# Food and beverage marketing to children in South Africa: mapping the terrain

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# Abstract

The prevalence of overweight and obesity, particularly in children, raises serious attention to its causes and possible interventions. Food marketing to children has in recent years come under scrutiny as one of the putative factors responsible for the rising rates of obesity among children. This article addresses the global evidence base on the issue and explores policy interventions practised in the more developed world as well as the local challenges in dealing with the issue in South Africa. South African policymakers have a wide range of policy options based on international practice in committing to the health and well-being of its children.

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# Introduction

Public health practitioners the world over have focused their efforts on the range of factors that contribute to the high levels of childhood obesity and have developed a compelling mandate for action.<sup>1</sup> Part of this mandate has been focused on food marketing and its impact on the diet and diet-related health of children. This article presents a global understanding of the issue, an examination of the evidence base, a description of the regulatory environment globally, as well as some challenges in developing policy options for South Africa.

#### **Conceptualising the issues**

Several issues have emerged in the consideration of marketing and advertising to children globally. The first issue is establishing the case for the focus on food marketing. Second, researchers and policymakers are interested in determining the relationship between exposure to food marketing and childhood obesity. Third is the definition of policy interventions. The fourth issue relates to an assessment of the effectiveness of policy options.

#### Establishing the case for action

Children are widely acknowledged as requiring special consideration with regard to marketing activities. Firstly, they lack the cognitive skills to understand the persuasive intent of commercial marketing and secondly, they live in and are active consumers of an increasingly interactive and multisensory media environment.<sup>2</sup> Children, it is held, should be protected from not only the actual harmful effects, but also from the possible harmful effects of advertising. This is termed the precautionary principle, under which it is suggested that full scientific certainty should not delay the implementation of measures to protect children. It might be argued that this precautionary principle advocated in the United Kingdom<sup>3</sup> should apply with greater zeal in the developing world in which the assumption of the rational consumer may not pass scrutiny at all.<sup>4</sup>

A case for action is also dependent on the evidence on the prevalence of overweight and obesity in children. Concern is being expressed at the increasing rates of obesity in earlier stages of human life. The condition of children is described as reaching pandemic proportions, with the World Health Organization (WHO) recording some 155 million children globally as being overweight or obese. Mukkudem-Petersen and Petersen<sup>5</sup> note the prevalence of overweight in US children at 14% and for children in South Africa at 12%. Goedecke et al<sup>6</sup> refer to the National Household Food Consumption Survey that reported 17.1% of South African children between the ages of one and nine living in urban areas as overweight. The THUSA BANA study<sup>7</sup> of 2006, on 10- to 15-year-old children from five different regions in the North West province, found the body mass index (BMI) and percentage of body fat of black children and mixed-origin children to be lower than those of white and Indian children. Results from this study suggest that ethnicity and gender affect BMI and body fat percentage in South African children. Mukkudem-Petersen and Petersen and Goedecke et al<sup>5,6</sup> focus attention on the double burden of nutritional disease in countries undergoing nutrition transition, with Doak et al<sup>8</sup> pointing to the particular incidence of the existence of undernutrition and overweight often in the same household in several developing countries like South Africa. Notwithstanding, childhood obesity is associated with significant physical and psychosocial health problems and costs. While it is accepted that obesity is a multifactorial problem, affected by a number of genetic, biological, socioeconomic and environmental factors, it is held that food marketing may be held responsible for the rising rates of childhood obesity.

# The international evidence base on exposure and effects

Concerns about the potential contribution of food and beverage marketing on children's diets and diet-related health outcomes has fuelled considerable research into the issue since the seventies. This has resulted in a substantial body of knowledge on food marketing and childhood obesity.

The knowledge base may be broadly categorised as the prevalence of food marketing/promotion to children and the effects of these on children's diets and diet-related health outcomes. Policymakers have looked to the evidence base for the formulation of policy options to address childhood obesity.

