endorsements, cartoon animations, the internet, and the inclusion of collectible toys with the purchase of the product (Delport 2015: 17).

According to Russell, Croker and Viner (2019: 554), HSSF foods and other harmful food products receive MUCH exposure in children's media, which promotes unhealthy eating patterns. Obesity has been influenced by the excessive consumption of unhealthy foods and non-alcoholic beverages that are high in saturated fats, trans fats, free sugar and salt (WHO 2018: 6). A study by Kelly et al. (2019: 117) reveals that significant changes in the food system have led to poor dietary habits and an increase in NCDs.

In addition, Rossouw, Grant and Viljoen (2012: 1) state that having an overweight or obese child has a negative effect on their general wellbeing. Children who are overweight or obese are also prone to illnesses and diseases, necessitating the addressing of such public health issues (Russell et al. 2019: 566). Therefore, steps must be taken to address these risk factors (Spires, Sanders, Hoelzel, Delobelle, Pouane and Swart 2016: 39). Studies indicate that children's health problems such as diabetes, cardiovascular disease, stroke, cancer, high blood pressure and other related non-communicable diseases are all correlated with childhood obesity (Sartorius, Sartorius, Taylor, Aagaard-Hansen, Dukhi, Day, Ndlovu, Slowtow and Hofman 2017: 2; Spires et al. 2016: 36; Boyland and Harris 2017: 761). It is also linked to Type 2 diabetes and cardiovascular disorders (Visscher, Lakerveld, Olsen, Kupers, Ramalho, Keaver, Brei, Bjune, Ezquerro and Yumuk 2017: 53). Hence, there is an urgent need to protect, as well as promote, the

health of children through the improvement of the governance of food supplies and the regulation of the advertising of unhealthy food products to children (Lobstein, Jackson-Leach, Moodie, Hall, Gortmaker, Swinburn, James, Wang and McPherson 2015: 2515).

Experts have suggested limits to reduce the quantity of unhealthy food product advertising to children since research has confirmed the enormous volume of advertising directed at children and its detrimental impact on their health (Harris et al. 2017: 1). There is a clear connection between obesity and non-communicable diseases, hence the policy interventions to address the problem are faced with weighing up competing interests (Reddy 2020: 443). The Consumer Protection Act 68 of 2008 (hereinafter referred to as the CPA) aims to promote fairness, openness and good business practices (Fouche 2015: 336), as well as to protect the poor and vulnerable from "exploitation in the marketplace" (Preamble). According to Section 3(1) of the CPA, the Act aims to promote the social welfare of consumers by creating and promoting a consumer market that is, *inter alia*, fair and responsible, particularly for vulnerable consumers. The Act also seeks to empower consumers, set national guidelines and standards for consumer information, forbid deceptive advertising, and outlaw unfair commercial practices (South Africa, Department of Trade and Industry 2008: 2). Hence, there was a need for a study that examines the food-related health challenges of children and the role of the Consumer Protection Act 68 of 2008 in regulating unhealthy food products that target children in South Africa.

AIM AND OBJECTIVES

The aim of this article is to investigate the food-related health challenges of children and the role of the Consumer Protection Act 68 of 2008 in addressing these challenges through the regulation of unhealthy food product advertising. The objectives are to outline the health challenges of children associated with the consumption of unhealthy food products; explore how the advertising of food products influences the types of food products consumed by children; and to examine the relevant provisions of the CPA and other relevant legislation in protecting children as consumers insofar as the advertising of unhealthy food products is concerned.

THEORETICAL FRAMEWORK

McGregor (2017: 5-6) describes distributive justice as the even distribution of wealth and income amongst people in society, and notes also that social justice is concerned with taking the right actions so that everyone will benefit. Social justice is present when everyone gets equal access, as it demands a free-market system regulated by a legal and political framework that prevents excessive concentrations of wealth and property (Rawls 2001: 44). Carreau (2011: 12) describes social injustice in terms of inequality. When it comes to the advertising of food products to children, the relationship between children and the food industry is not on an equitable basis.

A lack of social justice in the marketplace has a negative impact on "consumer justice" due to the fact that citizens are left voiceless and helpless (McGregor 2017: 7). As children fall into a vulnerable group, the inequality relating to the challenges arising from food advertising to children needs to be addressed. Hence, this study adopts the Social Justice Theory as a theoretical framework. When businesses advertise food products to children, the relationship between the children and the food industry is not on an equitable basis. Children lack the maturity to understand the harmful effects of advertising. Hence, the CPA in its preamble confirms that, as a piece of social justice legislation, it aims to promote the social-economic welfare of consumers, including children. Section 3 of the Act (South Africa 2008) acknowledges that children are a vulnerable group.

Social justice has been chosen as a theoretical framework in this study because of the central role it occupies in the transformation agenda in South Africa. The importance of social justice in South Africa is highlighted in the preambles of the Constitution, the CPA and the Children's Act 38 of 2005. In order to "create a society founded on democratic values, social justice and fundamental human rights", the Constitution's preamble states that it aspires to "heal the divisions of the past", whereby all citizens are equally protected by the law, thereby improving their quality of life (Statutes of the Republic of South Africa 1996: 1243). Consequently, there is a need to explore the health challenges linked to food product advertising faced by children, as well as the role of the CPA in protecting children in that context from a social justice perspective.

ADVERTISING OF UNHEALTHY FOOD PRODUCTS DIRECTED AT CHILDREN

Choukem, Tochie, Sibetcheu, Nansseu and Hamilton-Shield (2020: 6) assert that multinational corporations aggressively promote unhealthy food items whilst failing to educate the public about the harm that such products does to one's health, as well as the fact that they contribute to childhood obesity. Children in South Africa are becoming more overweight and obese as a result of the promotion of unhealthy food items, which has been observed to cause a number of health issues.

According to Andreyeva, Kelly and Harris (2011: 231), the majority of food advertising seen by children included meals that were high in calories and low in nutrients, and consuming these foods in excess may put children at risk for weight gain. Cairns et al. (2013: 209) and Moodie et al. (2013: 670) point out that current high sugar, salt and fats (HFSS) food advertising directly influences children's food preferences and contributes to obesity and non-communicable diseases (NCDs). Exposure to HFSS food and drink advertising is widespread across several media, particularly amongst disadvantaged groups and in less fortunate places (Yau, Berger, Law, Cornelsen, Greener, Adams, Boyland, Burgoine, de Vocht, Egan and Er 2022: 3). Cairns et al. (2013: 214) state that the advertising of unhealthy food products targets children because they are easily influenced by this type of advertising, and also because they can influence both their parents and their peers.

According to a study by Cassim and Bexiga (2007: 138), advertisers frequently target children because, in comparison to more mature audiences, they are seen as vulnerable buyers. Emond et al. (2016: 158) assert that food manufacturers frequently target children under the age of twelve years old. Children are a susceptible group and readily persuaded, thus advertisements of products for them use a variety of techniques (Lavrisa and Pravst 2019: 2 and Rowthorn 2019: 606).

ADVERTISING AND MARKETING TECHNIQUES AIMED AT CHILDREN

Advertisers use a variety of techniques to convince children to buy particular food items. Food products with high levels of sugar, salt or fat are mostly advertised on television (Delport 2015: 14). Mani (2014: 131) claims that because children cannot tell what is real from what is not, advertisers take advantage of this by using television to market their products to them. Children frequently watch television alone, without an adult nearby to help them understand the marketing message pervading the medium (Linn and Golin 2006: 15). According to a study by Hastings, McDermott, Angus, Stead and Thomson (2006: 23), television advertising dominated the majority of HFSS food advertisements targeted at children in many different countries.

Schools can also be a way for food advertising businesses to influence children's eating habits. Soni (2007: 314) notes that advertisers placed billboards and posters in cash-strapped schools, convincing them to let them in by paying for access to classes and space for their promotional materials.

