



Year	Source	Title	Authors	Affiliations	Abstract	PubMed ID
2013	JAMA Pediatr. 2013 Jun 17:1-6.	Amount of Hispanic Youth Exposure to Food and Beverage Advertising on Spanish- and English-Language Television.	Fleming-Milici F, Harris JL, Sarda V, Schwartz MB.		<p>IMPORTANCE Exposure to large numbers of television advertisements for foods and beverages with little or no nutritional value likely contributes to poor diet among youth. Given higher rates of obesity and overweight for Hispanic youth, it is important to understand the amount and types of food advertising they view. OBJECTIVE To quantify the amount of food and beverage advertising viewed by Hispanic youth on Spanish- and English-language television and compare it with the amount of food and beverage advertising viewed by non-Hispanic youth. DESIGN, SETTING, AND PARTICIPANTS Data on gross rating points that measured advertising viewed on national broadcast and cable television in 2010 using a Nielsen panel of television-viewing households of Hispanic and non-Hispanic preschoolers (2-5 years), children (6-11 years), and adolescents (12-17 years). MAIN OUTCOMES AND MEASURES Food and beverage television advertisements viewed on English- and Spanish-language television by product category and television-viewing times by age and language preference. EXPOSURE Food and beverage advertising on Spanish- and English-language television. RESULTS In 2010, Hispanic preschoolers, children, and adolescents viewed, on average, 11.6 to 12.4 television food ads per day; the majority of these ads (75%-85%) appeared on English-language television. Fast food represented a higher proportion of food ads on Spanish-language television. Consistent with television-viewing patterns, Hispanic preschoolers saw more Spanish-language food advertisements than did Hispanic children and adolescents. Owing to somewhat less food advertising on Spanish-language television, Hispanic children and adolescents viewed 14% and 24% fewer food ads overall, respectively, compared with non-Hispanic youth. Spanish-language television viewing was highly concentrated among youth who primarily speak Spanish. CONCLUSIONS AND RELEVANCE Both Hispanic and non-Hispanic youth view large numbers of television advertisements for nutrient-poor categories of food and beverage. Although Hispanic children and adolescents see somewhat fewer of these ads, the higher obesity rates among Hispanic youth, the greater exposure by Hispanic preschoolers, and the potential enhanced effects of targeted advertising on Hispanic youth suggest that this exposure may pose additional risks for Hispanic youth. Continued monitoring is warranted owing to food companies' stated intentions to increase marketing to Hispanics.</p>	23778639
2013	Child Obes. 2013 Jun 18. [Epub ahead of print]	Not So Grrreat: Ten Important Myths about Food Advertising Targeted to Children in Canada.	Elliott C, Cook B.	Department of Communication and Culture, University of Calgary, Calgary, Alberta, Canada .	<p>Abstract Rising rates of childhood obesity have led to a greater concern over the impact of food advertising on children's health. Although public policy interventions seek to mitigate the impact of advertising on children, several pervasive myths often sidetrack effective discussions. This Perspective outlines and responds to ten common myths.</p>	23777270

2013	Aust N Z J Public Health. 2013 Jun;37(3):284-9.	Investigating the media power of a population health monitoring survey: case study of the NSW Schools Physical Activity and Nutrition Survey (SPANS).	Espinel PT, Laws R, Bonfiglioli C, Hardy LL, King L	Prevention Research Collaboration, School of Public Health, University of Sydney, New South Wales Faculty of Arts and Social Sciences, University of Technology, New South Wales Prevention Research Collaboration, School of Public Health, University of Sydney, New South Wales.	Objective : To examine the extent and nature of news coverage of a government-funded population monitoring survey of children and the potential implications of this coverage for public health advocacy. Methods : Case study of the NSW Schools Physical Activity and Nutrition Survey (SPANS), a population monitoring survey of school-aged children's weight and weight-related behaviours, conducted in 1997, 2004 and 2010. Printed news items from all Australian newspapers between January 1997 and December 2011 mentioning the survey findings were identified from the Factiva database and a descriptive analysis of the content conducted. Results : Overall, 144 news items were identified. The news angles focused mainly on physical activity/sedentary behaviour; overweight/obesity and nutrition; however these angles changed between 1997 and 2011, with angles focused on physical activity/sedentary behaviour increasing, compared with overweight/obesity and nutrition angles (p=0.001). Responsibility for obesity and weight-related behaviours was most frequently assigned to parents and food marketing, and the most common solutions were policy strategies and parental/child education and support. Conclusions : Population health surveys are newsworthy and when coupled with strategic dissemination, media can contribute to communicating health issues and interpreting findings in ways that are relevant for consumers, policy makers and stakeholders. Implications : This case study emphasises the news value of government-funded population surveys, while providing a cautionary note about media focus on individual studies rather than a larger body of research evidence.	23731113
2013	Appl Physiol Nutr Metab. 2013 Jun;38(6):666-72.	Nutrition marketing on processed food packages in Canada: 2010 Food Label Information Program.	Schermel A, Emrich TE, Arcand J, Wong CL, L'abbé MR	Department of Nutritional Sciences, University of Toronto, FitzGerald Building, 150 College Street, Toronto, ON M5S 3E2, Canada.	The current study describes the frequency of use of different forms of nutrition marketing in Canada and the nutrients and conditions that are the focus of nutrition marketing messages. Prepackaged foods with a Nutrition Facts table (N = 10 487) were collected between March 2010 and April 2011 from outlets of the 3 largest grocery chains in Canada and 1 major western Canadian grocery retailer. The nutrition marketing information collected included nutrient content claims, disease risk reduction claims, and front-of-pack nutrition rating systems (FOPS). We found that nutrition marketing was present on 48.1% of Canadian food packages, with nutrient content claims being the most common information (45.5%), followed by FOPS on 18.9% of packages. Disease risk reduction claims were made least frequently (1.7%). The marketing messages used most often related to total fat and trans fat (15.6% and 15.5% of nutrient content claims, respectively). Limiting total and trans fats is a current public health priority, as recommended by Health Canada and the World Health Organization. However, other nutrients that are also recommended to be limited, including saturated fats, sodium, and added sugars, were not nearly as prominent on food labels. Thus, greater emphasis should be placed by the food industry on these other important nutrients. Repeated data collection in the coming years will allow us to track longitudinal changes in nutrition marketing messages over time as food marketing, public health, and consumer priorities evolve.	23724885
2013	Obesity (Silver Spring). 2013 Apr;21(4):800-7.	Internet marketing directed at children on food and restaurant websites in two policy environments.	Kent MP, Dubois L, Kent EA, Wanless AJ.	Institute of Population Health, University of Ottawa, Ottawa, ON K1N 6N5, Canada. mpk@rogers.com	OBJECTIVE: Food and beverage marketing has been associated with childhood obesity yet little research has examined the influence of advertising policy on children's exposure to food/beverage marketing on the Internet. The purpose of this study was to assess the influence of Quebec's Consumer Protection Act and the self-regulatory Canadian Children's Food and Beverage Advertising Initiative (CAI) on food manufacturer and restaurant websites in Canada. DESIGN AND METHODS: A content analysis of 147 French and English language food and restaurant websites was undertaken. The presence of child-directed content was assessed and an analysis of marketing features, games and activities, child protection features, and the promotion of healthy lifestyle messages was then examined on those sites with child-directed content.	23712983

					RESULTS: There were statistically no fewer French language websites (n = 22) with child-directed content compared to English language websites (n = 27). There were no statistically significant differences in the number of the various marketing features, or in the average number of marketing features between the English and French websites. There were no fewer CAI websites (n = 14) with child-directed content compared to non-CAI websites (n = 13). The CAI sites had more healthy lifestyle messages and child protection features compared to the non-CAI sites. CONCLUSION: Systematic surveillance of the Consumer Protection Act in Quebec is recommended. In the rest of Canada, the CAI needs to be significantly expanded or replaced by regulatory measures to adequately protect children from the marketing of foods/beverages high in fat, sugar, and sodium on the Internet.	
2013	Child Obes. 2012 Apr;8(2):85-8.	Food marketing to youth: current threats and opportunities.	Schwartz MB, Ustjanauskas A.			22799505
2013	Pediatr Obes. 2013 Jul 2.. [Epub ahead of print]	Food and beverage advertising on children's web sites	Ustjanauskas AE, Harris JL, Schwartz MB.	Rudd Center for Food Policy and Obesity, Yale University, New Haven, CT, USA.	WHAT IS ALREADY KNOWN ABOUT THIS SUBJECT: Food and beverage advertising contributes to childhood obesity. Display advertising on children's web sites is a prominent technique used to promote food to children. Industry self-regulation has not substantially improved food marketing to children in other media, such as television and food company web sites. WHAT THIS STUDY ADDS: More than 3 billion display advertisements for food and beverages were viewed on popular children's web sites from July 2009 to June 2010. Three-quarters of these advertisements promoted brands that food companies identified as healthier dietary choices to be included in child-directed food advertising. However, 84% of these ads promoted products high in fat, sugar and/or sodium. BACKGROUND: Food marketing contributes to childhood obesity. Food companies commonly place display advertising on children's web sites, but few studies have investigated this form of advertising. OBJECTIVES: Document the number of food and beverage display advertisements viewed on popular children's web sites, nutritional quality of advertised brands and proportion of advertising approved by food companies as healthier dietary choices for child-directed advertising. METHODS: Syndicated Internet exposure data identified popular children's web sites and food advertisements viewed on these web sites from July 2009 through June 2010. Advertisements were classified according to food category and companies' participation in food industry self-regulation. The percent of advertisements meeting government-proposed nutrition standards was calculated. RESULTS: 3.4 billion food advertisements appeared on popular children's web sites; 83% on just four web sites. Breakfast cereals and fast food were advertised most often (64% of ads). Most ads (74%) promoted brands approved by companies for child-directed advertising, but 84% advertised products that were high in fat, sugar and/or sodium. Ads for foods designated by companies as healthier dietary choices appropriate for child-directed advertising were least likely to meet independent nutrition standards. CONCLUSIONS: Most foods advertised on popular children's web sites do not meet independent nutrition standards. Further improvements to industry self-regulation are required.	23818245

2013	Eur J Clin Nutr. 2013 Jun 26.	How important is the choice of the nutrient profile model used to regulate broadcast advertising of foods to children? A comparison using a targeted data set.	Scarborough P, Payne C, Agu CG, Kaur A, Mizdrak A, Rayner M, Halford JC, Boyland E	British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford, Oxford, UK	Background/Objective:The World Health Assembly recommends that children's exposure to marketing of unhealthy foods should be reduced. Nutrient profile models have been developed that define 'unhealthy' to support regulation of broadcast advertising of foods to children. The level of agreement between these models is not clear. The objective of this study was to measure the agreement between eight nutrient profile models that have been proposed for the regulation of marketing to children over (a) how many and (b) what kind of foods should be permitted to be advertised during television viewed by children.Subjects/Methods:A representative data set of commercials for foods broadcast during television viewed by children in the UK was collected in 2008. The data set consisted of 11 763 commercials for 336 different products or brands. This data set was supplemented with nutrition data from company web sites, food packaging and a food composition table, and the nutrient profile models were applied.Results:The percentage of commercials that would be permitted by the different nutrient profile models ranged from 2.1% (0.4%, 3.7%) to 47.4% (42.1%, 52.6%). Half of the pairwise comparisons between models yielded kappa statistics less than 0.2, indicating that there was little agreement between models.Conclusions:Policy makers considering the regulation of broadcast advertising to children should carefully consider the choice of nutrient profile model to support the regulation, as this choice will have considerable influence on the outcome of the regulation	23801095
2013	Public Health Nutr. 2013 Jul 5:1-9. [Epub ahead of print]	Caregiver perceptions of the food marketing environment of African-American 3-11-year-olds: a qualitative study	Baskin ML, Herbey I, Williams R, Ard JD, Ivankova N, Odoms-Young A.		OBJECTIVE: To assess caregivers' perceptions of the extent to which the food marketing environment influences food consumption among African-American children (aged 3-11 years) in order to generate potential strategies to make the marketing environment more favourable to healthier eating.DESIGN: Individual semi-structured interviews with caregivers were conducted by trained community leaders to ascertain their awareness of and perceptions about food marketing environments contributing to African-American children's food consumption.SETTING: Six predominantly African-American communities in metro Birmingham, Alabama, USA with high proportions of school-age children and lower-income residents.SUBJECTS: Caregivers (n 25) were predominantly female (93 %) and either parents/guardians (64 %) or grandparents (28 %) of African-American children aged 3-11 years. Caregiver mean age was 43 years and 46 % had lived in their current residence for over 10 years.RESULTS: Caregivers reported all aspects of the food marketing matrix as supporting unhealthy eating among African-American youth. Child preference for foods higher in fat and sugar, lower pricing of less healthy foods, limited access to healthier food retailers and targeted advertisements were particularly influential on the food selection, acquisition and consumption of children. Company loyalty, corporate sponsorship of local events and conflicts over parental v. food company responsibility contributed to less consensus about the overall impact (positive or negative) of food companies in African-American communities.CONCLUSIONS: While caregivers perceived aspects of their food marketing environments as primarily contributing to unhealthy eating among African-American children, framing the demand for changes in the food marketing environments of African-American youth may be particularly challenging.	23830058