Prevalence studies document what children are and what they are likely to be exposed to. Researchers often use exposure to media as a proxy for the exposure to marketing communications. This poses inherent limitations, as marketing includes a wide range of activities, promotional tools vary and children are exposed to a wide range of media options. Children are fast becoming adept at multitasking in a multimedia environment.<sup>9-11</sup> Most previous research has however focused on the prevalence of television viewing and television advertising and this has been documented through content analytic studies. These studies number well over 100 and are now emerging in the developing world too. Studies range from reports conducted by state or public organisations, such as Consumers International,<sup>12</sup> Sustain UK,13 the Office of Communications (UK) (Ofcom)14 and the Federal Trade Commission<sup>15,16</sup> to peer-reviewed academic publications. Perhaps the most comprehensive and widely quoted study is that published by the Kaiser Family Foundation in 2007.<sup>10</sup> This study recorded 1 638 hours of television content across 13 networks in the USA. Over 41 000 advertisements formed the basis of the assessment. The study concluded that half of all advertising time on children's shows is for food and, in particular, for foods that nutritionists and consumer groups argue should be consumed either in moderation or only occasionally. The most exposed group of children are between the ages of 8 and 12, who see on average 21 food advertisements per day on television. Most of the other studies documented concluded substantial exposure. The academic papers on exposure are best reported by Powell et al,<sup>17</sup> who documented academic papers covering children's programming during the past 35 years. These studies reported between 27% and 87% of total advertising dedicated to foods. Powell et al,<sup>17</sup> using a different methodology, concluded that exposure is lower than that reported in earlier studies: 27% of total non-programme content time was for food-related products and 36% of all product advertising (excluding TV promotions and public service announcements) seen by children was for foods.

Prevalence studies are emerging in developing countries. Turkish children are exposed to 44% of food advertisements.<sup>18</sup> The exposure of Bulgarian children to food advertising is reported by Galcheva et al<sup>19</sup> at 33%, of which 97% were for 'unhealthy' foods. In a Malaysian study, 28% of all advertisements were for foods on programmes watched by children.<sup>20</sup> One reported study covers children's exposure in South Africa.<sup>21</sup>

The effects of this exposure to food advertising have also been the subject of much research internationally. This was prompted by the WHO<sup>22</sup> declaring food marketing a 'probable' factor promoting obesity.

Several reviews of studies are to be found in the literature. The first review was conducted by the Institute for Social Marketing on the effects of food promotion on the dietary choices of children.<sup>3</sup> This systematic review of 55 papers on the topic concluded effects "particularly on children's preferences, purchase behaviour and consumption".<sup>3</sup> This report prompted a surge in research in the United Kingdom comprising updates of reviews (Hastings 2006; 2008),<sup>23</sup> critiques<sup>24</sup> and further reviews,<sup>25,26,27</sup> arriving at different conclusions.

In the USA, the Institute of Medicine's (IOM) report<sup>28</sup> represents the most comprehensive analysis of the scientific literature on the subject. A rigorous analytic framework examined over 120 academic papers covering four decades of research into television advertising and its impact on diets. The report concluded that television advertising influences the food and beverage preferences and the purchase requests of children (aged 2–11). The report also concluded that there is an association between adiposity and exposure to television advertising.

In 2007, the Australian Communications and Media Authority (ACMA) commissioned a review of research relevant to the provisions contained in its Children's Television Standards.<sup>29</sup> The study concluded that empirical research "shows correlations but not causal relationships between children's exposure to advertising and knowledge about diet and nutrition, and preferences as indicated by requests (but not necessarily actual consumption) of advertised foods".<sup>29</sup>

Several factors may be advanced for these different interpretations and findings of the research. Brand<sup>29</sup> points to "significant differences in sampling methodology and sampling frames, significant variations in methods of data collection and differences in the quality and degree of reporting". Livingstone<sup>30</sup> notes the different definitions of children by different researchers; researching children of different ages, socioeconomic status, cultural contexts, parental involvement, and so forth; examination of indirect and direct effects; shortterm versus long-term effects; and examining the promotion of unhealthy rather than healthy foods. Researchers have also pointed to the inclusion of commercial proprietary research conducted for companies. Further, Boyce<sup>31</sup> reflects on the orientation of the researchers who come largely from the health sciences and may neglect attention to audience-reception theories or perspectives in media sociology or marketing.

More importantly, researchers have focused on establishing correlations rather than causes. There is evidence, for example, correlating exposure to television and measures of food choice, health and obesity. This does not, however, imply a causal relationship. The design of an experiment that will control for the confounding factors in situations that mimic everyday reality will deliver the potential for determining causality. As this is near impossible to undertake, the findings of experiments on food promotions and childhood obesity are likely to have low internal validity and may not be generalisable.

In summary, it may be concluded that there is a critical mass in international research that allows the conclusion that television advertising has some effect on the diets and diet-related behaviour of children. The issue is whether this conclusion is strong enough to support policy interventions. Several countries have regarded this evidence sufficient to justify interventions on food marketing.