Other strategies include viral marketing, whereby businesses can encourage children to advertise their items and influence their friends using social media networking platforms, by sharing texts, videos and photos (UNICEF 2018: 16); product placement, i.e. displaying messages about eating habits on web pages (Villegas-Navas, Montero-Simo and Araque-Padilla 2019: 1); and "pester power", where children who have seen advertisements nag their parents into purchasing the product (Delport 2015: 15). Cairns et al. (2013: 213) state that advertisers also make use of celebrities, billboards, online advertising and free samples inside food packaging. Calvert (2008: 209) notes that branded characters are another means of advertising to children, where media figures associated with businesses, such as SpongeBob SquarePants from Nickelodeon, are licensed to appear on products like cereals. According to Delport (2015: 17), other marketing strategies used to attract children are advergames (using digital games), packaging, the internet and celebrity endorsements.

Advertisers make sure that their items are updated frequently and in line with trends so that children may continue buying the newest goods (Lusted 2009: 27).

HEALTH CHALLENGES IN CHILDREN ASSOCIATED WITH OBESITY AND UNHEALTHY FOODS

NCDs are one of the leading causes of death worldwide, particularly in low and middle-income countries like South Africa. Research from around the world increasingly links the rapid changes in the food environment with the rise in chronic disease (Spires et al. 2016: 35). According to a study by Choukem et al. (2020: 6), the increased availability of packaged foods that are cheap for families and high in sugar and saturated fats is to blame for children being overweight and obese.

Children who are overweight or obese are at a significant risk of developing NCDs (Smit, Kassier, Nel and Koen 2017: 129). There is compelling evidence that marketing for unhealthy foods (rich in saturated fat, salt or sugar: HFSS) contributes to overweight and obesity (Murphy, Corcoran, Tatlow-Golden, Boyland and Rooney 2020: 1). According to UNICEF (2018: 7), there is a link between childhood obesity and a number of NCDs. Obesity also contributes to the decline in quality of life and is linked to chronic diseases, including Type 2 diabetes and cardiovascular disorders (Visscher et al. 2017: 53).

Children's consumption of unhealthy food products, affordability and accessibility of these products, and the extensive marketing efforts made by food manufacturers to market such unhealthy food products to children are just a few of the factors that have been identified as contributing to the health challenges in children mentioned above (Wicks 2017: 12). The availability of unhealthy food items on South African school grounds is brought up by Choukem et al. (2020: 6). Evidence suggests that low-income households have less relative access to healthy foods (fresh, unprocessed and nutrient-rich foods) and are more vulnerable to the expense of healthy meals (Sawyer, van Lenthe, Kamphuis, Terragni, Roos, Poelman, Nicolaou, Waterlander, Djojosoeparto, Scheidmeir and Neumann-Podczaska 2021: 2).

A number of studies have shown a correlation between childhood obesity and health problems in children, such as diabetes, cardiovascular disease, stroke, cancer, high blood pressure, and other related non-communicable diseases (Sartorius et al. 2017: 2; Spires et al. 2016: 36; Boyland and Harris 2017: 761). According to the WHO (2018), obesity has serious negative effects on children's health, including cardiovascular disease, insulin resistance, musculoskeletal diseases, several forms of cancer, and disability. Major non-communicable diseases are primarily caused by poor diet and inactivity (Reddy 2020: 443).

As confirmed by Reddy (2020: 443), there is a distinct relationship between obesity and non-communicable diseases. Moreover, additional measures are still needed to reduce children's exposure to such advertisements (Adams, Tyrrell, Adamsom and White 2012: 5). The dietary changes in South Africa have been influenced by a number of techniques used by large food manufacturers to boost the accessibility, acceptance and cost of their products to consumers (Igumbor, Sanders, Puoane, Tsolekile, Schwarz, Purdy, Swart, Durao and Hawkes 2012: 2). The rapid rise in the consumption of foods and beverages with a high fat, sugar or salt content has been related to an increase in overweight and obesity amongst children (WHO 2017: 15). According to Lavrisa and Pravst (2019: 1), exposure to food advertisements frequently has a negative effect on children's dietary intake and can cause health problems in children.

Rapidly increasing HFSS food consumption in low- and middle-income countries has been linked to an increase in the incidence of NCDs (Stuckler, McKee, Ebrahim and Basu 2012: 1). According to Spires et al. (2016: 35), an increasing body of international research links population-level dietary changes over individual characteristics, like knowledge, attitudes and behaviours, to an emerging chronic illness epidemic. The authors believe that environmental policy changes can be useful strategies for establishing more hygienic food settings. Therefore, the views stated above confirm that unhealthy food products do cause children to experience serious health issues. An unhealthy diet increases a child's chance of developing non-communicable diseases (NCDs), which results in hazards that begin in early childhood and last into adulthood. Unhealthy diets are linked to the rising rates of overweight and obesity in children around the world (WHO 2010: 7). Russell et al. (2019: 554) state that children who see advertisements of unhealthy food, consume more, which leads to a rise in childhood obesity. In addition, experts have concluded that the global increase in overweight and diet-related NCDs is the result of a food and beverage environment that encourages unhealthy eating habits (Folkvord and Hermans 2020: 431).

It is evident that exposure to advertising leads to the consumption of unhealthy food products which are harmful to children's health. There is strong evidence that such advertising influences them to make unhealthy food preferences which contribute to unhealthy eating habits and reduced physical participation levels.

THE REGULATION OF UNHEALTHY FOOD ADVERTISING DIRECTED AT CHILDREN

The regulatory measures pertaining to unhealthy food products that target children in South Africa include the relevant provisions of the CPA and regulatory measures that are aimed at the protection of children. An "amendment" to the Foodstuffs, Cosmetics and Disinfectants Act in the form of Regulation R429 (South Africa, Department of Health 2014) was gazetted in 2014, but was not passed into law (Sulcas 2022). Regulation R429 related to the commercial marketing of food and beverage products to children and was intended to ban unhealthy food product marketing to school children (Delport 2015: 27). A further regulatory measure that is relevant is the Codes of Practice of the Advertising Regulatory Board (ARB) (2021). Although the ARB Codes (Appendix J) do provide that food and beverage poor nutritional habits amongst children and that such advertising should accurately reflect the attributes of such products, if such codes are breached, there are no penalties or government intervention (Sulcas 2022).

In terms of its preamble, the CPA seeks to promote and advance the socio-economic welfare of consumers, while in terms of Section 3, the Act seeks to reduce the disadvantages experienced by vulnerable consumers, including children. The relevant provisions of the CPA with respect to food product marketing to children are discussed in the next section.

THE CONSUMER PROTECTION ACT 68 OF 2008 AND FOOD PRODUCT MARKETING TO CHILDREN

The CPA aims to promote the social welfare of consumers by creating and promoting a consumer market that is, *inter alia*, fair and responsible, particularly for vulnerable consumers. Section 3 emphasizes that minors are categorised under the vulnerable group and the aim is to protect children, as children under the age of eight years old are not able to differentiate between a TV programme and an advertisement (Mills 2016: 230).

One of the purposes of the Act is to set general standards for the marketing of goods and services to consumers (Part E: Sections 29-39, South Africa: 2008). The CPA definition of a consumer in Section 1 not only includes the person who concludes a contract for food products, but also includes those who consume them and those to whom they are marketed. Hence, children are protected as consumers.

CONSUMER RIGHTS IN TERMS OF THE CONSUMER PROTECTION ACT THAT HAVE IMPLICATIONS FOR THE MARKETING OF FOOD PRODUCTS TO CHILDREN

A range of consumer rights are granted by the Act, which are applicable to the advertising of food products to children. These are discussed below.