2013	Nutr J. 2013 Jul 10;12(1):95. [Epub ahead of print]	Investigating the obesogenic effects of marketing snacks with toys: an experimental study in Latin Americ	Gregori D, Ballali S, Gafare CE, Casella A, Stefanini G, de Sousa Alves R, Franchin L, Amador I, Da Silva NM, Dibildox J.		The inclusion of toys in food packages is a common marketing practice, and it is suspected of promoting obesogenic behaviours. This study aimed to determine whether toys packaged with food are indeed increasing the amount of food eaten by children, and if this effect is enhanced by contemporary exposure to TV and/or advertising. METHODS: A total of 600 children (balanced according to gender and age groups, 3--6 and 7--10 years old) were randomized in three school facilities in Argentina, Brazil and Mexico and exposed to food (snacks) alone or food associated with toys in an experimental setting. All of the children received the same meal at lunchtime. The products were packages in which chocolate was associated with toys in an egg-shaped container partially filled by chocolate. The children were asked to eat ad libitum for 20 minutes during the afternoon break. In addition, the children were randomized into two groups and either shown or not shown a movie cartoon, with three different levels of exposure to commercials in the TV viewing condition (1, 2 or 3 advertisements). RESULTS: No significant differences emerged between the "toys" and "no toys" groups even after taking into account exposure to TV, commercials and other confounding factors. CONCLUSIONS: The inclusion of toys in food packages was not shown per se to lead to an increase in the caloric intake of children.	23841997
2013	Obes Rev. 2013 Jul 12. doi: 10.1111/obr.12060. [Epub ahead of print]	The impact of initiatives to limit the advertising of food and beverage products to children: a systematic review	Galbraith-Emami S, Lobstein T.		In response to increasing evidence that advertising of foods and beverages affects children's food choices and food intake, several national governments and many of the world's larger food and beverage manufacturers have acted to restrict the marketing of their products to children or to advertise only 'better for you' products or 'healthier dietary choices' to children. Independent assessment of the impact of these pledges has been difficult due to the different criteria being used in regulatory and self-regulatory regimes. In this paper, we undertook a systematic review to examine the data available on levels of exposure of children to the advertising of less healthy foods since the introduction of the statutory and voluntary codes. The results indicate a sharp division in the evidence, with scientific, peer-reviewed papers showing that high levels of such advertising of less healthy foods continue to be found in several different countries worldwide. In contrast, the evidence provided in industry-sponsored reports indicates a remarkably high adherence to voluntary codes. We conclude that adherence to voluntary codes may not sufficiently reduce the advertising of foods which undermine healthy diets, or reduce children's exposure to this advertising.	23845093
2013	J Obes. 2013;2013:4085-82. Epub 2013 Apr 17.	Experimental evidence on the impact of food advertising on children's knowledge about and preferences for healthful food.	Reisch LA, Gwozdz W, Barba G, De Henauw S, Lascorz N, Pigeot I.	Copenhagen Business School, Porcelaenshaven 18, 2000 Frederiksberg, Denmark. lr.ikl@cbs.dk	To understand the rising prevalence of childhood obesity in affluent societies, it is necessary to take into account the growing obesity infrastructure, which over past decades has developed into an obesogenic environment. This study examines the effects of one of the constituent factors of consumer societies and a potential contributory factor to childhood obesity: commercial food communication targeted to children. Specifically, it investigates the impact of TV advertising on children's food knowledge and food preferences and correlates these findings with their weight status. Evaluations of traditional information- and education-based interventions suggest that they may not sustainably change food patterns. Based on prior consumer research, we propose five hypotheses, which we then test using a subsample from the IDEFICS study, a large-scale pan-European intervention study on childhood obesity. The results indicate that advertising has divergent effects on children's food knowledge and preferences and that food knowledge is unrelated to food preferences. This finding has important implications for both future research and public policy.	23691285

	Perspect Public Health. 2013 May;133(3):146-7.	Action needed to combat food and drink companies' social media marketing to adolescents.	Williams S.	Northwestern University, Chicago, USA.	Reports have shown how behavioural marketing through social media sites is heavily dominated by soft drink and fast food franchises, with additional concern arising due to the direct targeting of this marketing at 13 to 17-year-olds. Dr Simon Williams from Northwestern University, Chicago, USA suggests ways in which the medical community can tackle this threat to public health.	23657233
2013	J Health Commun. 2013 May 2. [Epub ahead of print]	Food Marketing to Children on U.S. Spanish-Language Television.	Kunkel D, Mastro D, Ortiz M, McKinley C.	a Department of Communication , University of Arizona , Tucson , Arizona , USA.	Latino children in particular are at risk of childhood obesity. Because exposure to televised food marketing is a contributor to childhood obesity, it is important to examine the nutritional quality of foods advertised on Spanish-language children's programming. The authors analyzed a sample of 158 Spanish-language children's television programs for its advertising content and compared them with an equivalent sample of English-language advertising. The authors evaluated nutritional quality of each advertised product using a food rating system from the U.S. Department of Health and Human Services. In addition, the authors assessed compliance with industry self-regulatory pledges. The authors found that amount of food advertising on Spanish-language channels (M = 2.2 ads/hour) was lower than on English-language programs, but the nutritional quality of food products on Spanish-language channels was substantially poorer than on English channels. Industry self-regulation was less effective on Spanish-language channels. The study provides clear evidence of significant disparities. Food advertising targeted at Spanish-speaking children is more likely to promote nutritionally poor food products than advertising on English-language channels. Industry self-regulation is less effective on Spanish-language television channels. Given the disproportionately high rate of childhood obesity among Latinos, the study's findings hold important implications for public health policy.	23638634
2013	Public Health Nutr. 2013 May 1:1-8. [Epub ahead of print]	The effects of television and Internet food advertising on parents and children	Pettigrew S, Tarabashkina L, Roberts M, Quester P, Chapman K, Miller C.	1 UWA Business School and UWA School of Sport Science, Exercise and Health, 35 Stirling Highway, Crawley, WA 6009, Australia.	OBJECTIVE: The current study examined the impact of television and Internet food advertising on Australian parents and children. DESIGN: Parents and their children aged 8 to 14 years were exposed to a television advertisement, an Internet advertisement or a control picture for four commonly advertised energy-dense, nutrient-poor foods. SETTING: Online web panel survey, Australia.SUBJECTS: Parents (n 1302) and their children aged 8 to 14 years (n 1302). RESULTS: After a single exposure to each advertisement, parent respondents in the two exposure conditions evaluated the products more favourably, had a greater desire to consume the products and thought the product could be consumed more frequently than those in the control condition. Similar trends were observed among children, although the differences were statistically significant only for the frequency of food consumption in the Internet advertisement condition and the evaluation of one product. CONCLUSIONS: The results have implications for assumptions of adults' immunity to advertising. This is of particular importance in efforts to address child obesity and the reliance on parents to mediate the effects of food advertising.	23635396

2013	Pediatr Obes. 2013 Apr 29.	Effects of nutrient content claims, sports celebrity endorsements and premium offers on pre-adolescent children's food preferences: experimental research	Dixon H, Scully M, Niven P, Kelly B, Chapman K, Donovan R, Martin J, Baur LA, Crawford D, Wakefield M	Centre for Behavioural Research in Cancer, Cancer Council Victoria, Carlton, Victoria, Australia	<p>WHAT IS ALREADY KNOWN ABOUT THIS SUBJECT: Food marketing has come under scrutiny for its likely contribution to promoting unhealthy eating and obesity in children. There is limited published evidence regarding the effects of food packaging promotions on children. Nutrient content claims and sports celebrity endorsements on food packs influence adults to prefer energy-dense and nutrient-poor (EDNP) products bearing such promotions, especially among the majority who do not read the nutrition information panel. WHAT THIS STUDY ADDS: This study experimentally tested pre-adolescent children's responses to three common food marketing techniques: nutrient content claims, sports celebrity endorsements and premium offers. On-pack nutrient content claims made pre-adolescents more likely to choose EDNP products and increased perceptions of their nutrient content. Sports celebrity endorsements made pre-adolescent boys more likely to choose EDNP products. OBJECTIVES: To assess pre-adolescent children's responses to common child-oriented front-of-pack food promotions. METHODS: Between-subjects, web-based experiment with four front-of-pack promotion conditions on energy-dense and nutrient-poor (EDNP) foods: no promotion [control]; nutrient content claims; sports celebrity endorsements (male athletes) and premium offers. Participants were 1302 grade 5 and 6 children (mean age 11 years) from Melbourne, Australia. Participants chose their preferred product from a randomly assigned EDNP food pack and comparable healthier food pack then completed detailed product ratings. Child-oriented pack designs with colourful, cartooned graphics, fonts and promotions were used. RESULTS: Compared to the control condition, children were more likely to choose EDNP products featuring nutrient content claims (both genders) and sports celebrity endorsements (boys only). Perceptions of nutritional content were enhanced by nutrient content claims. Effects of promotions on some product ratings (but not choice) were negated when children referred to the nutrition information panel. Premium offers did not enhance children's product ratings or choice. CONCLUSIONS: Nutrient content claims and sports celebrity endorsements influence pre-adolescent children's preferences towards EDNP food products displaying them. Policy interventions to reduce the impact of unhealthy food marketing to children should limit the use of these promotions.</p>	23630014
2013	Pediatr Obes. 2013 Aug;8(4):325-337.	Comparison of nutrient profiling schemes for restricting the marketing of food and drink to children	Brinsden H, Lobstein T.	International Association for the Study of Obesity, London, UK.	<p>WHAT IS ALREADY KNOWN ABOUT THIS SUBJECT: Many companies have signed voluntary agreements to restrict the marketing of foods high in fat, sugar and salt directly to children. Several nutrient profiling schemes have been proposed for defining products which can be advertised to children. WHAT THIS STUDY ADDS: Provides evidence that industry-led nutrient profiling schemes are less effective in restricting the advertising of energy-dense foods compared to government-led models. Provides evidence that industry-led nutrient profiling schemes particularly favour the continued advertising of foods high in sugar. BACKGROUND: The food and beverage industry have made voluntary pledges to reduce children's exposure to the marketing of energy-dense foods and beverages, and in 2012 announced the replacement of company-specific nutrient profiling schemes with uniform sets of criteria from 2013 (in the USA) and 2014 (in the European Union [EU]). OBJECTIVE: To compare the proposed USA and EU nutrient profiling schemes and three government-led schemes, paying particular attention to the differences in sugar criteria. METHOD: Food and beverage products permitted to be advertised in the USA under pre-2013 criteria were examined using five nutrient profiling schemes: the forthcoming USA and EU schemes and three government-approved schemes: the US Interagency Working Group (IWG) proposals, the United Kingdom Office of Communications (OfCom)</p>	23589396