#### **Exposure and effects on South African children**

South Africa, with its population of 46.9 million people and a growth rate of 0.1% per annum, has a large population of young people. According to the Statistics SA Census 2001, adjusted mid 2007, 29.1% of the population is between the ages of 0 and 14, and 42.3% of the population is under the age of 19.32 The size of this young population prompts a focus of attention on child-related issues. The children of South Africa are spread across the Living Standards Measure (LSM) segments, reflecting a characteristic of developing countries. Jacobs et al<sup>33</sup> indicate that some 66% of all South African children live in income poverty (defined as "households that have less than R1 200 per month to spend on the needs of all their members"). In the absence of hard data, it is reasonable to assume that these children are exposed to media, most notably television. While 83% of the adult population is reached by television,<sup>32</sup> there is very little information on South African children and their media habits, unlike in the developed world.<sup>9</sup> Van Vuuren<sup>34</sup> quotes interesting statistics of a Human Sciences Research Council study of 1983, in which it was found that very young toddlers (from nine months old) spent approximately 40 minutes per day in front of the television set. Children aged 10 to 12 years spent approximately three hours per day watching television. He also quotes the South African Advertising Research Foundation's (SAARF) 2003 and 2005 statistics of approximately 2.5 hours of television watching per day for South African children aged 7 to 15. His own analysis of the Television Audience Measurement Surveys (TAMS) of SAARF demonstrated very similar child audiences to that of adult audiences, represented in typical inverted U-shaped curves over the duration of the day. He noted the large child audiences for the 'soap' broadcast on South African television. Moreover, children watch television well beyond the "watershed time of 21h00". Using this information, it may be calculated that South African children were exposed to approximately 24 minutes of advertising (or 48 x 30-second commercials) per day in 2003 to 2005.

Only two pieces of work document the prevalence of food advertising in South Africa. The first is an exploratory unpublished study by the this author<sup>35</sup> in 2005, in which 115 hours of children's programming were recorded. While the reliability and validity cannot be confirmed, the actual counts reflect 16% of the 579 advertisements for foods seen during children's programming. However, if one removes the large proportion of self-advertising, the figure changes to a high of 28%. The other study<sup>21</sup> reports an assessment of 49.5 hours of programming content. On SABC 2 there were no food advertisements. SABC 1 contained 16.9% food advertisements. The authors note that of these, 42% were for foods of generally good nutritional value.

An assessment of advertising expenditure on food categories will expand the picture. Advertising expenditure stood at R23 billion in 2007.<sup>32</sup> R785 million was spent on food (3.4%) and R1.4 billion of this advertising expenditure was spent on beverage advertising. Thus, 9.5% of the total adspend in 2007 was committed to food and beverages.

It may be concluded from the above evidence that South African children are relatively 'safe' in their limited exposure to food advertisements on television. However, an examination of the top advertisers in the country reveals the top spender as food and household goods manufacturer Unilever. Coca Cola is the 17<sup>th</sup> largest spender in South Africa, while Tiger Brands and KFC take 20<sup>th</sup> and 21<sup>st</sup> places respectively.<sup>32</sup> The lack of information lends credence to the call for a closer examination of the South African and African children's media landscape and consumption habits, and the impact of these on dietary behaviour.

# Policy interventions and the regulation of advertising to children

The protection of children is guided by the United Nations Convention on the Rights of the Child (Article 17) and Article 18 of the International Chamber of Commerce's (ICC) Code of Advertising Practice. The World Health Assembly<sup>36</sup> mandated the WHO in 2003 to develop a set of recommendations on food marketing to children. Furthermore, in 2007, the International Obesity Task Force (of the International Association for the Study of Obesity) released the "Sydney Principles", which provide a set of "guiding principles for achieving substantial reductions in the commercial promotion of foods and beverages to children".<sup>37</sup>

The regulation of food marketing to children is frequently proposed as the most suitable policy option.<sup>38</sup> Regulatory options range from total reliance on the self-regulatory approaches of industry and the regulation of marketing of specific foods to children, to statutory bans on all advertising to children. Most countries of the world, however, deploy co-regulation, a combination of state regulation and self-regulation, where an established legal regulatory framework is supplemented with self-regulation by the advertising/ communications industry.

Statutory regulation refers to laws, statutes or rules governing marketing to children. Compliance is a legal requirement. Statutory regulations range from complete bans of all advertising to children, as in Quebec, Norway and Sweden, to specific restrictions on advertising to children. In the Hawkes<sup>39</sup> review of 73 countries, 22 had some form of regulation specific to food (either in a clause or in a separate code).