The consumer right to information in plain and understandable language:

Section 22(1) of the CPA states that children have the right to receive information in plain and understandable language, especially in advertisements directed at children; and the child must be able to understand the message that is conveyed by the advertiser. The purpose of this provision is to ensure that a consumer with average literacy

skills and minimal experience (in the position of a child as a consumer) is able to understand the content without any difficulty. Hence, in advertising aimed at children, they assess whether a child is able to understand the content without undue effort (Fouche 2015: 345).

The consumer right in respect of product labelling and trade descriptions:

Section 24(2)(a) of the Act deals with product labelling and trade descriptions. The retailer of goods is, *inter alia*, not allowed to mislead consumers with respect to displayed goods (Fouche 2015: 345). Children, as a vulnerable group, can be misled into believing that there are no risks in consuming unhealthy food products. The Act provides that the Minister may specify that information that is mandatory must be included in the trade description (South Africa, Department of Trade and Industry 2008: 66). Section 24(6) states that any person who produces any goods must display on the packaging of the goods a notice in a prescribed manner and form that discloses the presence of any genetically modified ingredients of those goods in accordance with applicable regulations (South Africa, Department of Trade and Industry 2008: 66). The definition of "trade description" in Section 1 indicates that the supplier has an obligation to include the ingredients of which the goods consist, but there is no specific mention made that it should indicate whether the product is safe or not. This fact highlights the need for explicit legislation relating to overweight, obesity and health risks associated with the consumption of particular unhealthy food products (Reddy 2020: 456).

The consumer right to fair value, good quality and safety:

Section 53 provides the right to fair value, good quality and safety. It identifies a "hazard" as goods that are found to present a risk of personal injury, whilst section 53(1)(d) explains that "unsafe" means particular goods that present an extreme risk of personal injury to the consumer (South Africa, Department of Trade and Industry 2008: 106). As seen above, unhealthy food products are seen as contributory causes to overweight and obesity amongst children, which leads to NCDs. Although children have the right to food products that are safe and of good quality, the consumer's right to safe products does not amount to a prohibition on the sale or marketing of unhealthy food products to children. Yet, taking cognizance of the maturity level of children and their ability to understand advertisements, children will still continue to select unhealthy food products despite access to such information (Reddy 2020: 453).

The consumer right to restrict unwanted direct marketing:

Section 11 of the Act specifies the right of consumers to pre-emptively block any unwanted direct marketing (South Africa, Department of Trade and Industry 2008: 46). Direct marketing is defined as marketing whereby a person is approached either by mail, in person or through electronic communications for the sole purpose of being offered to supply goods to a person for any reason (Jacobs, Stoop and van Niekerk 2010: 338). Such a right is also extended to children. However, due to their maturity levels, quite often, they do not discontinue such marketing because they are attracted to the advertising messages. Consequently, it is clear that children are vulnerable and need protection from such marketing through explicit legislation (Reddy 2020: 455).

The consumer right to fair and responsible marketing and promotion:

Suppliers used different techniques to advertise their unhealthy food products, Hence, Section 29 of the Act regulates the various marketing techniques (including those referred to above) so that children as consumers are not mislead, and so that suppliers are prohibited from marketing their products in a manner that could create a false or misleading impression of their product, such as marketing. Moreover, with respect to the right to fair and responsible marketing, Section 40(2) of the Act explains that it is unconscionable for the supplier to take advantage of consumers who are unable to protect their interests due to the inability to understand the language used in the agreement, or ignorance (South Africa, Department of Trade and Industry 2008: 84). Mills (2016: 230) points out that children under the age of eight years old are incapable of differentiating between television programmes and advertisements. Hence, children's lack of understanding and ignorance with respect to advertising would in fact qualify them for protection in terms of this section. The author believes that Section 40 of the CPA, which prohibits unconscionable conduct, could be used to address marketing practices that target children because such practices are unfair and deceptive.

In regulating advertising practices, the child's best interests are always the highest priority. Delport (2015: 16) confirms that in South Africa, limited research is available on advertising directed at children who are seen as vulnerable consumers and who are at a higher risk of being exploited. When looking at Africa, South Africa has the highest obesity rates. Although studies have investigated the effects of such unhealthy food product advertising on children from disadvantaged areas, particularly in townships in KZN. There is also a gap as far as investigating the role of the CPA in protecting such children as consumers, from the effects of unhealthy food product advertising. Hence, this study investigates the food-related health challenges of children in the Mpophomeni Township area, the advertising of unhealthy food products and the role of the CPA in addressing such challenges.

METHODOLOGY

This study adopted the quantitative method. A descriptive research design was used in terms of which quantitative data was collected to describe the health challenges faced by children, the unhealthy food products they consume and the food product advertising they are exposed to. The target population for the study was parents of children (who are twelve years old or under) in the Mpophomeni township area in the uMngeni Municipality of KwaZulu-Natal. According to the statistics of Census 2011, the township had approximately 25 732 people (Statistics South Africa 2011). However, there are no available statistics with respect to the number of parents in the selected area.

The sample size was guided by the sample size table of Sekaran and Bougie (2016: 263), which suggests that if the population is between 20 000 and 30 000, a sample of 377 is sufficient to draw conclusions from. Hence, the sample size for this study was 377 respondents from the Mpophomeni Township area. The study used the non-probability sampling methods, namely convenience sampling (i.e. individuals who were accessible and available to participate in the study were selected) and purposive sampling (individuals who were parents with children under the age of twelve years old were selected). Data was collected from parents through an online survey using self-administered questionnaires to explore the food-related health challenges of children and the role of the CPA in addressing these challenges. A link was distributed via email by school principals in the area to parents on their database. The link was also distributed amongst available parents who then shared the link with other parents. A total of 377 guestionnaires were administered. A pre-test of the questionnaire was conducted amongst 17 individuals to ensure the clarity of the questions, and to remove possible ambiguities. The questionnaire used mostly closed-ended questions, including five-point Likert scale questions to determine the degree to which respondents agreed or disagreed with relevant statements. The items on the Likert scale were derived from the existing literature. The statistician tabulated the Cronbach's alpha scores for each of the questionnaire's items. For newly developed constructs, a reliability coefficient of 0.7 or above is regarded as "acceptable" (Bryman 2012: 170). All sections' dependability scores were higher than the suggested Cronbach's alpha value. This demonstrated a level of respectable, consistent scoring for these study parts. As a result, reliability was acceptable. The software package SPSS version 27.0 was used to analyse the data using factor analysis.

In a quantitative study, probability sampling is utilized because the sample is helpful when the researcher wishes to develop a generalisation (Leavy 2017: 78). Kumar (2014: 244) states that non-probability sampling means that some members of the target population have a chance of being chosen, but others do not because they are not present when the sample is assembled. This was done to ensure that bias was minimized and assisted to avoid any bias and ensure that the sample represents the larger population. Furthermore, anonymity and confidentiality ensured that the participants responses are more likely to be honest and unbiased

ETHICAL CONSIDERATIONS

In conducting this study, a number of ethical considerations had to be taken, including the fact that the data collected is confidential and will strictly be used for the purposes of the study; the questionnaires were anonymous; there was no risk of harm to the participants; and participation was voluntary, i.e. there was no form of coercion on respondents to participate. Ethical clearance was granted by the Institutional Research Ethics Committee. This approval ensures that the research adheres to ethical principles and guidelines, as well as the safety of individuals involved in the study.

DELIMITATIONS

This quantitative study entailed a survey amongst parents with children under the age of twelve years old in the Mpophomeni township area, KZN.

VALIDITY AND RELIABILITY

In this study, the Cronbach alpha test was used to determine reliability. A measure's reliability is its degree of consistency, calculated by taking multiple measurements of the same individuals under the same circumstances (Wilson and Shuttleworth 2019). For a freshly developed construct, a reliability coefficient of 0.60 or above is regarded as "acceptable". The reliability scores for all sections of the instrument exceeded the recommended Cronbach's alpha value.