					regulations and the Danish Forum co-regulatory Code. RESULTS: Under the new USA and EU nutrient profiling schemes, 88 (49%) and 73 (41%) of a total of 178 products would be permitted to be advertised, respectively. The US IWG permitted 25 (14%) products; the Ofcom regulations permitted 65 (37%) and the Danish Code permitted 13 (7%). CONCLUSION: Government-led schemes are significantly more restrictive than industry-led schemes, primarily due to their tougher sugar criteria. The Danish Forum (93%) and USA IWG scheme (86%) are the most restrictive of the five examined. Further harmonization of nutrient profiling schemes is needed to reduce children's exposure to the promotion of energy-dense foods.	
2013	J Bioeth Inq. 2013 Jun;10(2):149-63.	Private governance, public purpose? Assessing transparency and accountability in self-regulation of food advertising to children.	Reeve B.	Faculty of Law, University of Sydney, F10 Eastern Avenue, Camperdown, NSW, 2006, Australia, bhreeve@uni.sydney.edu.a	Reducing non-core food advertising to children is an important priority in strategies to address childhood obesity. Public health researchers argue for government intervention on the basis that food industry self-regulation is ineffective; however, the industry contends that the existing voluntary scheme adequately addresses community concerns. This paper examines the operation of two self-regulatory initiatives governing food advertising to children in Australia, in order to determine whether these regulatory processes foster transparent and accountable self-regulation. The paper concludes that while both codes appear to establish transparency and accountability mechanisms, they do not provide for meaningful stakeholder participation in the self-regulatory scheme. Accordingly, food industry self-regulation is unlikely to reflect public health concerns or to be perceived as a legitimate form of governance by external stakeholders. If industry regulation is to remain a feasible alternative to statutory regulation, there is a strong argument for strengthening government oversight and implementing a co-regulatory scheme.	23585017
2013	Gac Sanit. 2013 Mar 25. pii: S0213-9111(13)00040-X.	[Can the advertising and food industries help prevent childhood obesity and promote healthy lifestyles?]	Royo-Bordonada MA.	Asociación Madrileña de Salud Pública, Madrid, España. Electronic address: royo1967@yahoo.es.	[Article in Spanish]	23537852
2013	Am J Prev Med. 2013 Apr;44(4):358-64	Redefining "child-directed advertising" to reduce unhealthy television food advertising	Harris JL, Sarda V, Schwartz MB, Brownell KD	The Rudd Center for Food Policy and Obesity, Yale University, New Haven, CT 06520, USA. Jennifer.harris@yale.edu	BACKGROUND: Food and beverage companies have pledged to reduce unhealthy marketing to children through the Children's Food and Beverage Advertising Initiative (CFBAI). However, public health experts question the initiative's effectiveness because pledges apply to only some types of marketing. For instance, the CFBAI covers only TV advertising that is "child-directed," defined as advertising during programs for which children make up 35% or more of the viewing audience. PURPOSE: To quantify the proportion of food and beverage TV advertisements (ads) viewed by children that is covered by current CFBAI pledges and examine the potential impact of broader definitions of child-directed advertising. METHODS: Nielsen data were used to quantify percentages of children (aged 2-11 years) in the audience (i.e., child-audience share), as well as absolute numbers of child viewers, for all national TV programs in 2009. Nielsen advertising data provided the number of food and beverage ads viewed by preschoolers (aged 2-5 years); older children (aged 6-11 years); and adults (aged 18-49 years) during programs with various child-audience compositions. Data were collected in 2010 and analyzed in 2011. RESULTS: Just 45%-48% of food ads viewed by children met current CFBAI definitions of	23498101

					child-directed advertising. Expanding this definition to include advertising during programs with a child-audience share of 20% or higher and/or 100,000 or more child viewers would cover 70%-71% of food advertising seen by children but just one third of ads seen by adults. CONCLUSIONS: Children viewed an estimated 35% fewer food ads during TV programs with a high child-audience share ($\geq 50\%$) in 2009 compared with 2004. However, ensuring that nutrition standards apply to the majority of food ads viewed by children requires broader definitions of child-directed advertising.	
2013	Arch Latinoam Nutr. 2012 Mar;62(1):53-9	Food advertising and television exposure: influence on eating behavior and nutritional status of children and adolescents.	Costa SM, Horta PM, dos Santos LC	Department of Physiology and Pharmacology, Institute of Biological Sciences, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil.	This study aimed to evaluate the influence of food advertising and television exposure on eating behaviour and nutritional status of children and adolescents. It was a cross sectional study developed among 116 students from a private school in Brazil. Socio-demographic and health conditions were evaluated. Anthropometric data, food consumption, physical activity, television viewing habits and behaviour in relation to food advertising were also investigated. Among the results, a 1:2 relationship was identified between the number of televisions and residents per household. Excessive weight was present in 25.8% of subjects and 66.4% of children watched television while eating. Children were exposed to television for a median of 3.0 hours daily (95% CI: 2.9 to 3.6). There was a direct association between attraction to foods advertised and purchasing the product ($p < 0.001$) and a positive relationship between the number of televisions per household and body weight ($r = 0.246$, $p = 0.015$) and the amount of liquid consumed during meals ($r = 0.277$, $p = 0.013$). Findings also highlighted the association between watching television while eating and the reduced probability of fruit consumption ($p = 0.032$), contrasted with a greater likelihood of daily artificial juice intake ($p = 0.039$). In conclusion, watching television is associated with lower probability of daily consumption of fruits and the number of television at household is positively related to BMI in children and adolescents.	23477208
2013	J Health Commun. 2013;18(5):563-82.	Marketing sugary cereals to children in the digital age: a content analysis of 17 child-targeted websites	Cheyne AD, Dorfman L, Bukofzer E, Harris JL.	Berkeley Media Studies Group, 2130 Center Street, Berkeley, CA 94704, USA. cheyne@bmsg.org	The Institute of Medicine has warned of the harm of food marketing to children from television to new media channels such as the Internet. The authors identified and analyzed the techniques used to engage children on websites from cereal companies--the third largest food marketer to children. The authors found that top breakfast cereal manufacturers maintain child-oriented websites, using strategies unique to the Internet to capture and maintain children's attention. These include branded engagement techniques such as advergames, videos, site registration, and viral marketing, including inviting friends to join the site. The authors found 3 progressive levels of telepresence on child-targeted cereal websites: sites with more than 1 engaging feature, multiple techniques present on individual pages, and the construction of a virtual world. Using Internet traffic data, the authors confirm that these techniques work: cereal marketers reach children online with lengthier and more sophisticated engagements than are possible with traditional, passive media such as television advertisements or product packaging. Despite the cereal manufacturer's self-regulatory pledge to improve their marketing to children, their marketing practices exploit children's susceptibility to advertising by almost exclusively promoting high-sugar cereals using deeply engaging techniques.	23421722

2013	J Pediatr. 2013 Apr;162(4):672-3.	The importance of understanding the impact of children's food marketing on the brain	Gearhardt AN, Brownell KD		Comment on Brain responses to food logos in obese and healthy weight children.	23305960
2013	BMC Public Health. 2013 Jan 10;13:20.	Outdoor advertising, obesity, and soda consumption: a cross-sectional study	Lesser LI, Zimmerman FJ, Cohen DA	Department of Health Policy, Palo Alto Medical Foundation Research Institute, Palo Alto, CA, USA. LesserL@pamfri.org	BACKGROUND: Recent research has shown that neighborhood characteristics are associated with obesity prevalence. While food advertising in periodicals and television has been linked to overweight and obesity, it is unknown whether outdoor advertising is related to obesity. METHODS: To test the association between outdoor food advertising and obesity, we analyzed telephone survey data on adults, aged 18-98, collected from 220 census tracts in Los Angeles and Louisiana. We linked self-reported information on BMI and soda consumption with a database of directly observed outdoor advertisements. RESULTS: The higher the percentage of outdoor advertisements promoting food or non-alcoholic beverages within a census tract, the greater the odds of obesity among its residents, controlling for age, race and educational status. For every 10% increase in food advertising, there was a 1.05 (95% CI 1.003 - 1.093, p<0.03) greater odds of being overweight or obese, controlling for other factors. Given these predictions, compared to an individual living in an area with no food ads, those living in areas in which 30% of ads were for food would have a 2.6% increase in the probability of being obese. CONCLUSIONS: There is a relationship between the percentage of outdoor food advertising and overweight/obesity.	23305548
2013	BMC Public Health. 2012 Dec 28;12:1123.	An analysis of potential barriers and enablers to regulating the television marketing of unhealthy foods to children at the state government level in Australia	Chung A, Shill J, Swinburn B, Mavoa H, Lawrence M, Loff B, Crammond B, Sacks G, Allender S, Peeters A	Department of Epidemiology and Preventive Medicine, BakerIDI Heart and Diabetes Institute, Monash University, Victoria, Australia.	BACKGROUND: In Australia there have been many calls for government action to halt the effects of unhealthy food marketing on children's health, yet implementation has not occurred. The attitudes of those involved in the policy-making process towards regulatory intervention governing unhealthy food marketing are not well understood. The objective of this research was to understand the perceptions of senior representatives from Australian state and territory governments, statutory authorities and non-government organisations regarding the feasibility of state-level government regulation of television marketing of unhealthy food to children in Australia. METHOD: Data from in-depth semi-structured interviews with senior representatives from state and territory government departments, statutory authorities and non-government organisations (n=22) were analysed to determine participants' views about regulation of television marketing of unhealthy food to children at the state government level. Data were analysed using content and thematic analyses. RESULTS: Regulation of television marketing of unhealthy food to children was supported as a strategy for obesity prevention. Barriers to implementing regulation at the state level were: the perception that regulation of television advertising is a Commonwealth, not state/territory, responsibility; the power of the food industry and; the need for clear evidence that demonstrates the effectiveness of regulation. Evidence of community support for regulation was also cited as an important factor in determining feasibility. CONCLUSIONS: The regulation of unhealthy food marketing to children is perceived to be a feasible strategy for obesity prevention however barriers to implementation at the state level exist. Those involved in state-level policy making generally indicated a preference for Commonwealth-led regulation. This research suggests that implementation of regulation of the television	23272940

					marketing of unhealthy food to children should ideally occur under the direction of the Commonwealth government. However, given that regulation is technically feasible at the state level, in the absence of Commonwealth action, states/territories could act independently. The relevance of our findings is likely to extend beyond Australia as unhealthy food marketing to children is a global issue.	
2013	Appetite. 2013 Mar;62:182-4.	The marketing of foods and non-alcoholic beverages to children. Setting the research agenda	Halford JC, Boyland EJ.	Experimental Psychology, University of Liverpool, Liverpool L69 7ZA, UK. j.c.g.halford@liverpool.ac.uk		23220356
2013	J Pediatr. 2013 Apr;162(4):759-764.e2.	Brain responses to food logos in obese and healthy weight children.	Bruce AS, Lepping RJ, Bruce JM, Cherry JB, Martin LE, Davis AM, Brooks WM, Savage CR.	Department of Psychology, University of Missouri-Kansas City, Kansas City, MO 64110, USA. bruceam@umkc.edu	OBJECTIVE: To evaluate brain activation in response to common food and nonfood logos in healthy weight and obese children. STUDY DESIGN: Ten healthy weight children (mean body mass index in the 50th percentile) and 10 obese children (mean body mass index in the 97.9th percentile) completed self-report measures of self-control. They then underwent functional magnetic resonance imaging while viewing food and nonfood logos. RESULTS: Compared with the healthy weight children, obese children showed significantly less brain activation to food logos in the bilateral middle/inferior prefrontal cortex, an area involved in cognitive control. CONCLUSION: When shown food logos, obese children showed significantly less brain activation than the healthy weight children in regions associated with cognitive control. This provides initial neuroimaging evidence that obese children may be more vulnerable to the effects of food advertising.	23211928
2013	Public Health Nutr. 2013 Jul;16(7):1314-20.	Evaluation of food and beverage television advertising during children's viewing time in Spain using the UK nutrient profile model.	Romero-Fernández MM, Royo-Bordonada MÁ, Rodríguez-Artalejo F	Escuela Nacional de Sanidad, Instituto de Salud Carlos III, Madrid, Spain		
2013	Appetite. 2013 Mar;62:187-9.	News report. Gaps and weaknesses in controls on food and drink marketing to children in the UK	Landon J.	National Heart Forum, Victoria House, Southampton Row, London WC1B 4AD, UK. jane.landon@heartforum.org.uk	In 2011 the National Heart Forum completed a commission from the UK Department of Health to conduct a mapping and consultation exercise on the marketing and promotion of food and drinks to children. One of the outputs was an analysis of the regulatory environment including statutory and self-regulatory rules and voluntary codes of conduct. The key findings and observations from this analysis are presented in this short report.	