Hawkes<sup>38</sup> notes that most regulations between 2004 and 2006 were developed by industry itself. These ranged from codes or guidelines to clauses on food marketing to young people. The self-regulatory system also comprises the voluntary initiatives developed by individual food companies or by sub-sectors of the industry (Coca Cola, for example, has a policy of not advertising to children under the age of 12).<sup>40</sup> A number of criticisms are levelled at the efforts of industry to protect children. Foremost is the fact that self-regulation relies on an industry that has a financial interest in selling foods to children. In addition, the Public Health Advocacy Institute (PHAI), among other organisations, notes that CARU (Children's Advertising Review Unit) fails to provide an "adequate public health response; lacks strong independent input, well-resourced monitoring and tough sanctions for breaches of the rules; applies subjective criteria in assessing advertisements; does not review advertising prior to dissemination; lacks third party review of its decision and cannot enforce its decisions".41 Monitoring and enforcement appear to be a serious concern.42

South Africa falls into the category of countries that have no statutory regulation of food marketing to children. However, the Trade Practices Act of 1976, the Consumer Affairs Act of 1999 and the Bill of Rights have provisions for children. The broadcasting apparatus that makes reference to children is the Broadcasting Complaints Commission of South Africa (established in 2003) and the Independent Communications Authority of South Africa. In 2007, the Minister of Health introduced draft regulations (no R 642) relating to the Labelling and Advertising of Foodstuffs, to be introduced under Section 15(1) of the Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972. Clause 52(2)(e) of the South African Government Gazette No. 30075 prohibits advertising of foods "not regarded as part of a healthy diet and healthy lifestyle" to children under the age of 16.43 Responses to the Draft Regulations are being considered by the Department of Health with final action awaiting the World Health Assembly meeting in May 2010.

The self-regulatory mechanism in South Africa is applied through the Advertising Standards Authority of South Africa (ASASA). The Code of Advertising Practice makes provisions for the advertising of food to children.

Policy options include a range of laws, statutory guidelines and self-regulatory systems in different permutations across the globe. However, the evidence<sup>38</sup> on the impact of these systems on children's diets remains an issue. New regulatory developments are however occurring rapidly and these are being driven by ethics more than by the need for evidence.<sup>38</sup>

# Local policy challenges

The first question that arises is whether the research conducted in other parts of the world is applicable to South Africa given the living standards, culture, media content and regulatory systems in this country. This issue hinges on an assessment of whether children in South Africa are so different from those in other countries that we require a different approach. It may be concluded that the South African Department of Health has adopted the 'precautionary principle' and/or the position that 'children are children' in its development of the Draft Bill relating to advertising foods to children without a local evidence base. This assumption needs testing.

A related issue is children's media consumption, as this will determine the similarities to the developed world. This knowledge is only anecdotally available and children's consumption of and relationship with media should be the subject of research.

The concern of international researchers about the applicability of the largely television-based research is at issue. This is particularly important given the quick adoption of new kinds of media and communications technology by South African children.<sup>44, 45</sup>

The international evidence suggests a likelihood of risk that justifies the regulation of food marketing to children as the dominant policy option. This is evident in the array of regulatory schemes focusing on television advertising during children's programming across the globe. Such a strategy is however limited in its potential for effects, as firstly, children are known to view programmes that are not designed for them and secondly, marketers are migrating to newer media to communicate their messages.

This challenge of childhood obesity and food marketing to children has focused attention on the food and beverage industry, since it has been placed on notice as partially responsible. While industry commitment to the self-regulatory scheme continues across the globe, reservations are expressed at industry's ability to act in the interests of children since it is held that the goals of public health are fundamentally in conflict with the economic objective of business. The monitoring of industry responses by Lang et al<sup>46</sup> suggests that the world's food companies are "not yet fully engaged with the seriousness and urgency of this transformation". Similarly, Lewin et al<sup>40</sup> conclude that self-regulatory efforts are inadequate. It has however been concluded by the Institute of Medicine<sup>28</sup> in its examination of the progress in preventing childhood obesity that forging an alliance between the public health community and industry "is a vitally important leverage point".

South Africa is in a peculiar situation with both government and industry developing initiatives in parallel. This may be interpreted as a challenge in that one party needs to take the lead on the issue. It must be noted that it is generally acknowledged that governments are slow in implementation and monitoring. This makes it extremely important to ensure a collaborative relationship that works in the best interests of children.