FACTOR ANALYSIS

Factor analysis was used to assess validity. Data reduction is the primary objective of the statistical technique known as factor analysis. When conducting survey research, factor analysis is frequently used to represent a large number of questions with a few fictitious factors. Principal component analysis was used for the extraction process, and Varimax with Kaiser Normalization was used for the rotation process.

The results for the Kaiser-Meyer-Olkin (KMO) and the Bartlett's test show that all of the conditions are satisfied for factor analysis, that is, the KMO Measure of Sampling Adequacy value should be greater than 0.500 and the Bartlett's Test of Sphericity sig. value should be less than 0.05. Factor analysis was undertaken only for the Likert- scale items.

Factor loading and analysis reveal the correlations between the variables. Items of questions with comparable loading imply measurement along the same axis. In cases where items cross-loaded at greater than this value, an analysis of the content of those items loading at or above 0.5 (and using the higher or highest loading in those cases) and effectively measured along the various components. Table 1 below shows the rotated component matrix for the unhealthy food product advertising that respondents' children are exposed to, and their effects.

TABLE 1: ROTATED COMPONENT MATRIX: UNHEALTHY FOOD PRODUCT ADVERTISING THAT RESPONDENTS' CHILDREN ARE EXPOSED TO AND THEIR EFFECTS

C11	Component	
CTI	1	
My children are exposed to advertising of foods that are harmful to their health, such as high sugar, salt and saturated fats (HSSF foods).	0.886	
The majority of food advertisements viewed by my children contain unhealthy foods, such as fast foods and sweets.	0.900	
I do not have control over the advertising that my children may be exposed to on TV and the internet.	0.865	
Advertising has influenced my child/children to consume unhealthy foods products such as chocolate bars, sugary drinks and fried foods.	0.871	
The colourful packaging with cartoons that are used to advertise sugary products, influence my children to choose unhealthy foods.	0.896	
Extraction Method: Principal Component Analysis.		

1 components extracted.

Source: Authors' own compilation

All of the sections' individual phrases loaded flawlessly along a single component. This suggests that the statements that made up these sections accurately measured the things they were intended to test.

In the Rotated Component Matrix for health challenges linked to unhealthy food choices, the correlation between the following variables were tested: unhealthy diets are linked with the increased rate of health challenges in children (0.836); my children have gained weight due to consuming nutritionally poor foods (0.902): my children's health challenges are related to the unhealthy foods they consume (0.917); and consuming soft drinks has contributed to my children putting on weight (0.906). Again, all of this section's individual phrases loaded flawlessly along a single component.

FINDINGS AND DISCUSSION

The quantitative study entailed a survey using questionnaires that were sent to parents with children below the age of twelve years old. The three main themes that the questionnaire focussed on were: the health challenges of children and unhealthy food product consumption; the impact of unhealthy food advertising on children; and the role of the CPA and related legislation in protecting children as consumers. The findings from the empirical study are set out below in terms of the specific themes.

THE HEALTH CHALLENGES OF CHILDREN AND UNHEALTHY FOOD PRODUCT CONSUMPTION

With respect to the various health challenges of children linked to unhealthy food product consumption, Table 2 below shows the results.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Chi Square p-value
Overweight and obesity	11.9%	8.5%	13.8%	34.0%	31.8%	< 0.001
Heart disease	10.6%	8.8%	16.2%	32.4%	32.1%	< 0.001
High Blood pressure	10.6%	8.2%	13.3%	31.0%	36.9%	< 0.001
Diabetes	9.0%	13.8%	16.2%	28.9%	32.1%	< 0.001
Asthma	9.5%	7.4%	15.9%	33.7%	33.4%	< 0.001
Sleeping disorder	10.6%	6.4%	8.0%	31.8%	43.2%	< 0.001

TABLE 2: HEALTH CHALLENGES LINKED TO UNHEALTHY FOOD CHOICES

Source: Authors' own compilation

As indicated in Table 2 above, the majority of respondents agreed that there was a link between the consumption of unhealthy food products and specific non-communicable diseases (NCDs) (namely: overweight and obesity – collectively 65.8% agreed or strongly agreed; heart disease – 64.5%; high blood pressure – 67.9%; diabetes – 61%; asthma – 67.1%; and sleeping disorders – 75%). The majority also confirmed that their children have gained weight due to consuming nutritionally poor foods and that their health challenges are related to the unhealthy foods they consume.

NON-COMMUNICABLE DISEASES THAT THE RESPONDENTS' CHILDREN SUFFER FROM

The respondents were asked to indicate the NCDs that their children suffer from. The findings, as shown in Figure 1 above, indicate that almost half the respondents had children with at least one or more of the non-communicable diseases mentioned. The increased consumption of HFSS foods in low- and middle-income countries is rapidly rising and has been associated with the increasing incidence of NCDs (Stuckler et al. 2012: 1). The findings also indicate that a significant proportion of the respondents had children who were overweight or obese (34.0%) or had sleeping disorders (22.3% of the respondents). Smit et al. (2017: 129) explain that children being overweight and obese is a high-risk factor for non-communicable diseases (NCDs). It is also significant that a small proportion had asthma

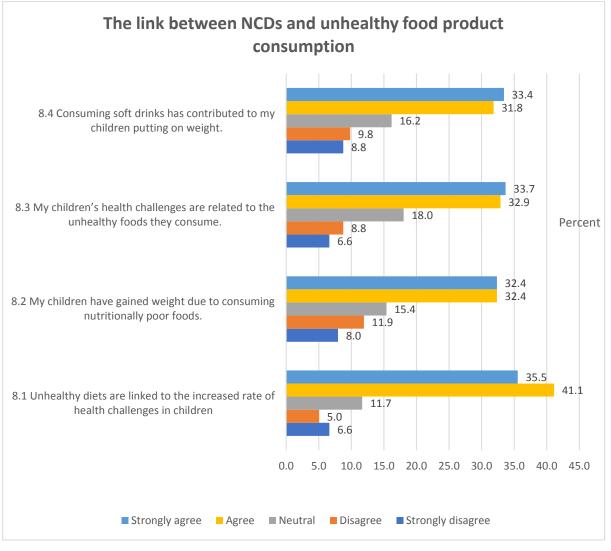
(10.9%), diabetes (6.4%) or high blood pressure (8%). Ebbeling, Pawiak and Ludwig (2002: 473) suggest that such children have a greater chance of developing health problems and Delport (2015: 2) explains that South Africa is also currently struggling with a rapid increase in health challenges amongst children.

THE FREQUENCY OF RESPONDENTS' CHILDREN HAVING FOOD FROM FAST-FOOD OUTLETS, TAKE-AWAYS AND RESTAURANTS

Significantly more respondents (44.8%) indicated that their children ate food from fast-food outlets, take-aways and restaurants more than 4 times a month (p < 0.001), while some (32%) ate 2-4 times a month and the remainder (23%) ate once a month. Hence, all the respondents indicated that their children did in fact eat food from fast-food outlets, take-aways and restaurants.

THE LINK BETWEEN NCDS AND UNHEALTHY FOOD PRODUCT CONSUMPTION

The respondents were asked to indicate their level of agreement with statements on the link between NCDs and the consumption of unhealthy food products. Figure 1 below shows the results.