2013	Appetite. 2013 Mar;62:185-6.	Research needs on food marketing to children. Report of the StanMark project.	Lobstein T.	International Association for the Study of Obesity, London, UK. tlobstein@iaso.org	A series of meetings on the topic of children's exposure to the marketing of food and beverages was held between researchers and government officials based in Europe and the Americas during 2010-2011. The meetings resulted in a number of outputs, including observations from policy-makers on the types of evidence they needed to strengthen policy-making. Their observations on the definitions of a child, the specification of foods using nutrient profiling schemes, the types of media carrying marketing messages, and the related policy implementation problems, are summarised in this Short Communication. The paper highlights the need for research which can directly support policy-making and which can evaluate its effectiveness.	23092756
2013	Appetite. 2013 Mar;62:232-5.	Nutrient profiling and the regulation of marketing to children. Possibilities and pitfalls	Rayner M, Scarborough P, Kaur A.	British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford, Headington, Oxford OX1 7LF, UK. mike.rayner@dph.ox.ac.uk	This paper gives a definition of 'nutrient profiling' and outlines the scope 'marketing of foods to children' and it's 'regulation' for the purposes of the paper. It then points out that nutrient profiling has many other purposes besides the regulation of marketing of foods to children. It briefly outlines the ideal process for developing a nutrient profile model and summarises how nutrient profiling models have been validated to date. It discusses how existing nutrient profiling models for the purpose of regulating the marketing of foods to children can be compared and it concludes that nutrient profiling has much potential but that there are several obstacles to overcome before an ideal model for regulating the marketing of foods can be agreed.	22885727
2013	Appetite. 2013 Mar;62:194-7.	Evolutions in food marketing, quantifying the impact, and policy implications.	Cairns G.	Institute for Social Marketing, University of Stirling, Stirling FK9 4LA, United Kingdom. g.a.cairns@stir.ac.uk	A case study on interactive digital marketing examined the adequacy of extant policy controls and their underpinning paradigms to constrain the effects of this rapidly emerging practice. Findings were interactive digital marketing is expanding the strategies available to promote products, brands and consumer behaviours. It facilitates relational marketing; the collection of personal data for marketing; integration of the marketing mix, and provides a platform for consumers to engage in the co-creation of marketing communications. The paradigmatic logic of current policies to constrain youth-oriented food marketing does not address the interactive nature of digital marketing. The evidence base on the effects of HFSS marketing and policy interventions is based on conceptualizations of marketing as a force promoting transactions rather than interactions. Digital technologies are generating rich consumer data. Interactive digital technologies increase the complexity of the task of quantifying the impact of marketing. The rapidity of its uptake also increases urgency of need to identify appropriate effects measures. Independent analysis of commercial consumer data (appropriately transformed to protect commercial confidentiality and personal privacy) would provide evidence sources for policy on the impacts of commercial food and beverage marketing and policy controls.	22858428
2012	PLoS One. 2012;7(10):e47000. Epub 2012 Oct 17	Food marketing towards children: brand logo recognition, food-related behavior and BMI among 3-13-year-olds in a south Indian town	Ueda P, Tong L, Viedma C, Chandy SJ, Marrone G, Simon A, Stålsby Lundborg C.	Karolinska Institutet, Stockholm, Sweden. peter.ueda@gmail.com	OBJECTIVES: To assess exposure to marketing of unhealthy food products and its relation to food related behavior and BMI in children aged 3-13, from different socioeconomic backgrounds in a south Indian town. METHODS: Child-parent pairs (n=306) were recruited at pediatric clinics. Exposure to food marketing was assessed by a digital logo recognition test. Children matched 18 logos of unhealthy food (high in fat/sugar/salt) featured in promotion material from the food industry to pictures of corresponding products. Children's nutritional knowledge, food preferences, purchase requests, eating behavior and socioeconomic characteristics were assessed by a digital game and parental questionnaires. Anthropometric measurements were recorded. RESULTS: Recognition rates for the brand logos ranged from 30% to 80%. Logo recognition ability increased with age (p<0.001) and socioeconomic level (p<0.001 comparing children in the highest and lowest of three socioeconomic groups). Adjusted for gender, age and socioeconomic group, logo recognition was associated with higher BMI (p=0.022) and	23082137

					nutritional knowledge ($p < 0.001$) but not to unhealthy food preferences or purchase requests. CONCLUSIONS: Children from higher socioeconomic groups in the region had higher brand logo recognition ability and are possibly exposed to more food marketing. The study did not lend support to a link between exposure to marketing and poor eating behavior, distorted nutritional knowledge or increased purchase requests. The correlation between logo recognition and BMI warrants further investigation on food marketing towards children and its potential role in the increasing burden of non-communicable diseases in this part of India.	
2012	BMC Public Health. 2012 Oct 5;12:846.	Compliance with children's television food advertising regulations in Australia.	Roberts M, Pettigrew S, Chapman K, Miller C, Quester P	The University of Western Australia (M263), 35 Stirling Highway, Crawley, WA, 6009, Australia. michele.roberts@uwa.edu.au	The objective of this study was to assess the effectiveness of the Australian co-regulatory system in limiting children's exposure to unhealthy television food advertising by measuring compliance with mandatory and voluntary regulations. An audit was conducted on food and beverage television advertisements broadcast in five major Australian cities during children's programming time from 1st September 2010 to 31st October 2010. The data were assessed against mandatory and voluntary advertising regulations, the information contained in an industry report of breaches, and the Australian Guide to Healthy Eating. RESULTS: During the two months of data collection there were a total of 951 breaches of the combined regulations. This included 619 breaches of the mandatory regulations (CTS) and 332 breaches of the voluntary regulations (RCMI and QSRI). Almost 83% of all food and beverages advertised during children's programming times were for foods classified as 'Extras' in the Australian Guide to Healthy Eating. There were also breaches in relation to the amount of advertising repetition and the use of promotional appeals such as premium offers, competitions, and endorsements by popular children's characters. The self-regulatory systems were found to have flaws in their reporting and there were errors in the Australian Food and Grocery Council's compliance report. CONCLUSIONS: This audit suggests that current advertising regulations are inadequate. Regulations need to be closely monitored and more tightly enforced to protect children from advertisements for unhealthy foods.	23039855
2012	Nutr Rev. 2012 Oct;70(10):571-93.	Does food marketing need to make us fat? A review and solutions.	Chandon P, Wansink B.	INSEAD, Boulevard de Constance, 77300 Fontainebleau, France. pierre.chandon@insead.edu	Food marketing is often singled out as the leading cause of the obesity epidemic. The present review examines current food marketing practices to determine how exactly they may be influencing food intake, and how food marketers could meet their business objectives while helping people eat healthier. Particular attention is paid to the insights provided by recently published studies in the areas of marketing and consumer research, and those insights are integrated with findings from studies in nutrition and related disciplines. The review begins with an examination of the multiple ways in which 1) food pricing strategies and 2) marketing communication (including branding and food claims) bias food consumption. It then describes the effects of newer and less conspicuous marketing actions, focusing on 3) packaging (including the effects of package design and package-based claims) and 4) the eating environment (including the availability, salience, and convenience of food). Throughout, this review underscores the promising opportunities that food manufacturers and retailers have to make profitable "win-win" adjustments to help consumers eat better.	23035805

2012	Public Health Nutr. 2012 Oct 4:1-6. [Epub ahead of print]	Building the case for independent monitoring of food advertising on Australian television.	King L, Hebden L, Grunseit A, Kelly B, Chapman K.	Prevention Research Collaboration, School of Public Health, University of Sydney, Level 2, K25, Sydney, NSW 2006, Australia.	OBJECTIVE: To provide an independent monitoring report examining the ongoing impact of Australian self-regulatory pledges on food and drink advertising to children on commercial television. DESIGN: Analysis of food advertisements across comparable sample time periods in April/May 2006, 2007, 2009, 2010 and 2011. The main outcome measure comprised change in the mean rate of non-core food advertisements from 2006 to 2011. SETTING: Sydney free-to-air television channels. SUBJECTS: Televised food advertisements. RESULTS: In 2011 the rate of non-core food advertisements was not significantly different from that in 2006 or 2010 (3.2/h v. 4.1/h and 3.1/h), although there were variations across the intervening years. The rate of fast-food advertising in 2010 was significantly higher than in 2006 (1.8/h v. 1.1/h, P < 0.001), but the same as that in 2011 (1.5/h). CONCLUSIONS: The frequency of non-core food advertising on Sydney television has remained essentially unchanged between 2006 and 2011, despite the implementation of two industry self-regulatory pledges. The current study illustrates the value of independent monitoring as a basic requirement of any responsive regulatory approach.	23034219
2012	Asia Pac J Clin Nutr. 2012;21(4):609-17.	Public support for restrictions on fast food company sponsorship of community events.	Pettigrew S, Pescud M, Rosenberg M, Ferguson R, Houghton S.	School of Sport Science, Exercise and Health (M408), University of Western Australia, 35 Stirling Highway, Crawley, 6009 Australia. simone.pettigrew@uwa.edu.au	This study investigated community attitudes to fast food companies' sponsorship of community events. The aim was to inform future efforts to introduce greater restrictions on these marketing activities to reduce child obesity. While previous research has focused on the sponsorship of sporting events, the present study included all community events and gauged public support for fast food company sponsorships in general as well as specific sponsorship activities such as securing event naming rights, advertising on event premises, and distributing free items to children in the form of food and redeemable vouchers. A large and diverse sample of Western Australian adults (n=2,005) responded to a community attitudes telephone survey that included questions relating to event sponsorship. Almost half of the respondents reported that the promotion of fast foods is inappropriate at community events, and only a third considered it appropriate at events where children are likely to be present. Around two-thirds agreed that promoting fast foods at such events sends contradictory messages to children and just a quarter of respondents considered it acceptable for free fast food to be distributed at events or for children to be rewarded for participation with fast food vouchers. The results suggest that efforts to reduce child obesity that involve restrictions on the sponsorship of community events by organisations promoting unhealthy foods may be supported by a substantial proportion of the population.	23017320
2012	Am J Prev Med. 2012 Sep;43(3 Suppl 2):S109-15.	Convenience stores and the marketing of foods and beverages through product assortment.	Sharkey JR, Dean WR, Nalty C.	Program for Research in Nutrition and Health Disparities and Texas Nutrition and Obesity Policy Research and Evaluation Network Collaborating Center, School of Rural Public Health, Texas A&M Health Science Center, College Station, Texas	BACKGROUND: Product assortment (presence and variety) is a key in-store marketing strategy to influence consumer choice. Quantifying the product assortment of healthier and less-healthy foods and beverages in convenience stores can inform changes in the food environment. PURPOSE: To document product assortment (i.e., presence and variety of specific foods and beverages) in convenience stores. METHODS: Observational survey data were collected onsite in 2011 by trained promotora-researchers in 192 convenience stores. Frequencies of presence and distributions of variety were calculated in 2012. Paired differences were examined using the Wilcoxon matched-pairs signed-rank test. RESULTS: Convenience stores displayed a large product assortment of sugar-sweetened beverages (median 86.5 unique varieties); candy (76 varieties); salty snacks (77 varieties); fried chips (44 varieties); cookies and pastries (19 varieties); and frozen sweets (21 varieties). This compared with 17 varieties of non-sugar sweetened beverages and three varieties of baked chips. The Wilcoxon signed-rank test confirmed a (p<0.001) greater variety of sugar-sweetened than non-sugar-sweetened beverages, and of fried chips compared with baked chips. Basic food items provided by convenience stores included milk (84% of stores); fresh fruit (33%); fresh vegetables (35%); canned vegetables (78%); white bread (71%); and deli-	22898159

					style packaged meat (57%). Healthier versions of milk, canned fruit, canned tuna, bread, and deli-style packaged meat were displayed in 17%-71% of convenience stores. CONCLUSIONS: Convenience stores in this area provide a greater assortment of less-healthy compared with healthier foods and beverages. There are opportunities to influence consumer food choice through programs that alter the balance between healthier and less-healthy foods and beverages in existing convenience stores that serve rural and underserved neighborhoods and communities.	
2012	Health Mark Q. 2012;29(2):97-116.	Tobacco socialization and anti-tobacco ad effectiveness among children	Khalbous S, Bouslama H.	Institute of Higher Business Studies, University of Carthage, Tunis, Tunisia.	In order to prevent smoking onset among children, it is essential to know the process of smoking socialization and its various dimensions before being able to design any effective anti-tobacco advertisements. This research aims to conceptualize this process and to test the effectiveness of certain styles of anti-tobacco advertising addressed to children. The results show that both attitudinal and behavioral smoking socialization influence anti-tobacco advertisements effectiveness and that the least offensive and humoristic are most effective in Tunisia.	22676839
2012	Pediatrics. 2012 Sep;130(3):e486-91. Epub 2012 Aug 20	Lower life satisfaction related to materialism in children frequently exposed to advertising	Oprea SJ, Buijzen M, Valkenburg PM	The Amsterdam School of Communication Research, University of Amsterdam, Kloveniersburgwal 48, 1012 CX Amsterdam, The Netherlands. s.j.oprea@uva.nl.	OBJECTIVE: Research among adults suggests that materialism and life satisfaction negatively influence each other, causing a downward spiral. So far, cross-sectional research among children has indicated that materialistic children are less happy, but causality remains uncertain. This study adds to the literature by investigating the longitudinal relation between materialism and life satisfaction. We also investigated whether their relation depended on children's level of exposure to advertising. METHODS: A sample of 466 children (aged 8-11; 55% girls) participated in a 2-wave online survey with a 1-year interval. We asked children questions about material possessions, life satisfaction, and advertising. We used structural equation modeling to study the relationship between these variables. RESULTS: For the children in our sample, no effect of materialism on life satisfaction was observed. However, life satisfaction did have a negative effect on materialism. Exposure to advertising facilitated this effect: We only found an effect of life satisfaction on materialism for children who were frequently exposed to advertising. CONCLUSIONS: Among 8- to 11-year-old children, life satisfaction leads to decreased materialism and not the other way around. However, this effect only holds for children who are frequently exposed to television advertising. It is plausible that the material values portrayed in advertising teach children that material possessions are a way to cope with decreased life satisfaction. It is important to reduce this effect, because findings among adults suggest that materialistic children may become less happy later in life. Various intervention strategies are discussed.	22908113
2012	Appetite. 2012 Aug 7. [Epub ahead of print]	Nutrient profiling and the regulation of marketing to children. Possibilities and pitfalls.	Rayner M, Scarborough P, Kaur A	British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford, Headington, Oxford OX1 7LF, UK.	This paper gives a definition of 'nutrient profiling' and outlines the scope 'marketing of foods to children' and it's 'regulation' for the purposes of the paper. It then points out that nutrient profiling has many other purposes besides the regulation of marketing of foods to children. It briefly outlines the ideal process for developing a nutrient profile model and summarises how nutrient profiling models have been validated to date. It discusses how existing nutrient profiling models for the purpose of regulating the marketing of foods to children can be compared and it concludes that nutrient profiling has much potential but that there are several obstacles to overcome before an ideal model for regulating the marketing of foods can be agreed.	22885727