Such a relationship must require business to make a commitment to the health and well-being of children. This could be achieved through initiatives that aim to improve the diets and health of children through new product development and/or product reformulations and sizing (portion sizing), careful attention to packaging and the scrutinising of all marketing promotions targeting young people. These suggestions are in response to the conclusions of the IOM's report<sup>28</sup> that "the marketing practices geared to children and youth are out of balance with healthful diets and contribute to an environment that puts their health at risk" and criticisms levelled at current global self-regulatory mechanisms. In addition, business could play a positive complementary role in marketing health and nutrition to the wider society. Public reliance on the media for health information has been documented in the United Kingdom.<sup>47</sup> If this is the case, then business and the media could be used for positive messaging in an integrated strategy comprising collaborative business and government initiatives to achieve the goals.

#### Conclusion

South Africa is but a small part of a larger movement in which factors contributing to the pandemic of childhood obesity come under scrutiny. A large number of interventions are being tried in countries across the globe. Researchers, policymakers, the media and the wider public have important roles to play in dealing with the complex issue of childhood obesity. Research should develop on the international evidence base investigating the peculiarities in the South African environment. It is important for South African policymakers to examine the experiences of countries across the globe, consider the national context in which they work and harness the influence of industry in ensuring the health and well-being of its children and youth.

### **Conflict of interest**

#### The author declares no conflict of interest.

#### References

- Brownell KD, Schwartz MB, Puhl RM, Henderson KE, Harris JL. The Need for Bold Action to Prevent Adolescent Obesity. J Adolesc Health. 2009;45(3, Supplement 1):S8-S17.
- Brown JD, Cantor J. An Agenda for Research on Youth and the Media. J Adolesc Health. [Conference Proceedings]. 2000;275:2-7.
- Hastings G, Stead M, McDermott L, Forsyth A, MacKintosh AM. Review of Research on the effects of Food Promotion to Children. Glasgow: Centre for Social Marketing2003 22nd September 2003.
- Witkowski T. Food marketing and obesity in developing countries: analysis, ethics and public policy. Journal of Macromarketing. 2007;27:126-37.
- Mukkudem-Petersen J, Petersen MA. Childhood Obesity in Transitional Countries: A South African Perspective. In: Flamenbaum RK, editor. Global Dimensions of Childhood Obesity. New York: Nova Publishers; 2006. p. 1-50.
- Goedecke JH, Jennings CL, Lambert EV. Obesity in South Africa. Cape Town: Medical Research Council2006.
- Kruger R, Kruger HS, MacIntyre UE. The determinants of overweight and obesity among 10- to 15-yearold schoolchildren in the North West Province, South Africa - the THUSA BANA study. Public Health Nutrition. 2006;9(03):351-8.
- Doak CM, Adair L, Bentley M, Fengying Z, B P. The dual burden household and the nutrition transition paradox. Int J Obes Relat Metab Disord. 2005;29:129-36.
- Vandewater EA, Lee S-J. Measuring childen's media use in the digital age: Issues and challenges. Washington: National Academies of Science and National Research Council Board on Children, Youth and Families2006.
- Gantz W, Schwartz N, Angelini JR, Rideout V. Food For Thought Television Food Advertising to Children in the United States. California: The Kaiser Family Foundation2007. Report No.: 7618.
- 11. Oakes J, Michael. The effect of media on children: a methodological assessment from a social epidemiologist. Minneapolis: National Academies of Science and the National Research Council Board on Children. Youth and Families2006 March 2-3.
- 12. Consumers International. The Junk food Generation A multi-country survey of the influence of television advertisements on children. London: Consumers International2004.
- 13. Sustain. Protecting children from unhealthy food advertising, Sustain Campaign Document. London2002.