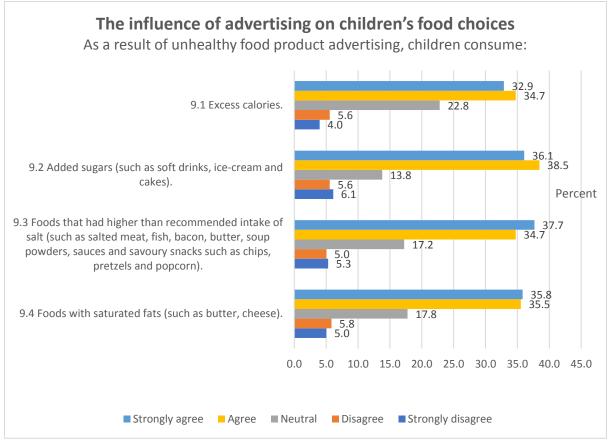
Source: Authors' own compilation

FIGURE 1: THE LINK BETWEEN NCD AND UNHEALTHY FOOD PRODUCT CONSUMPTION

The majority of respondents agreed (collectively, 76.6% agreed/strongly agreed) that there was a link between NCDs and the consumption of unhealthy food products. The majority also agreed that their children have gained weight due to consuming nutritionally poor foods (64.8%); that their children's health challenges are related to the unhealthy foods they consume (66.6%); and that consuming soft drinks has contributed to their children putting on weight (65.2%). It is also significant that a small proportion of the respondents in each case believed that there was no link between NCDs and unhealthy food product consumption. The WHO (2010: 4) maintains that the high consumption of HFSS foods is categorised as an unhealthy diet linked to children being overweight and obese, which in turn increases the chance of them developing NCDs. Kraak, Vandevijvere, Sacks, Brinsden, Hawkes, Barquera, Lobstein and Swinburn (2016: 540) point out that poor-nutrient diets have contributed to weight gain in children and this has had a negative impact on their health.

THE INFLUENCE OF ADVERTISING ON CHILDREN'S FOOD CHOICES

The respondents were asked to indicate their level of agreement in respect of statements relating to the influence of advertising on children's food choices. The results are presented in Figure 2 below.



Source: Authors' own compilation

FIGURE 2: THE INFLUENCE OF ADVERTISING ON CHILDREN'S FOOD CHOICES

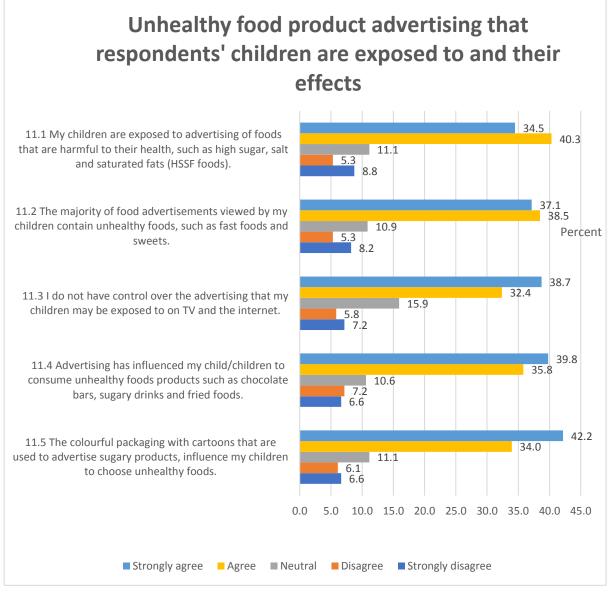
The majority of respondents agreed that, as a result of unhealthy food product advertising, children end up consuming excess calories (collectively, 67.6% agreed/strongly agreed), added sugars (74.6%), foods that had higher than the recommended intake of salt (72.4%) and foods with saturated fats (71.3%). UNICEF (2018: 4) confirms that the advertising of unhealthy food products does affect children's food preferences, while Gorton (2011: 2) observes that it has an effect on the amounts of food eaten by them. A study by Chou, Rahad and Grossman (2008: 600) found a link between fast-food television advertising and the steady rise in childhood obesity. Russell et al. (2019: 566) state that the advertising of food products on platforms such as television increases children's intake of unhealthy food products, which results in long-term effects on their health.

NUMBER OF HOURS THAT CHILDREN SPENT ON WATCHING TELEVISION/ THE INTERNET

The respondents were asked to indicate the number of hours that their children spent watching television or on the internet. The majority (collectively 54.6%) indicated that their children spent 5 or more hours watching television or using the internet. In addition, a significant proportion (42.4%) indicated that their children spent more than 6 hours watching television/ on the internet. Villegas-Navas et al. (2019: 2) highlight that children spend much time watching cartoons which are associated with specific product placements that influence their eating patterns.

UNHEALTHY FOOD PRODUCT ADVERTISING THAT THE RESPONDENTS' CHILDREN ARE EXPOSED TO AND THEIR EFFECTS

The respondents were asked to indicate their level of agreement on statements about unhealthy food product advertising that their children are exposed to. Figure 3 below shows the results.



Source: Authors' own compilation

FIGURE 3: UNHEALTHY FOOD PRODUCT ADVERTISING THAT RESPONDENTS' CHILDREN ARE EXPOSED TO AND THEIR EFFECTS

As shown in Figure 3 above, the majority of respondents agreed that their children are exposed to advertising of foods that are harmful to their health (collectively 74.8% agreed or strongly agreed); that they do not have control over the advertisements that their children were exposed to on TV and the internet (71.1%); that advertising made their children consume unhealthy food products, such as chocolate bars, sugary drinks and fried foods (75.6%); and that the colourful packaging with cartoons used to advertise sugary products influenced their children to choose unhealthy foods (76.2%). Food promotions do have an influence on children's food choices, purchasing influence, and on consumption (Hastings et al. 2006: 32; Kraak, Gootman and McGinnis (2006: 26).

ADVERTISING MEDIA/TECHNIQUES USED BY FOOD ADVERTISERS TO INFLUENCE CHILDREN'S FOOD CHOICES

Television (88.1%) was the leading technique used to target children, while freebies (44.3%) and cartoon characters (43.2%) were also commonly used. Some respondents believed that packaging (28.9%), branding (17.5%) and radio (16.2%) were other techniques used.

THE NECESSITY OF MEASURES TO PROTECT CHILDREN FROM UNHEALTHY FOOD PRODUCT ADVERTISING

On the necessity for measures to protect children from the effects of unhealthy food product advertising, the majority agreed that the present restrictions placed on unhealthy food advertising to children were not adequate (collectively, 73.2% agreed/strongly agreed)); that more interventions were needed to protect children from unhealthy food advertising (81.7%); and that there was an urgent need to protect children from the advertising of unhealthy food products, particularly on television and the internet (80.3%). The majority also agreed that children lacked the maturity to understand the harmful effects of advertising (80.4%); that the advertising of unhealthy food products to children should be prohibited in terms of legislation (74.5%); that the health challenges of children linked to food product advertising needs to be addressed (82.2%); and that consumer education was needed for parents and children insofar as the advertising of food products are concerned (83%). According to Cassim and Bexiga (2007: 139), children do not necessarily understand advertisements, but they are more vulnerable to the effects of such advertising.

RESPONDENTS' AWARENESS OF LEGISLATION PROTECTING CHILDREN AS CONSUMERS

Although the majority of the respondents were aware of the legislation protecting children as consumers, a significant proportion (28.4%) were not aware.

RESPONDENTS' AWARENESS OF CONSUMER RIGHTS IN TERMS OF THE CONSUMER PROTECTION ACT 68 OF 2008 PROTECTING CHILDREN

The majority were not aware of certain consumer rights contained in the Consumer Protection Act 68 of 2008 that protected children, namely the right to privacy (67.1% were not aware); the right to fair and responsible marketing (67.9%); the right to fair value, good quality and safety (62.2%); and the right to disclosure of risks in food, i.e. suppliers are not allowed to mislead consumers by making them believe that products are healthy for them when in fact they are not (66.6%).

MEASURES THAT SHOULD BE ADOPTED TO PROTECT CHILDREN FROM UNHEALTHY FOOD PRODUCT ADVERTISING

The measures suggested by respondents to protect children from unhealthy food product advertising included the following:

Restrictions on advertising:

The measures suggested included restrictions on unhealthy food advertising; prohibit cartoon advertising and free toys aimed at children; include health risks when unhealthy food is being advertised; block advertisements during children's shows on television and the internet; and unhealthy food advertising should be prohibited during children's viewing time and on children's channels, instead there should be healthy food advertising.