2012	Public Health Nutr. 2012 Jul 2:1-5. [Epub ahead of print]	The use of sports references in marketing of food and beverage products in supermarkets	Bragg MA, Liu PJ, Roberto CA, Sarda V, Harris JL, Brownell KD	Rudd Center for Food Policy and Obesity, Yale University, 309 Edwards Street, New Haven, CT 06511, USA.	<p>OBJECTIVE: Food marketing has been identified as a significant driver of the childhood obesity epidemic. The purpose of the present study was to (i) conduct a content analysis of the types of sports references that appear on supermarket food and beverage products and (ii) assess each product's nutritional and marketing profile.</p> <p>DESIGN: This was a descriptive study. Every product featuring sports references on the packaging was purchased in two major supermarkets during 2010. A content analysis was conducted and nutritional evaluations were made based on the Nutrient Profile Model, a validated nutrition model. Marketing data were obtained from The Nielsen Company.</p> <p>SETTING: Two major supermarkets in Connecticut, USA.</p> <p>SUBJECTS: Food and beverage products (n 102) were selected from two supermarkets.</p> <p>RESULTS: The 102 products (fifty-three foods and forty-nine beverages) had sports references as part of their packaging: 72.5 % featured a character exercising, 42.2 % were endorsed by a professional sports entity and 34.0 % were child-targeted. The median nutrition score for food products was 36 (1 = unhealthiest and 100 = healthiest; scores of ≥ 63 are considered healthy according to this model). More than two-thirds of beverages (69.4 %) were 100 % sugar-sweetened. Children saw significantly more commercials for these products than adults.</p> <p>CONCLUSIONS: Companies place sports figures on food and beverage products that are child-targeted and unhealthy.</p>	22874497
2012	Appetite. 2012 Jul 31. [Epub ahead of print]	Evolutions in food marketing, quantifying the impact, and policy implications.	Cairns G.	Institute for Social Marketing, University of Stirling, Stirling FK9 4LA, United Kingdom.	<p>A case study on interactive digital marketing examined the adequacy of extant policy controls and their underpinning paradigms to constrain the effects of this rapidly emerging practice. Findings were interactive digital marketing is expanding the strategies available to promote products, brands and consumer behaviours. It facilitates relational marketing; the collection of personal data for marketing; integration of the marketing mix, and provides a platform for consumers to engage in the co-creation of marketing communications. The paradigmatic logic of current policies to constrain youth-oriented food marketing does not address the interactive nature of digital marketing. The evidence base on the effects of HFSS marketing and policy interventions is based on conceptualizations of marketing as a force promoting transactions rather than interactions. Digital technologies are generating rich consumer data. Interactive digital technologies increase the complexity of the task of quantifying the impact of marketing. The rapidity of its uptake also increases urgency of need to identify appropriate effects measures. Independent analysis of commercial consumer data (appropriately transformed to protect commercial confidentiality and personal privacy) would provide evidence sources for policy on the impacts of commercial food and beverage marketing and policy controls.</p>	22858428

2012	J Public Health (Oxf). 2012 Jun;34(2):245-52. Epub 2011 Nov 10	Giving the wrong impression: food and beverage brand impressions delivered to youth through popular movies.	Skatrud-Mickelson M, Adachi-Mejia AM, MacKenzie TA, Sutherland LA	Department of Pediatrics, Dartmouth Medical School, One Medical Center Drive, Lebanon, NH 03756, USA.	<p>BACKGROUND: Marketing on television showcases less-healthy options, with emerging research suggesting movies promote similar products. Given the obesity epidemic, understanding advertising to youth should be a public health imperative. The objective of this study was to estimate youth impressions to food and beverages delivered through movies.</p> <p>METHODS: Impressions were calculated by dividing US receipts annually into average movie ticket prices, then multiplying this by the number of brand appearances. Examination by ratings, product types and ages were conducted by Spearman rank correlation coefficient tests.</p> <p>RESULTS: Youth in the USA saw over 3 billion food, beverage or food-retail establishment (FRE) impressions on average, annually from 1996 to 2005. Those aged 12-18 viewed over half of all impressions, with PG-13-rated movies containing 61.5% of impressions. There were no significant trends in brand appearances by food, beverage or FRE impressions over the decade, although there was a decreasing trend in R-rated impressions for both foods ($P < 0.01$) and beverages ($P < 0.01$), but not FREs ($P = 0.08$).</p> <p>CONCLUSIONS: Movies promote billions of food and beverage impressions annually to youth. Given the public health crisis of obesity, future research should further investigate these trends, as well as the potential association of these unhealthy exposures in youth.</p>	22076600
2012	Child Obes. 2012 Jun;8(3):191-4	Marketing foods to children: are we asking the right questions?	Elliott C.	Department of Communication and Culture, Faculty of Arts, University of Calgary, Calgary, Alberta, Canada. celliott@ucalgary.ca	The childhood obesity epidemic has prompted a range of regulatory initiatives that seek to reduce the impact of food marketing on children. Policy recommendations by government and public health organizations have suggested regulating the promotion of high-sugar, -fat, and/or -salt foods to children, while the food industry has created voluntary nutrition guidelines to channel child-targeted marketing toward only "better-for-you" products. This article argues that the overarching focus on the nutrient profile of foods (nutritionism) is wrong-headed: The slippage in terms from "better-for-you" foods to "healthy dietary choices" is problematic and also makes it difficult for children to identify the healthy choice. Nutritionism further works to sidestep important questions pertaining to the ethics of food marketing, not to mention the way that marketing foods as fun and entertainment works to encourage overeating in children.	22799544
2012	Health Promot Int. 2012 Jun 19. [Epub ahead of print]	Restriction of television food advertising in South Korea: impact on advertising of food companies.	Kim S, Lee Y, Yoon J, Choung SJ, Lee SK, Kim H.	1Department of Food and Nutrition, Seoul National University, Seoul 151-742, South Korea.	The association between exposure to television (TV) food advertising and children's dietary habits has been well established in previous studies. However, the efficacy of restrictions on TV food advertising in the prevention of childhood obesity remains controversial. The South Korean government has recently enforced a regulation, termed the Special Act on Safety Management of Children's Dietary Life, which restricts TV advertising of energy-dense and nutrient-poor (EDNP) foods targeting children. This study aimed to determine the impact of this regulation by examining changes in the TV advertising practices of South Korean food companies since the scheduled enforcement date of January 2010. The total advertising budget, number of advertisement placements and gross rating points (GRPs) for advertisements on EDNP foods aired on the five representative TV channels in South Korea were compared and analyzed for the year before and after January 2010. After January 2010, the total advertising budget, number of advertisement placements and GRPs decreased during regulated hours. Even during non-regulated hours, a significant decline was noticed in the number of advertisement placements and GRPs. The total advertising budget for non-EDNP foods increased, whereas that for EDNP foods decreased at a higher rate in addition to a drop in its percentage share. These results suggest positive changes in TV advertising	22717614

					practices of food companies because of the regulation, thereby lowering children's exposure to TV advertising of EDNP foods and promoting a safer environment that may facilitate child health improvement in South Korea.	
2012	Appetite. 2012 Jun 12. [Epub ahead of print]	The joint effect of tangible and non-tangible rewards on healthy food choices in children.	Grubliauskienė A, Verhoeven M, Dewitte S.	Research Center for Marketing and Consumer Science, Faculty of Business and Economics, Katholieke Universiteit Leuven, Naamsestraat 69, 3000 Leuven, Belgium.	This study investigated how a combination of tangible and non-tangible rewards can alter health-related decisions made by children. Children chose between an unhealthy food option (a bowl of potato crisps) and a healthy food option (a bowl of grapes) on two occasions. In the first round, we manipulated the expected tangible reward and praise. The tangible reward was manipulated by means of a game that the child received upon choosing the healthy product, and the praise was manipulated by means of the teacher's applause and smiles if the child selected the healthy option. The second trial occurred three days after the first trial using the same food item options. Neither tangible rewards nor praise influenced the children's choices by themselves, but combining the two substantially increased the children's likelihood of selecting the healthy food choice. The data were consistent with a reattribution process akin to social labeling. Although initially externally motivated to select the healthy option, the children who received praise appeared to interpret their choice as internally motivated and therefore continued to select the healthy option even in the absence of reward.	22698975
2012	Physiol Behav. 2012 Jun 6;106(3):379-86. Epub 2012 Mar 16.	The impact of food branding on children's eating behavior and obesity.	Keller KL, Kuilema LG, Lee N, Yoon J, Mascaro B, Combes AL, Deutsch B, Sorte K, Halford JC.	Department of Research Medicine, New York Obesity Research Center, St. Luke's Roosevelt Hospital, Columbia University College of Physicians and Surgeons, New York, NY 10025, USA. klk37@psu.edu	Branding is a technique used by the food industry to create a recognizable image to attract consumers and hopefully boost sales of the product. Children recognize food brands from a young age, but their impact on the development of eating behaviors and obesity is unclear. In addition, the notion that some branding techniques may be used to increase intake of healthful foods, like fruits and vegetables, has not been rigorously investigated. Three laboratory-based intake studies designed to test the impact of common food brands on children's eating habits are presented. In the first study, four to six year-old children (n=43) were exposed to ad libitum test-meals where foods were presented either with or without their associated branding. In the second study, a novel food brand based Stroop task was developed and tested to assess children's cognitive response to food brands, and following this procedure, seven to nine year-old children (n=41) ate ad libitum test-meals consisting of foods packaged with or without a logo from a popular fast food restaurant. Finally, a pilot intervention was conducted with four to five year-old children (n=16) to demonstrate the efficacy of using licensed (spokes) characters to package and promote intake of fruits and vegetables. These studies demonstrate that branding is an important influence on what and how much children eat, but some children may be more susceptible to these influences than others. Future studies are needed to better understand the influence that child age, sex, and obesity has on response to food branding and marketing.	22450261