- 14. OFCOM. Childhood Obesity Food Advertising in Context. London: Office of Communications2004
- Federal Trade Commission. Children's Exposure to TV Advertising in 1977 and 2004: information for the obesity debate. Bureau of Economics Staff Report. Washington DC2007 June 2007.
- Federal Trade Commission. Marketing Food to Children and Adolescents: A review of industry expenditures, activities, and self regulation. Washington DC: Federal Trade Commission2008 July 2008.
- 17. Powell LM, Szczypka G, Chaloupka FJ. Exposure to food advertising on television among US children. Arch Pediatr Adolesc Med. 2007 Jun;161(6):553-60.
- Aktas Arnas Y. The effects of television food advertisement on children's food purchasing requests. Pediatr Int. 2006 Apr;48(2):138-45.
- Galcheva SV, lotova VM, Stratev VK. Television food advertising directed towards Bulgarian children. Arch Dis Child. 2008;93(10):857-61.
- Karupaiah T, Chinna K, Mee LH, Mei LS, Noor MI. What's on Malaysian television? A survey on food advertising targeting children. Asia Pacific Journal Of Clinical Nutrition. 2008;17(3):483-91.
- Temple NJ, Steyn NP, Nadomane Z. Food advertisements on children's programs on TV in South Africa. Nutrition. 2008 Jul-Aug;24(7-8):781-2.
- World Health Organization. Diet, Nutrition And The Prevention of Chronic Diseases. Geneva: World Health organization2003 Contract No.: 916.
- Young B. Advertising and Food Choice in Children: A Review of the Literature. London: The Advertising Association, Food Advertising Unit;2003.
- 24. Paliwoda S, Crawford I. An Analysis of the Hastings Review: Food Advertising Unit, The Advertising Association2003.
- Ambler T. Does the UK promotion of food and drink to childen contribute to their obesity? London: Centre for Marketing, London Business School/2004 March Contract No.: No 04-901.
- Livingstone S, Helsper E. Advertising foods to Children: Understanding Promotion in the Context of Children's Daily Lives. London: OFCOM2004 7th May.
- 27. Livingstone S. New Research On Advertising Foods To Children: An Updated Review of the Literature. Update of a Literature Review. London: OFCOM2006 22 January. Report No.: Annex 9.
- McGinnis JM, Gootman J, Krack VI. Food marketing to children and youth: Threat or opportunity? Washington, DC US: National Academies Press; 2006.
- Brand J. Television Advertising to Children A review of contemporary research on the influence of television advertising directed to children. Literature Review. Melbourne: Australian Communication and Media Authority2007 May.
- Livingstone S. Assessing the Research Base for the Policy Debate over the Effects of Food Advertising to Children International Journal of Advertising. 2005;24(3):273-96.
- 31. Boyce T. The Media and Obesity. Obesity Reviews. 2007 Mar;8 Suppl 1:201-5
- 32. Koenderman T. OMD South Africa & SADC Media Facts. Johannesburg2008.
- Jacobs M, Shung-King M, Smith C. South African Child Gauge 2005. Cape Town: University of Cape Town; 2005.
- 34. Van Vuuren D. Child Audiences in South Africa. Communicare. 2006;25(1):81-102.
- Cassim S. An Exploratory Assessment of childen's exposure to advertising in South Africa Working Paper. Durban: University of KwaZulu Natal, Management;2005.
- World Health Organization. Prevention and Control of non-communicable diseases: implementation of the global strategy, Sixtieth World Health Assembly. Geneva: World Health Organization2007 May 23, 2007.
- International Obesity Task Force. Sydney Principles, Summary of responses from the global consultation. Sydney: International Obesity Task Force2007.
- Hawkes C. Regulating and litigating in the public interest: regulating food marketing to young people worldwide: trends and policy drivers. American Journal of Public Health. 2007 Nov;97(11):1962-73.
- Hawkes C. Marketing Foods to Children: the global regulatory environment. Geneva: World Health Organization2004.
- Lewin A, Lindstrom L, Nestle M. Food Industry Promises to Address Childhood Obesity: Preliminary Evaluation. J Public Health Policy. 2006;27(4):327-48.
- Kelley B. Industry Controls over Food Marketing to Young Children: Are they effective? Boston: The Public Health Advocacy Institute2005.
- Caraher M, Landon J, Dalmeny K. Television advertising and children: lessons from policy development. Public Health Nutrition. 2006 Aug;9(5):596-605.
- 43. Foodstuffs, Cosmetics and Disinfectants Act, 1972, (2007).
- Hargrave AM, Livingstone S. Harm and Offence in Media Content: A review of the evidence Bristol: Intellect; 2006.
- 45. Kraushaar A. BratTrax the hottest study to hit South Africa this year. Johannesburg, South Africa2009 [cited 2009 1st March, 2009]; Description of the Brat Trax 5th wave syndicated study launched in 2009.]. Available from: www.chirpnetwork.com/content/research/brattrax-the-hottest-youth.html.
- 46. Lang T, Rayner G, Kaelin E. The Food Industry, Diet, Physical Activity and Health: A Review of Reported Commitments and Practice of 25 of the World's Largest Food Companies. London Centre for Food Policy, City University2006 April, 2006.
- Hargreaves I, Lewis J, Speers T. Towards a Better Map: Science, the public and the media. Swindon: Economic and Social Research Council2003.