Furthermore, there should be strict regulation of advertising hours and content aimed at children. Further, fines and taxes should be implemented on unhealthy food product advertising.

Labels on packaging requirements:

Food and beverage product labels should clearly state the health risks on packaging, as businesses use words to mislead consumers. Labels must also disclose all NCD risks to the consumer associated with consuming the product. Furthermore, there is a need for information on food labels and products to be in plain language so that parents fully understand what such foods contain.

Measures relating to other business practices:

Restaurants must take sugary drinks off their children's menus; retail store check-out areas should be free of candy, sugary drinks and other low nutrition food items; and the sale of low-nutrition foods and beverages should be prohibited in venues frequented by children.

Additional legislation/regulation:

Respondents identified the need for additional legislation to protect children and prohibit unhealthy food advertisements aimed at them. They also suggested that food and beverage industries should adopt voluntary pledges and self-regulation.

Measures focussing on parents and children as consumers:

Respondents recognized the need for consumer education for parents and children; parental control over what their children were exposed to during television viewing time and the use of the internet; parental responsibility to avoid making unhealthy/non-nutritive food products available to their children; and that parents need to read food labels. They also pointed out that parents have a responsibility to avoid buying foods with unhealthy ingredients. Respondents felt that there was a need to educate children about the dangers of unhealthy food products and non-communicable diseases, and further, that children should know their rights under the CPA.

Awareness campaigns and workshops:

An overwhelming majority (97.6 %) indicated that there was a need for consumer education for parents and children in townships. The respondents stated that parents need to be educated so that they can be empowered to protect their children from food-related health challenges. They also saw the need for workshops to make parents more aware of the health challenges of unhealthy foods; how advertisers lure children into buying their unhealthy food products; and on the importance of the CPA and how it protects children's rights.

CONCLUSIONS AND RECOMMENDATIONS

The empirical study entailed a survey using questionnaires administered to parents in the Mpophomeni township area. The following conclusions are drawn:

The health challenges of children and unhealthy food product consumption:

NCDs, such as heart disease, high blood pressure, diabetes, asthma, sleeping disorder and overweight and obesity, were all linked to unhealthy food choices; the children suffered from at least one or more of the non-communicable diseases mentioned; the children of respondents (parents in Mpophomeni) consumed fast-food more than four times a month; and there is a perception amongst parents that they have gained weight due to consuming nutritionally poor foods; and that soft drinks have contributed to their children putting on weight.

The impact of unhealthy food product advertising on children:

Parents perceive unhealthy food product advertising as contributing to their children consuming excess calories; added sugars; foods that had higher than the recommended intake of salt; and foods with saturated fats that are advertised. This is similar to the view of the WHO (2010: 7) that an unhealthy diet also places children at greater risk of getting non-communicable diseases (NCDs). Children spent 5 hours per day and more viewing television or on the internet. In addition, children were exposed to the advertising of foods that are harmful to their health; food advertisements viewed by children contained unhealthy foods; respondents do not have control over the advertisements that their children were exposed to on television and the internet; advertising made their children consume unhealthy food products such as chocolate bars, sugary drinks and fried foods; and colourful packaging with cartoons used to advertise sugary products influenced their children to choose unhealthy foods.

Protection of children as consumers in disadvantaged areas:

Children in the Mpophomeni township, which is a disadvantaged area, are faced with health challenges linked to the consumption of unhealthy and they lacked an understanding of the harmful effects of advertising, which points to social injustice against a vulnerable group that needs to be addressed.

The adequacy of consumer-related legislation in protecting children as consumers:

Parents lacked awareness of the consumer rights protecting children as listed in the CPA.

The adequacy of existing legislation and the need for measures to protect children from unhealthy food product advertising:

The health challenges of children that are linked to food product advertising needs to be addressed as children lacked the maturity to understand the harmful effects of such media. Furthermore, it is clear that present restrictions on unhealthy food advertising to children are inadequate and that there is a need for the advertising of unhealthy food products to children to be prohibited. Moreover, consumer education was needed for parents and children. Galbraithe-Emami and Lobstein (2013: 972) observed that statutory regulation does have the potential of reducing children's exposure to the marketing of unhealthy food products.

Possible measures to protect children from unhealthy food product advertising:

Consumer education is needed for parents and children in as far as the advertising of food products to children is concerned; children and parents should be educated about NCDs and the harmful effects of unhealthy food advertising; labels on food products must be in plain language and disclose the risks associated with unhealthy food products; and parents should be proactive and restrict the food products they purchase and monitor what their children consume. More voluntary measures and pledges by food and beverage industries need to be adopted and implemented. The advertising of unhealthy food products to children, especially in disadvantaged areas, should include explicit protective measures and mechanisms. Hence, intervention measures for the regulation of unhealthy food product advertising plays an important role in addressing the food-related challenges experienced by children.

Implications of the study:

The study examined the impact of advertising regulations on children's health and the role of the Consumer Protection Act (CPA) relating to advertisers who do not adhere to the requirements. It highlights the need for the enforcement of CPA provisions and other legislation to prevent health issues for children in underprivileged areas. The research, conducted in Mpophomeni township, contributes to the concept of social justice and highlights the need for change and equality for all children. The advertising of unhealthy food products has serious consequences for children, particularly in disadvantaged areas such as Mpophomeni. Children in such areas lacked the understanding of the harmful effects of advertising. NCDs in children, such as heart disease, high blood pressure, diabetes, and overweight and obesity, have all been linked to unhealthy food choices. Unhealthy food product advertising plays a role in such unhealthy food choices. Parents do not have control over advertisements that children are exposed to which influences them to choose unhealthy foods. Present restrictions on food advertising to children are not adequate. Intervention measures to regulate unhealthy food product advertising is clearly required to protect children as vulnerable consumers. Businesses should be restricted or fined for promoting sales practices that prioritize profit over children's health, as children are vulnerable consumers who require constant protection. This would help decrease NCDs amongst children and protect them from harm.

The study highlighted the health challenges that children face due to unhealthy food advertising techniques. It also highlights the exploitation of vulnerable groups, lack of understanding of harmful effects, and undermined children's rights. The study recommends raising awareness about advertisers, consumer protection rights, legislation regulation, and punishment for infringing laws. It also calls for further research and a national study in South Africa to address children's consumer protection rights, unhealthy food products, and advertising.

REFERENCES

- Adams, J., Tyrrell, R., Adamson, A.J. and White, M. 2012. Effect of restrictions on television food advertising to children on exposure to advertisements for "less healthy" foods: Repeat cross-sectional study. Available: https:// doi/org/10.1371/journal.pone.0031578 (Accessed 21 February 2021).
- Advertising Regulatory Board. 2021. Code of Advertising Practice. Available: ADVERTISING_STDS_Issue15.PDF (arb.org.za) (Accessed: 17 September 2023).
- Andreyeva, T., Kelly, I.R. and Harris, J.L. 2011. Exposure to food advertising on television: Associations with children's fast food and soft drink consumption and obesity. *Economics and Human Biology*, 9: 221-233.
- Blades, M., Oates, C., Blumberg, F. and Gunter, B. 2014. *Advertising to children: New directions, new media.* 1st ed. Basingstoke: Palgrave Macmillan.
- Boyland, E. J. and Harris, J. L. 2017. Regulation of food marketing to children: Are statutory or industry selfgoverned systems effective? *Public Health Nutrition*, 20(5): 761-764. Available: https://www.cambridge.org (Accessed 25 February 2020).
- Bryman, A. 2012. Social research methods. 4th ed. New York: Oxford University Press.
- Budreviciute, A., Damiati, S., Sabir, D.K., Onder, K., Schuller-Goetzburg, P., Plakys, G., Katileviciute, A., Khoja, S. and Kodzius, R., 2020. Management and prevention strategies for non-communicable diseases (NCDs) and their risk factors. *Frontiers in Public Health*, 8: 1-11.
- Cairns, G., Angus, K., Hastings, G. and Caraher, M. 2013. Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary. *Appetite*, 62: 209-215.
- Calvert, S.L. 2008. Children as consumers: Advertising and marketing, 18(1): 205-234.
- Carreau, S. 2011. *Consumers and access to justice: One stop shopping for consumers?* Available: http:// uniondesconsommateurs.ca/docu/protec-conso/02-Tribunaconsommation-e2.pdf. (Accessed 25 March 2020).
- Cassim, S. B. and Bexiga, D. 2007. The regulation of advertising to children. A comparative assessment. *Alteration*, 14(1): 137-165. Available: http://alteration.ukzn.ac.za (Accessed 21 February 2020).