2012	Pediatr Clin North Am. 2012 Jun;59(3):677-92.	Childhood obesity and the media.	Hingle M, Kunkel D.	Department of Nutritional Sciences, University of Arizona, 1177 East, 4th Street, Shantz Building, Room 328, Tucson, AZ 85721, USA.	This article assesses the role played by media in contributing to the current epidemic of childhood obesity. Electronic media use, often referred to as screen time, is significantly correlated with child adiposity. Although the causal mechanism that accounts for this relationship is unclear, it is well established that reducing screen time improves weight status. Media advertising for unhealthy foods contributes to obesity by influencing children's food preferences, requests, and diet. Industry efforts have failed to improve the nutritional quality of foods marketed on television to children, leading public health advocates to recommend government restrictions on child-targeted advertisements for unhealthy foods.	
2012	Health Promot Int. 2012 Jun;27(2):187-96. Epub 2011 Apr 5.	Television food advertising in Singapore: the nature and extent of children's exposure.	Huang L, Mehta K, Wong ML.	Nutrition and Dietetics, Flinders Clinical and Molecular Medicine, Flinders University of South Australia, Bedford Park, SA 5042, Australia. liyan.huang09@gmail.com	Television advertising is an effective medium for reaching young children and influencing their food choice. Studies have shown that messages conveyed by food advertisements are rarely consistent with healthy eating messages. With the increasing purchasing power of children, food companies are focusing on children as lucrative target audiences. Extensive marketing of energy-dense, nutrient-poor foods to children potentially contributes to the 'obesogenic' environment. This study aims to determine the degree and nature of food advertisements that Singaporean children are exposed to on television. Ninety-eight hours of children's television programmes broadcast by free-to-air stations were recorded and analysed. Advertisements with the intent of selling and sponsorships for programmes were included. Foods advertised were considered healthy if they met the criteria of the Healthier Choice Symbol in Singapore. Of the 1344 advertisements and sponsorships identified, 33% were for food. Of the food advertisements, 38% were considered healthy, while 57% were not. Candy, confectionery and fast food advertisements accounted for 46% of total food advertisements. Significantly more unhealthy food advertisements were screened on weekends compared with weekdays ($p < 0.001$). This is the first content analysis of television advertisements in Singapore and the results of this study provide background data on the extent of food advertising that children in Singapore are exposed to. Consistent with other countries, unhealthy food advertisements continue to dominate children's television programmes. This study suggests that Singaporean children are exposed to high levels of advertising for unhealthy foods. The study provides a baseline against which measures aimed at reducing children's exposure to television food advertising can be evaluated.	21467098
2012	Pediatr Clin North Am. 2012 Jun;59(3):659-75.	The new threat of digital marketing.	Montgomery KC, Chester J, Grier SA, Dorfman L.	School of Communication, American University, 4400 Massachusetts Avenue, NW, Washington, DC 20016, USA.	Because of their avid use of new media and their increased spending power, children and teens have become primary targets of a new "media and marketing ecosystem." The digital marketplace is undergoing rapid innovation as new technologies and software applications continue to reshape the media landscape and user behaviors. The advertising industry, in many instances led by food and beverage marketers, is purposefully exploiting the special relationship that youth have with new media, as online marketing campaigns create unprecedented intimacies between adolescents and the brands and products that now literally surround them.	22643172

2012	Pediatr Obes. 2012 Jun;7(3):220-9. doi: 10.1111/j.2047-6310.2011.00045.x. Epub 2012 Mar 16.	Branded food references in children's magazines: 'advertisements' are the tip of the iceberg.	Jones SC, Gregory P, Kervin L.	Centre for Health Initiatives, University of Wollongong, Wollongong, New South Wales, Australia. judithdeniet@live.com	OBJECTIVE: While children's magazines 'blur the lines' between editorial content and advertising, this medium has escaped the calls for government restrictions that are currently associated with food advertisements aired during children's television programming. The aim of this study was to address significant gaps in the evidence base in relation to commercial food messages in children's magazines by systematically investigating the nature and extent of food advertising and promotions over a 12-month period. METHOD: All issues of Australian children's magazines published in the calendar year 2009 were examined for references to foods or beverages. RESULTS: Approximately 16% of the 1678 food references identified were portrayals of branded food products (or food brands). However, only 83 of these 269 were clearly identified as advertisements. Of these 269 branded food references, 86% were for non-core (broadly, less healthy) foods, including all but seven of the advertisements. CONCLUSIONS: It appears that recent reductions in televised promotions for non-core foods, and industry initiatives to reduce the targeting of children, have not carried through to magazine advertising. This study adds to the evidence base that the marketing of unhealthy food to children is widespread, and often covert, and supports public health calls for the strengthening of advertising regulation.	22434788
2012	Public Health Nutr. 2012 May 11:1-6. [Epub ahead of print]	Views of children and parents on limiting unhealthy food, drink and alcohol sponsorship of elite and children's sports	Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ	1Prevention Research Collaboration, School of Public Health, Level 2 - Medical Foundation Building (K25), University of Sydney, Sydney, NSW 2006, Australia.	OBJECTIVE: To determine parents' and children's attitudes towards food, beverage and alcohol sponsorship of elite and children's sports and the acceptability of policies and alternative funding models to limit this sponsorship. DESIGN: Telephone surveys were conducted with parents in February-May 2011. One child from each household was invited to complete an online survey. Surveys assessed parents' perceptions about the influence of sponsorship on children and support for limiting sponsorship, and children's awareness of and attitudes towards sponsors. SETTING: Randomly sampled households in New South Wales, Australia. SUBJECTS: Parents (n 825) and children aged 10-16 years (n 243). RESULTS: Three-quarters of parents supported the introduction of policies to restrict unhealthy food, beverage and alcohol sponsorship of children's and elite sports. More parents (81 %) supported the introduction of alternative funding models to allow these companies to sponsor sport provided there was no visible branding. Two-thirds of children recalled sponsors of their favourite elite sports team/athlete, with 428 sponsors recalled. Of these, 11 % were food/beverage companies and 3 % were alcohol-related. For 39 % of sponsors, children reported feeling better about the company after it had sponsored a team/athlete. CONCLUSIONS: Australian parents support restrictions on unhealthy food, beverage and alcohol sport sponsorship. Children's positive associations regarding sponsors are likely to be linked to brand preferences and usage	22575442
2012	Int J Paediatr Dent. 2012 May;22(3):232-8. doi: 10.1111/j.1365-263X.2011.01187.x. Epub 2011 Oct 5.	A content analysis of advertisements related to oral health in children's Tamil television channels--a preliminary	Sukumaran A, Diwakar MP, Shastry SM.	Department of Public Health Dentistry, Ragas Dental College, Chennai, India. abi_aparna1986@yahoo.com	AIMS: This study was conducted to examine the nature, content, and duration of advertisements broadcasted during children's Tamil television channels and to determine the extent to which television advertising changes during school holiday and non-holiday periods and between prime time and non-prime time broadcast. METHODS: Television broadcasts on two main children's Tamil television channels were video-recorded over 16 days between 17.00-19.00 hours (non-prime time) and 19.00-21.00 hours (prime time). For each commercial, the type of product advertised, as well as the duration (in seconds), was recorded. Advertisements were categorized as 'food' and 'non-food'. The former category was further subdivided into 'sugar-rich foods' and 'other foods'.	21972943

		report.			<p>The sugar-rich foods were further categorized as liquid, solid and sticky, and slowly dissolving sugars. Commercials related to the promotion of oral health products and non-food products were also recorded.</p> <p>RESULTS: Among the total of 128 h of television programmes recorded, advertising accounted for 10.15% (13.01 hours). The advertisement of sugar-rich food products, non-food and oral hygiene products occupied 50.36%, 38.41% and 1.90%, respectively, of the total advertising time. Solid and sticky products made up 100% of advertisements in this category on Chithiram television channel, compared with 62.5% of advertisements on Chutti television channel.</p> <p>CONCLUSION: It was concluded that the advertising of sugar-rich foods, particularly solid and sticky food products, was broadcasted more in Chithiram television channel, during school holidays and during prime time.</p>	
2012	Appetite. 2012 May 26. [Epub ahead of print]	Mothers' perceptions of the negative impact on TV food ads on children's food choices.	Yu JH.	School of Communications, Sogang University, 209 Gabriel Hall, Mapo-Gu, Seoul, Republic of Korea.	This exploratory study investigates the opinions of mothers who have at least one child between the ages of 7 and 12 in terms of the impact of TV food advertising on their children. This research also examines whether there is any third person effect active in mothers' opinions of TV food advertising aimed at children by asking them about both the impact on their own children, and the children of strangers. The results reveal that most mothers in the study have generally negative attitudes toward TV food advertising aimed at children, but they believe that the children of strangers are more negatively impacted by exposure to the ads than their own children.	22641145
2012	Public Health Nutr. 2012 May 21:1-8. [Epub ahead of print]	Marketing foods to children through product packaging: prolific, unhealthy and misleading.	Mehta K, Phillips C, Ward P, Coveney J, Handsley E, Carter P.	1Department of Public Health, Flinders University, Bedford Park, South Australia, Australia.	OBJECTIVE: To investigate marketing techniques used on the packaging of child-oriented products sold through supermarkets. DESIGN: Food and beverage products which met criteria for 'marketed to children' were recorded as child-oriented. The products were analysed for food categories, nutritional value, and type and extent of marketing techniques used. SETTING: A major supermarket chain in Adelaide, South Australia. SUBJECTS: Child-oriented food and beverage products. RESULTS: One hundred and fifty-seven discrete products were marketed to children via product packaging; most (75.2 %) represented non-core foods, being high in fat or sugar. Many marketing techniques (more than sixteen unique marketing techniques) were used to promote child-oriented food products. Claims about health and nutrition were found on 55.5 % of non-core foods. A median of 6.43 marketing techniques per product was found. CONCLUSIONS: The high volume and power of marketing non-core foods to children via product packaging in supermarkets should be of concern to policy makers wanting to improve children's diet for their health and to tackle childhood obesity. Claims about health or nutrition on non-core foods deserve urgent attention owing to their potential to mislead and confuse child and adult consumers.	22608304
2012	BMJ. 2012 May 11;344:e3340. doi: 10.1136/bmj.e3340.	US efforts to limit marketing of unhealthy food to children are delayed.	Roehr B.			22581631

2012	Appetite. 2012 May 2. [Epub ahead of print]	Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary.	Cairns G, Angus K, Hastings G, Caraher M.	Institute for Social Marketing, University of Stirling, Stirling FK9 4LA, UK.	A 2009 systematic review of the international evidence on food and beverage marketing to children is the most recent internationally comprehensive review of the evidence base. Its findings are consistent with other independent, rigorous reviews conducted during the period 2003-2012. Food promotions have a direct effect on children's nutrition knowledge, preferences, purchase behaviour, consumption patterns and diet-related health. Current marketing practice predominantly promotes low nutrition foods and beverages. Rebalancing the food marketing landscape' is a recurring policy aim of interventions aimed at constraining food and beverage promotions to children. The collective review evidence on marketing practice indicates little progress towards policy aims has been achieved during the period 2003-2012. There is a gap in the evidence base on how substantive policy implementation can be achieved. We recommend a priority for future policy relevant research is a greater emphasis on translational research. A global framework for co-ordinated intervention to constrain unhealthy food marketing which has received high level support provides valuable insight on some aspects of immediate implementation research priorities.	22561190
2012	J Health Commun. 2012 Apr 4. [Epub ahead of print]	The Influence of Media Characters on Children's Food Choices	Kotler JA, Schiffman JM, Hanson KG	a Sesame Workshop , New York , New York , USA	Two experiments were conducted to assess the role of media characters in influencing children's food choices; the first focused on children's self-reported preference, whereas the second focused on actual choice. The results of the experiments suggest that popular characters can make a difference in encouraging children to select one food over another. In the first experiment, children were more likely to indicate a preference for one food over another when one was associated with characters that they liked and with whom they were familiar. This effect was particularly strong when a sugary or salty snack branded by a favored character was competing with a healthier option branded by an unknown character or no character. Alternatively, when children were asked to choose between a healthy food and a sugary or salty snack, branding of the healthy food with a favored character did not significantly change appeal of that healthy snack. However, when foods within the same category (i.e., 2 vegetables, 2 fruits, or 2 grains) were asked to compete against each other, character branding strongly influenced children's food choice. Findings from the second experiment suggest that children are more willing to try more pieces of a healthy food if a favored character, in comparison with an unknown character, is promoting that food	22475307
2012	J Pediatr Health Care. 2012 Apr 20. [Epub ahead of print]	The Effect of the Internet on Teen and Young Adult Tobacco Use: A Literature Review	Forsyth SR, Kennedy C, Malone RE		Research has shown that a positive association exists between exposure to smoking imagery, such as that found in movies and print advertising, and the subsequent uptake of cigarette smoking. Children appear to be especially vulnerable to advertising messaging and other positive portrayals of smoking, given that most adult smokers develop the habit before age 18 years. Although many traditional types of media have been studied, the current generation of youth is growing up as digital natives, with young people increasingly using the Internet for entertainment and to obtain information. Currently the Internet is an essentially unregulated marketplace of ideas and images. However, the effect of the Internet on teen smoking initiation has received little attention in studies. In this literature review, we summarize and critique the existing work, identify current knowledge gaps, and offer suggestions to health care providers about how to address this issue.	22521497

2012	Indian J Public Health. 2012 Apr-Jun;56(2):159-62	Mass media exposure to tobacco messages among secondary school children in Mumbai	Surani NS, Shroff HP	Assistant Professor, School of Health Systems Studies, Tata Institute of Social Sciences, V N Purav Marg, Deonar, Mumbai, Maharashtra, India.	The objectives of this study were to explore differences in exposure to media messages (pro- and antitobacco messages, marketing and promotions) between students consuming tobacco, areca nut, nonconsumers, and those intending to quit and to examine differences between municipal and private school students. The Global Youth Tobacco Survey was completed by secondary school students (N = 534) from municipal and private schools in Mumbai. Overall, the number of students who reported ever use of tobacco was quite low (5.1%). There was no significant difference in exposure to media messages between users of tobacco, areca nut, and nonusers. There were significantly higher numbers of ever users of tobacco in private compared to municipal schools. There was a significant association between exposure to marketing and promotions and intention to quit, but not with the other exposure variables. Media exposure may be related to intention to quit but not to quitting behavior	22910627
2012	Health Promot J Austr. 2012 Apr;23(1):58-62	Television viewing, television content, food intake, physical activity and body mass index: a cross-sectional study of preschool children aged 2-6 years.	Cox R, Skouteris H, Rutherford L, Fuller-Tyszkiewicz M, Dell' Aquila D, Hardy LL.	School of Psychology, Deakin University, Victoria	ISSUE ADDRESSED: The mechanisms underlying the relationship between television (TV) viewing and weight status in preschool aged children are not well understood. This study aimed to explore the relationships between preschool children's TV viewing habits (i.e. time spent viewing, content watched and foods eaten while viewing), daily food intake, general physical activity levels and their body mass index (BMI). METHOD: A cross-sectional sample of preschool children in Melbourne (n = 135). Mothers of preschoolers completed a 3-day TV diary; information was collected on viewing time, content and food consumed while watching TV. Mothers also reported their child's height, weight and physical activity behaviour. Associations between study and outcome variables were determined by bivariate correlations and hierarchical regression analyses. RESULTS: Mean age of preschoolers was 4.5 years and 14% were overweight or obese. The mean daily time spent watching TV was 90.7 minutes (SD 50.7) A small, positive correlation was found between viewing TV on weekdays and child BMIz, (p<0.05). This effect was moderate when controlled for total kilojoules consumed while watching TV (on weekdays) and number of minutes spent in sedentary activities (across three days). CONCLUSIONS: This study suggests that TV viewing may affect preschool child weight status through displacement of physical activity or eating while viewing.	22730942
2012	Appetite. 2012 Apr 26. [Epub ahead of print]	Children's recognition of advertisements on television and on Web pages.	Blades M, Oates C, Li S.	Department of Psychology, University of Sheffield, Western Bank, Sheffield S10 2TN, United Kingdom.	In this paper we consider the issue of advertising to children. Advertising to children raises a number of concerns, in particular the effects of food advertising on children's eating habits. We point out that virtually all the research into children's understanding of advertising has focused on traditional television advertisements, but much marketing aimed at children is now via the Internet and little is known about children's awareness of advertising on the Web. One important component of understanding advertisements is the ability to distinguish advertisements from other messages, and we suggest that young children's ability to recognise advertisements on a Web page is far behind their ability to recognise advertisements on television.	22543303

2012	Appetite. 2012 Apr;58(2):496-503. Epub 2011 Dec 22.	The use of negative themes in television food advertising.	Pettigrew S, Roberts M, Chapman K, Quester P, Miller C.	Health Promotion Evaluation Unit (M408), University of Western Australia, 35 Stirling Highway, Crawley WA 6009, Australia. simone.pettigrew@uwa.edu.au	The ability of food advertising to trigger food consumption and influence social norms relating to food consumption has resulted in increasing attention being given to the prevalence and nature of food advertising. The present study investigated the use of negative themes in food advertisements aired on Australian television to determine the prevalence of depictions of violence/aggression, mocking, nagging, boredom, loneliness, food craving, mood enhancement, and the emotional use of food across 61 days of programming time. The results suggest that advertisers are using negative themes to capture attention and invoke an emotional response in the target audience. Sixteen percent (14,611) of the 93,284 food advertisements contained negative themes, with mood enhancement and food craving being the most commonly depicted negative themes. Advertisements with negative themes were more likely to be for non-core foods and to be aired during children's popular viewing times than at other times. The potential for negative themes in food advertising to promote unhealthy food consumption behaviors among children is likely to be of concern to policy makers. Building on this exploratory study, further research is needed to investigate how nutrition-related decision making is affected by exposure to food advertisements employing negative emotional themes.	22222562
2012	Appetite. 2012 Apr;58(2):658-64. Epub 2011 Nov 22.	Persuasive techniques used in television advertisements to market foods to UK children.	Boyland EJ, Harrold JA, Kirkham TC, Halford JC	Kissileff Laboratory for the Study of Human Ingestive Behaviour, Department of Experimental Psychology, University of Liverpool, Eleanor Rathbone Building, Bedford Street South, Liverpool L69 7ZA, UK.	The aim of this study was to quantify the nature and extent of use of persuasive marketing techniques in television advertisements (adverts) to promote foods to children. Popular UK commercial television channels broadcasting children's/family viewing were recorded for 2days (6am-10pm) every month in 2008 and recordings were screened for adverts. Eighteen thousand eight hundred and eighty eight adverts were for food and these were coded for peak/non-peak children's viewing time and representation of core (healthy)/non-core (unhealthy)/miscellaneous foods. The analysis assessed use of persuasive appeals, premium offers, promotional characters (brand equity and licensed characters), celebrity endorsers and website promotion in food adverts. Promotional characters, celebrity endorsers and premium offers were used more frequently to promote non-core than core foods, even on dedicated children's channels. Brand equity characters featured on a greater proportion of food adverts than licensed characters. A food brand website was promoted in a third of food adverts (websites are not covered by the statutory regulation on food advertising). This extensive analysis of television adverts demonstrated that the use of persuasive marketing techniques to promote unhealthy foods was extensive in broadcasting popular with children despite regulations. Further studies should incorporate an analysis of the content of websites promoted during food adverts.	22133361
2012	Can J Public Health. 2012 Mar-Apr;103(2):100-2.	A ban on marketing of foods/beverages to children: the who, why, what and how of a population health intervention.	Dutton DJ, Campbell NR, Elliott C, McLaren L.	Department of Community Health Sciences, University of Calgary, Calgary, AB.	There is increasing recognition in Canada and elsewhere of the need for population-level interventions related to diet. One example of such an intervention is a ban on the marketing of foods/beverages to children, for which several health organizations have or are in the process of developing position statements. Considering the federal government's inaction to impose restrictions that would yield meaningful impact, there is opportunity for the health community to unite in support of a stronger set of policies. However, several issues and challenges exist, some of which we outline in this commentary. We emphasize that, despite challenges, the present and predicted future of diet-related illness in Canadian children is such that population-level intervention is necessary and becoming increasingly urgent, and there is an important role for the health community in facilitating action.	22530530

2012	Prev Med. 2012 Mar-Apr;54(3-4):181-2	Obesity, TV commercials, passive commuting, and smoking	Morabia A, Costanza MC			22464709
2012	Cien Saude Colet. 2012 Mar;17(3):681-6.	Life cannot consist of dreams alone: reflections on advertising and a healthy diet	Villagem AS, Prado SD, Freitas RF, Carvalho MC, Cruz CO, Klotz J, Freire Gde B	Programa de Pós-Graduação em Alimentação Nutrição e Saúde, Núcleo de Estudos sobre Cultura e Alimentação, Instituto de Nutrição, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, RJ	In this essay we present some thoughts on advertising and a healthy diet in the contemporary world, where consumption plays a highly relevant role. We seek to emphasize two aspects, among many others yet to be explored in the scientific literature in the food and nutritional field: the hegemony of the biomedical paradigm and the fragmentation of human life when advertising campaigns associate food with the idea of a healthy diet. We believe that we cannot merely live through advertisements in which our desires are triggered constantly and where the world is only dreams and the main goal is to sell more and earn more, even using some strategies for dissemination of biomedical and nutritional information. In our opinion, the merger between diet and health, i.e. a healthy diet, must involve enlightenment of the individual including information on quality in the context of social life in order to achieve the ideal of happiness. Individuals whose identities are fully formed both in dreams and reality can boldly seek knowledge and think about themselves in the world context, as well as zeal for their diet and health	22450409
2012	Appetite. 2012 Mar 12. [Epub ahead of print]	Television advertising and branding: Effects on eating behaviour and food preferences in children.	Boyland EJ, Halford JC.	Department of Experimental Psychology, Institute of Psychology, Health and Society, University of Liverpool, Liverpool, L69 7ZA.	Television provides one of the first, and most intimate, experiences of commercial food promotion. Therefore, unsurprisingly, the effects of television advertising on children's brand preferences are well established. However, its effect on actual food intake and the food choices in children of various weight statuses has only recently been characterised. Despite regulation, children in the UK are exposed to considerable numbers of food adverts on television. These are predominantly for foods high in fat, salt and sugar (HFSS), which are marketed to children using promotional characters and themes of fun. Such adverts have been shown to cause significant increases in intake, particularly in overweight and obese children, and enhanced preference for high carbohydrate and high fat foods in children who consume the greatest amounts of televisual media.	22421053

2012	Public Health Nutr. 2012 Mar;15(3):487-94. Epub 2011 Aug 2.	Socio-economic differences in exposure to television food advertisements in the UK: a cross-sectional study of advertisements broadcast in one television region.	Adams J, Tyrrell R, Adamson AJ, White M.	Institute of Health & Society, Newcastle University, Baddiley-Clarke Building, Richardson Road, Newcastle upon Tyne NE2 4AX, UK. .m.adams@ncl.ac.uk	<p>OBJECTIVE: To document socio-economic differences in exposure to food advertising, including advertisements for foods high in fat, salt and sugar (HFSS) as defined by the UK Food Standards Agency's Nutrient Profiling Model. DESIGN: A cross-sectional survey. Information (including product advertised and viewing figures) on all advertisements broadcast in one UK region over one week (6-12 July 2009) was obtained. Food advertisements were identified and linked to nutritional information on the content of advertised foods. SETTING:UK Tyne-Tees television region. SUBJECTS: Data were sourced from a UK-wide television viewing panel. RESULTS: Eleven per cent of advertising seen was for food and 63 % of food advertising seen was for HFSS foods. The proportion of all advertising seen that was for food was smaller among viewers in the least v. most affluent social grade (OR = 0.98, 99 % CI 0.95, 1.00). There was no difference in the proportion of food advertising seen that was for HFSS food between viewers in the most and least affluent social grades. Total exposure to both all food advertising and HFSS food advertising was 2.1 times greater among the least v. the most affluent viewers. CONCLUSIONS: While the least affluent viewers saw relatively fewer food advertisements, their absolute exposure to all food and HFSS food advertisements was higher than that of the most affluent viewers. Current UK restrictions prohibit advertisements for HFSS foods during programmes with a high proportion of child viewers. Extending these to all programming may reduce socio-economic inequalities in exposure to these advertisements and in diet and obesity.</p>	21806864
2012	Soc Issues Policy Rev. 2012 Mar;6(1):54-81. Epub 2012 Mar 5.	Digital Gaming and Pediatric Obesity: At the Intersection of Science and Social Policy.	Staiano AE, Calvert SL.	Pennington Biomedical Research Center.	<p>Children and adolescents in developed countries are heavily immersed in digital media, creating an inexpensive, far-reaching marketing opportunity for the food industry and the gaming industry. However, exposure to nonnutritious food and beverage advertisements combined with the use of stationary media create a conflict between entertainment and public health. Using the popular digital gaming platforms advergames (online games that market branded products) and exergames (video games that involves gross motor activity for play) as exemplars, the following article provides an analysis of the negative and positive health impacts of digital gaming as they relate specifically to overweight and obesity outcomes for children and adolescents. Theoretical explanations including the food marketing defense model, persuasion knowledge model, and social cognitive theory are used to explain the influence of gaming on young players' health. Throughout the article, we discuss the role of public policy to encourage the development and use of health-promoting digital games as an innovative, effective tool to combat the pediatric obesity crisis.</p>	22545068