- Chou, S., Rahad, I. and Grossman, M. 2008. Fast-food restaurant advertising on television and its influence on childhood obesity. *The Journal of Law and Economics*, 51 (4): 599-618.
- Choukem, S.P., Tochie, J.N., Sibetcheu, A.T., Nansseu, J.R. and Hamilton-Shield, J.P. 2020. Overweight/obesity and associated cardiovascular risk factors in sub-Saharan African children and adolescents: A scoping review. *International Journal of Pediatric Endocrinology*, 6: 1-13. Available: https://doi/10.1186/s13633-020-0076-7 (Accessed 24 August 2020).
- Delport, J. E. 2015. *Branding and cartoon character usage in food marketing to children: The South African picture.* M. Tech., North- West University. Available: https://respiratory.nwu.ac.za (Accessed 19 February 2020).
- Ebbeling, C.B., Pawiak, D.B. and Ludwig, D.S. 2002. Childhood obesity: Public-health crisis, common sense cure. *Lancet*, 360: 473-482.
- Elliott, C. and Scime, N.V. 2019. Nutrient profiling and child-targeted supermarket foods: assessing a "Made in Canada" policy approach. *International journal of environmental research and public health*, 16(4): 1-12.
- Emond, J.A., Bernhardt, A.M., Gilbert-Diamond, D.L.Z. and Sargent, J.D. 2016. Commercial television exposure, fast food toy collecting, and family visits to fast food restaurants among families living in rural communities. *The Journal of Pediatrics*, 168: 158-163.
- Folkvord, F. and Hermans, R.C. 2020. Food marketing in an obesogenic environment: a narrative overview of the potential of healthy food promotion to children and adults. *Current Addiction Reports*, 7: 431-436.
- Galbraith-Emami, S. and Lobstein, T. 2013. The impact of initiatives to limit the advertising of food and beverage products to children: A systematic review. *Obesity reviews,* 14: 960-974. Available: https://doi:10/1111/obr.12060 (Accessed 8 September 2020).
- Gorton, D. 2011. *Advertising to children background paper*. Available: https://www.heartfoundation.org.za (Accessed 12 September 2020).
- Harris, J.L., Haraghey, K.S., Lodolce, M. and Semenza, N.L. 2017. *Teaching children about good health? Halo effects in child-directed advertisements for unhealthy food.* Available: https://doi:10.1111/ijpo.12257 (Accessed 23 August 2020).
- Hastings, G., McDermott, L., Angus, K., Stead, M. and Thomson, S. 2006. *The extent, nature and effects of food promotion to children: A review of the evidence technical paper prepared for the World Health Organisation.* Geneva: World Health Organisation Press.
- Igumbor, E.U., Sanders, D., Puoane, T.R., Tsolekile, L., Schwarz, C., Purdy, C., Swart, R., Durao, S. and Hawkes, C. 2012." Big food", the consumer food environment, health and the policy response in South Africa. *PLoS Medicine*, 9(7): e1001253. Available: https://doi:10.1371/journal.pmed.1001253 (Accessed 24 August 2020).
- Jacobs, W., Stoop, P. and van Niekerk, R. 2010. Fundamental consumer rights under the Consumer Protection Act 68 of 2008: A critical overview and analysis. *PER/PELJ*, 13(3): 302-508.
- Kelly, B., Vandevijvere, S., Sacks, G., Adams, J., Allemandi, L., Bachena-Espina, L., Barquera, S., Boyland, E., Calleja, P., Carmona-Garces, I.S., Castronuovo, L., Cauchi, D., Correa, T., Corvalan, C., Cosenza-Quintana, E. L., Fernandez-Escobar, C., Gonzalez-Zapata, L. I., Halford, J., Jaichuen, N., Jensen, M. L., Karupaiah, T., Kaur, A., Kroker-Lobus, M. F., Mchiza, Z., Miklavec, K., Parker, W., Kent, M. P., Pravst, I., Ramirez-Zea, M., Reiff, S., Reyes, M., Royo-Bordonada, M. A., Rueangasom, P., Scarborough, P., Tiscornia, M. V., Toentino-Mayo, L., Wate, J., White, M., Zamora-Corrales, I., Zeng, L. and Swinburn, B. A. 2019. Global benchmarking of children's exposure to television advertising of unhealthy foods and beverages across 22 countries. *Obesity Reviews*, 20(S2): 116-128. Available: https://doi.org/10.1111/obr.12840 (Accessed 5 March 2020).
- Kraak, V.I., Gootman, J.A. and McGinnis, J.M. eds. 2006. *Food marketing to children and youth: threat or opportunity?*. National Academies Press.
- Kumar, R. 2014. Research methodology: A step-by-step for beginners. 4th ed. London: Sage Publications.

- Lavrisa, Z. and Pravst, I. 2019. Marketing of foods to children through food packaging is almost exclusively linked to unhealthy foods. *Nutrients*, 11(1128): 1-11. Available: https://doi:10.3390/nu11051128 (Accessed 25 August 2020).
- Leavy, P. 2017. *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches.* New York: The Guilford Press.
- Linn, S. and Golin, J. 2006. Beyond commercials: How food marketers target children. *Loyola of Los Angeles Law Review*, 39(13): 13-32. Available: https://www.digitalcommons.lmu.edu/11r/vol39/iss1/2. (Accessed 30 March 2021).
- Lobstein, D.T. and Jackson-Leach. 2016. Planning for the worst: Estimates of obesity and comorbidities in schoolage children in 2025. *Pediatric Obesity*, 11: 321-325.
- Lobstein, T., Jackson-Leach, R., Moodie, M.L., Hall, K.D., Gortmaker, S.L., Swinburn, B.A., James, W.P.T., Wang, Y. and McPherson, K. 2015. Child and adolescent obesity: Part of a bigger picture. *Lancet*, 385: 2510-2520.
- Lusted, M. A. 2009. Advertising to children. Minnesota: ABDO Publishing company.
- Mani, V. 2014. Advertising to Kids Rationales & Issues. *Research Journal of Social Science and Management*, 4(8): 131-137.
- McGregor, S. L. T. 2017. Conceptualizing consumer justice. *McGregor Monograph Series*, 201703. Seabright, N. S: McGregor Consulting Group. Available: http://www.consultmcgregor.com (Accessed 10 March 2020).
- Mchiza, Z.J., Temple, N.J., Steyn, N.P., Abrahams, Z. and Clayford, M. 2013. Content analysis of television food advertisements aimed at adults and children in South Africa. *Public Health Nutrition*, 16(12): 2213-2220.
- Mills, L. 2016. Considering the best interest of the child when marketing food to children: An analysis of the South African Regulatory Framework. LLD, Stellenbosch University. Available: https://scholar.sun.ac.za (Accessed 29 February 2020).
- Moodie, R., Stuckler, D., Monteiro, C., Sheron, N., Neal, B., Thamrangsi, T., Lincoln, P., Casswell, S. and Lancet NCD Action Group. 2013. Profits and pandemics: Prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *Lancet*, 381(9867): 670-679.
- Murphy, G., Corcoran, C., Tatlow-Golden, M., Boyland, E. and Rooney, B. 2020. See, like, share, remember: adolescents' responses to unhealthy-, healthy-and non-food advertising in social media. *International journal of environmental research and public health*, 17(7): 1-25.
- Rawls, J. 2011. *Justice as fairness: A restatement.* Cambridge, Massachusetts: Harvard University Press. Available: https://www.scribd.com (Accessed 25 March 2020).
- Reddy, K. 2020. Protecting children as consumers: obesity and the regulation of unhealthy food product marketing in South Africa, *Journal of South African Law:* 3: 441-459.
- Rossouw, H.A., Grant, G.C. and Viljoen, M. 2012. Overweight and obesity in children and adolescents: The South African problem. *The South African Journal of Science*, 108(5/6): 1-7. Available: https://doi.org/10.4102/sajs. v108i5/6.907 (Accessed 2 February 2021).
- Rowthorn, D. 2019. Is child advertising inherently unfair? Journal of Business Ethics, 158(3): 603-615.
- Russell, S.J., Crocker, H. and Viner, R.M. 2019. The effect of screen advertising on children's dietary intake: A systematic review and meta-analysis by John Wiley and Sons Ltd on behalf of World Obesity Federation, *reviewed in Obesity Reviews*, 20: 554-568. Available: https://doi.org/10.1111/obr.12812 (Accessed 23 August 2020).

- Sartorius, B., Sartorius, K., Taylor, M., Aagaard-Hansen, J., Dukhi, N., Day, C., Ndlovu, N., Slowtow, R. and Hofman, K. 2017. Rapidly increasingly body mass index among children, adolescents and young adults in a transitioning population, South Africa, 2008- 15. *International Journal of Epidemiology*, 1(1): 1-11. Available: https://academic.oup.com/ije/advance-article-abstract/doi/10.1093/ije/dyx263/4745803 (Accessed 20 February 2020).
- Sawyer, A.D., van Lenthe, F., Kamphuis, C., Terragni, L., Roos, G., Poelman, M.P., Nicolaou, M., Waterlander, W., Djojosoeparto, S.K., Scheidmeir, M. and Neumann-Podczaska, A. 2021. Dynamics of the complex food environment underlying dietary intake in low-income groups: a systems map of associations extracted from a systematic umbrella literature review. *International Journal of Behavioral Nutrition and Physical Activity*, 18(1): 1-21.
- Sekaran, U. and Bougie, R. 2016. *Research methods for business: A skill-building approach.* 7th ed. West Sussex: Wiley and sons.
- Smit, Y., Kassier, S., Nel, D. and Koen, N., 2017. The barriers that women face when choosing food for their primary school children: A case study in the Western Cape Province, South Africa. *South African Journal of Child Health*, 11(3): 129-134.
- Soni, S. 2007. Pester power effect of advertising. *International Marketing Conference on Marketing and Society,* 1(1): 313-324.
- South Africa, Department of Health. 2014. *Regulation 429. Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972. Regulations Relating to the Labelling and Advertising of Foods – Amendment.*
- South Africa, Department of Trade and Industry. 2008. *Consumer Protection Act 68 of 2008.* Pretoria: Government Printer.
- Spires, M., Sanders, D., Hoelzel, P., Delobelle, P., Pouane, T. and Swart, R. 2016. *Diet-related non-communicable diseases in South Africa: Determinants and policy responses.* Available: https://journals.co.za (Accessed 29 February 2020).
- Statistics South Africa. 2011. *Census*. Available: https://www.statssa.gov.za/?pageid=3839 (Accessed 23 May 2020).
- Statues of the Republic of South Africa *Constitutional law.* 1996. Constitution of the Republic of South Africa no.108 of 1996. Available: https://www.gov.za (Accessed 23 April 2020).
- Stuckler, D., McKee, M., Ebrahim, S. and Basu, S. 2012. Manufacturing Epidemics: The role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol, and tobacco. *PLoS Medicine*, 9(6): e1001235. Available: https://doi:10.1371/journal.pmed.1001235 (Accessed 23 August 2020).
- Sulcas, A. 2022. *Redefining food safety: SA's laws governing food advertising aimed at children need to be jacked up*. Available: Redefining food safety: SA's laws governing food advertising aimed at children need to be jacked up Redefining food safety: South Africa's laws governing food advertising aimed at children need to be jacked up (dailymaverick.co.za) (Accessed: 16 September 2023).
- UNICEF. 2018. A child rights-based approach to food marketing: A guide for policy makers. Available: https://www. unicef.org/csr (Accessed 12 September 2020).
- Villegas-Navas, V., Montero-Simo, M.J. and Araque-Padilla, R. A. 2019. Investigating the effects of non-branded foods placed in cartoons on children's food choices through type of food, modality and age. *International Journal of Environmental Research and Public Health*, 16(5032): 1-14. Available: https://doi:10.3390/ijerph16245032 (Accessed 24 August 2020).
- Visscher, T.L.S., Lakerveld, J., Olsen, N., Kupers, L., Ramalho, S., Keaver, L., Brei, C., Bjune, J.I., Ezquerro, S. and Yumuk, V. 2017. Perceived health status: Is obesity perceived as a risk factor and disease? *Obesity Facts*, 10: 52-60. Available: https://doi:10.1159/000457958 (Accessed 24 August 2020).

- Wang, Y. and Lobstein, T. 2006. Worldwide trends in childhood overweight and obesity. *International Journal of Pediatric Obesity*, 1: 11-25.
- Wicks, M. 2017. A framework to regulate the marketing of foods and beverages to children in South Africa. D. Tech., North-West University. Available: https://scholar.sun.ac.za (Accessed 25 March 2020).
- Wilson, T.L. and Shuttleworth, M. 2019. Definition of Reliability. Available: https://explorable.com/definition-ofreliability (Accessed 23 May 2022).
- Wood, B., Williams, O., Nagarajan, V. and Sacks, G. 2021. Market strategies used by processed food manufacturers to increase and consolidate their power: a systematic review and document analysis. *Globalization and health*, 17(1): 1-23.
- World Health Organisation. 2010. Set of recommendations on the marketing of foods and non-alcoholic beverages to children. *Geneva: World Health Organisation*. Available: www.who.int/dietphysicalactivity/publications/ recsmarketing/en/index.html (Accessed 7 February 2020).
- World Health Organisation. 2014. *World Health Statistics 2014*. Available: https://www.who.int/gho/publications/ world_health_statistics/2014/en/ (Accessed 9 September 2020).
- World Health Organisation. 2016. *Reducing the impact of marketing of foods and non-alcoholic beverages on children*. Available: https://www.who.int (Accessed 22 February 2020).
- World Health Organisation. 2017. Report on the commission on ending childhood obesity. *Geneva: World Health Organisation.*
- World Health Organisation. 2018. Evaluating implementation of the WHO set of recommendations on the marketing of foods and non-alcoholic beverages to children: 6 August 2020 Progress, challenges and guidance for next steps in the WHO European region. *Europe: World Health Organisation.* Available: https://www.euro.who.int (Accessed 7 March 2021).
- World Health Organisation. 2018. *Facts and Figures on childhood obesity.* Available: https://www.who.int/end-childhood-obesity/facts/en (Accessed 21 August 2020).
- Yamoah, D.A., De Man, J., Onagbiye, S.O. and Mchiza, Z.J. 2021. Exposure of children to unhealthy food and beverage advertisements in South Africa. *International Journal of Environmental Research and Public Health*, 18(3856): 1-11. Available: https://www.doi/10.3390/ijerph/8083856. (Accessed 30 May 2021).
- Yau, A., Berger, N., Law, C., Cornelsen, L., Greener, R., Adams, J., Boyland, E.J., Burgoine, T., de Vocht, F., Egan, M. and Er, V. 2022. Changes in household food and drink purchases following restrictions on the advertisement of high fat, salt, and sugar products across the Transport for London network: A controlled interrupted time series analysis. *PLoS medicine*, 19(2): e1003915:1-23.