2012	J Pediatr. 2012 Mar;160(3):452-5. Epub 2011 Oct 7.	Advertising Influences on Young Children's Food Choices and Parental Influence.	Ferguson CJ, Muñoz ME, Medrano MR.	Texas A&M International University, Laredo, TX.	OBJECTIVE: To evaluate whether advertising for food influences choices made by children, the strength of these influences, and whether they might be easily undone by parental influences. STUDY DESIGN: Children between 3 and 8 years of age (n=75) were randomized to watch a series of programs with embedded commercials. Some children watched a commercial for a relatively healthy food item; the other children watched a commercial for a less healthy item, both from the same fast-food company. Children were also randomized either to receive parental encouragement to choose the healthy item or to choose whichever item they preferred. RESULTS: Results indicated that children were more likely to choose the advertised item, despite parental input. Parental input only slightly moderated this influence. CONCLUSION: Although advertising impact on children's food choices is moderate in size, it appears resilient to parental efforts to intervene. Food advertisements directed at children may have a small but meaningful effect on their healthy food choices.	21983204
2012	Health Policy. 2012 Mar;104(3):288-95. Epub 2011 Oct 20.	Restricting unhealthy food sponsorship: Attitudes of the sporting community.	Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ.	Prevention Research Collaboration, School of Public Health, University of Sydney, Sydney, Australia	OBJECTIVES: Sponsorship is recognised as a significant marketing tool and restricting unhealthy food sponsorship of children's sport has been recommended by leading health agencies as a contribution towards preventing childhood obesity. This study aimed to determine the junior sporting community's support for policy interventions to restrict unhealthy food sponsorship. METHODS: Sports clubs known to have food sponsors and representing the most popular sports for Australian children across a range of demographic areas were recruited. Interview-based questionnaires were conducted at clubs with parents (n=200) and officials (n=20), and with governing sporting associations (n=20). Questionnaires measured respondents' attitudes towards sponsorship and support for sponsorship regulations. RESULTS: Many officials and parents perceived children to be 'very' influenced by elite sport sponsorship (65% of association officials, 53% of parents and 45% of club officials). Children were thought to be less influenced by sponsorship of their own sporting clubs (10%, 11% and 10%, respectively). However, 50% of officials and 70% of parents supported restrictions to children's sport sponsorship. Respondents were most supportive of restricting the use of unhealthy food logos on children's uniforms. CONCLUSIONS: Restricting unhealthy food sponsorship is supported by the sporting community and policy change is needed to reduce the perceived impact of this marketing. Alternative funding mechanisms have the potential to maintain sport funding whilst reducing promotional opportunities for unhealthy food.	22018820
2012	Am J Prev Med. 2012 Mar;42(3):334-5.	The nation needs to do more to address food marketing to children.	Dorfman LE, Wootan MG	Berkeley Media Studies Group, Public Health Institute, Berkeley, California.		22341174
2012	Appetite. 2012 Feb;58(1):396-9. Epub 2011 Nov 10.	Perceptions of the food marketing environment among African American teen girls and adults	Bibeau WS, Saksvig BI, Gittelsohn J, Williams S, Jones L, Young DR	Department of Epidemiology and Biostatistics, School of Public Health, University of Maryland, 2234S SPH, College Park, MD 20742,	Obesity disproportionately affects African American adolescents, particularly girls. While ethnically targeted marketing of unhealthful food products contributes to this disparity, it is not known how African Americans perceive the food marketing environment in their communities. Qualitative methods, specifically photovoice and group discussions, were used to understand perceptions of African American adults and teen girls regarding targeted food marketing to adolescent girls. An advisory committee of four students, two faculty, and two parents was formed, who recruited peers to photograph their environments and participate	22116054

				USA. wbibeau@gmail.com	in group discussions to answer "what influences teen girls to eat what they do." Seven adults and nine teens (all female) participated in the study. Discussions were transcribed, coded, and analyzed with ATLAS.ti to identify common and disparate themes among participants. Results indicated that adults and teens perceived the type of food products, availability of foods, and price to influence the girls' choices. The girls spoke about products that were highly convenient and tasty as being particularly attractive. The adults reported that advertisements and insufficient nutrition education were also influencers. The teens discussed that the places in which food products were available influenced their choices. Results suggest that the marketing of highly available, convenient food at low prices sell products to teen girls. Future work is needed to better understand the consumer's perspective on the food and beverage marketing strategies used.	
2012	PLoS One. 2012;7(2):e31578. Epub 2012 Feb 15.	Effect of restrictions on television food advertising to children on exposure to advertisements for 'less healthy' foods: repeat cross-sectional study.	Adams J, Tyrrell R, Adamson AJ, White M.	Institute of Health and Society, Newcastle University, Newcastle upon Tyne, United Kingdom.	BACKGROUND: In 2007, new scheduling restrictions on television food advertising to children in the UK were announced. The aim of the restrictions was to "reduce significantly the exposure of children under 16 to high fat, salt or sugar (HFSS) advertising". We explored the impact of the restrictions on relative exposure to HFSS food advertising among all viewers and among child television viewers, as well as adherence to the restrictions. METHODS: We conducted two cross-sectional studies of all advertisements broadcast in one region of the UK over one week periods - the first (week 1) six months before the restrictions were introduced, and the second (week 2) six months after. Data on what products were advertised were linked to data on how many people watched each advertisement. Nutritional content of foods advertised was added to the dataset and used to calculate HFSS status. Relative exposure was calculated as the proportion of all advertising person-minute-views (PMVs) that were for HFSS foods. RESULTS: 1,672,417 advertising PMV were included. 14.6% of advertising PMV were for food and 51.1% of these were for HFSS food. Relative exposure of all viewers to HFSS food advertising increased between study weeks 1 and 2 (odds ratio (99% confidence intervals)=1.54 (1.51 to 1.57)). Exposure of children to HFSS food advertising did not change between study weeks 1 and 2 (odds ratio (99% confidence intervals)=1.05 (0.99 to 1.12)). There was almost universal adherence to the restrictions. CONCLUSIONS: Despite good adherence to the restrictions, they did not change relative exposure of children to HFSS advertising and were associated with an increase in relative exposure of all viewers to HFSS advertising. Stronger restrictions targeting a wider range of advertisements are necessary to reduce exposure of children to marketing of less healthful foods.	22355376

2012	BMC Public Health. 2012 Feb 21;12:139	Lessons for public health campaigns from analysing commercial food marketing success factors: a case study	Aschemann-Witzel J, Perez-Cueto FJ, Niedzwiedzka B, Verbeke W, Bech-Larsen T	MAPP-Centre, Aarhus School of Business, Aarhus University, Haslegaardsvej 10, 8210 Aarhus, Denmark. jeaw@asb.dk	<p>BACKGROUND: Commercial food marketing has considerably shaped consumer food choice behaviour. Meanwhile, public health campaigns for healthier eating have had limited impact to date. Social marketing suggests that successful commercial food marketing campaigns can provide useful lessons for public sector activities. The aim of the present study was to empirically identify food marketing success factors that, using the social marketing approach, could help improve public health campaigns to promote healthy eating.</p> <p>METHODS: In this case-study analysis, 27 recent and successful commercial food and beverage marketing cases were purposively sampled from different European countries. The cases involved different consumer target groups, product categories, company sizes and marketing techniques. The analysis focused on cases of relatively healthy food types, and nutrition and health-related aspects in the communication related to the food. Visual as well as written material was gathered, complemented by semi-structured interviews with 12 food market trend experts and 19 representatives of food companies and advertising agencies. Success factors were identified by a group of experts who reached consensus through discussion structured by a card sorting method.</p> <p>RESULTS: Six clusters of success factors emerged from the analysis and were labelled as "data and knowledge", "emotions", "endorsement", "media", "community" and "why and how". Each cluster subsumes two or three success factors and is illustrated by examples. In total, 16 factors were identified. It is argued that the factors "nutritional evidence", "trend awareness", "vertical endorsement", "simple naturalness" and "common values" are of particular importance in the communication of health with regard to food.</p> <p>CONCLUSIONS: The present study identified critical factors for the success of commercial food marketing campaigns related to the issue of nutrition and health, which are possibly transferable to the public health sector. Whether or not a particular factor contributes to future success depends on the specific context of use, the combination of factors and the environment. Consideration of the specific applicability of the success factors identified in this study during the design of marketing activities could benefit public sector food and health-related campaigns.</p>	22353342
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2012	Public Health Nutr. 2012 Feb 21:1-6. [Epub ahead of print]	Perceptions of the food shopping environment are associated with greater consumption of fruits and vegetables	Blitstein JL, Snider J, Evans WD.	IRTI International, 3040 East Cornwallis Road, Research Triangle Park, NC 27709-2194, USA.	<p>OBJECTIVE: The present study examined whether characteristics such as quality, selection and convenience are associated with dietary intake of fruits and vegetables independent of perceived costs in an inner-city, low-income population. DESIGN: Secondary analysis of baseline data from a social marketing intervention designed to change household dietary practices among parents of 3- to 7-year-old children. SETTING: A community sample drawn from six low income, primarily minority neighbourhoods in Chicago, IL, USA. SUBJECTS: From the parent study, 526 respondents completed the baseline survey and were eligible for inclusion. Of this number, 495 provided complete data on sociodemographic characteristics, fruit and vegetable consumption, perceptions of the shopping environment, perceived costs of fruits and vegetables, and food shopping habits. RESULTS: Logistic regression analysis showed that more positive perceptions of the food shopping environment were associated with greater consumption of fruits and vegetables. There was an increase of approximately twofold in the likelihood of consuming three or more fruits and vegetables daily per level of satisfaction ascribed to the shopping environment. This association was independent of perceived cost, store type and sociodemographic characteristics. CONCLUSIONS: Our data show that among a generally minority and low-income population, quality, selection and convenience are important determinants of fruit and vegetable consumption. Nutrition promotion campaigns that aim to alter the built environment by increasing access to fruits and vegetables should recognize that simply increasing availability may not yield beneficial change when characteristics of the shopping context are ignored.</p>	22348332
2012	J Public Health Policy. 2012 Feb;33(1):75-88. doi: 10.1057/jphp.2011.46. Epub 2011 Aug 25.	Advanced policy options to regulate sugar-sweetened beverages to support public health.	Pomeranz JL.	Yale Rudd Center for Food Policy & Obesity, Yale University, 309 Edwards Street, PO Box 208369, New Haven, Connecticut 06520, USA. jennifer.pomeranz@yale.edu	<p>Consumption of sugar-sweetened beverages (SSBs) has increased worldwide. As public health studies expose the detrimental impact of SSBs, consumer protection and public health advocates have called for increased government control. A major focus has been on restricting marketing of SSBs to children, but many innovative policy options--legally defensible ways to regulate SSBs and support public health--are largely unexplored. We describe the public health, economic, and retail marketing research related to SSBs (including energy drinks). We review policy options available to governments, including mandatory factual disclosures, earmarked taxation, and regulating sales, including placement within retail and food service establishments, and schools. Our review describes recent international initiatives and classifies options available in the United States by jurisdiction (federal, state, and local) based on legal viability.</p>	21866177

2012	Minerva Pediatr. 2012 Feb;64(1):15- 26.	The reverse pyramid: a qualiquantitative study about food advertising inside children's television programmes.	Pellai A, Vetrano S, Nobile M, Luti C.	University of Milan, Milan, Italy - alberto.pellai@unimi.it c/o.	AIM: Considering how eating habits affect the health of children and taking into account the influence of advertising messages, we wanted to investigate the quantity and the typology of advertising on air during children's television programmes. METHODS: The research was conducted beginning in January 2008 up to March 2008. During this period all children's television programmes, in which cartoons are aired were recorded during third week of each month, for a total of 179 hours 27 minutes and 18 seconds. RESULTS: The research allowed to analyze 3495 adverts; 485 (13.88%) of them promoted foodstuffs, and among these a massive presence of confectionery product ads (304 out of 485, i.e. 62.68%) stands out. CONCLUSION: In conclusion a food pyramid based exclusively on the typology of foodstuffs advertised in the examined adverts has been built, in order to compare it to the correct food pyramid. The base of the pyramid we obtained is constantly composed by sweets and the top by fruits and vegetables. A child watching a television program addressed to him, must see commercials that advertise foodstuffs in 42.45% of cases, and among these 58.59% advertise sweets. This highlights the absolute need to protect children from aggressive marketing and advertising of foodstuffs through alimentary and media educational programmes, as well as through legislation regulating food commercials directed to children, as already happens in many European countries.	22350040
2012	Cien Saude Colet. 2012 Feb;17(2):481- 90.	Regulation of publicity for children's food as a strategy for promotion of health.[Article in Portuguese]	Henriques P, Sally EO, Burlandy L, Beiler RM.	Faculdade de Nutrição Emilia de Jesus Ferreiro, Universidade Federal Fluminense, Niteroi, RJ. patriciah@uol.com.br	The eating habits of the Brazilian population have been changing in recent decades and publicity is one of the factors contributing to this situation. The objective of this study was to evaluate the content of food publicity broadcast on television and addressed to children, from the standpoint of regulation. The publicity broadcast on the two major television stations during the school holidays was recorded on VHS tapes. Content analysis techniques were used and eight categories of analysis were defined based on the theoretical benchmark of the eating habits and their determining factors. The proposal for a Technical Regulation of Anvisa was used to conduct this analysis. 1018 advertisements were recorded, of which 132 (12.9%) that advertised foods targeted at children were selected, but only 12 different products were identified. According to the proposed regulation, all the material analyzed violated no less than three articles, among which the 4th, Sections III and VIb stand out. The pressing need for government regulation of the content of food advertisements for children, the consumption of which can be harmful to health, is clearly apparent because of its influence on the decision to purchase, both by the children themselves, and their parents.	22267042
2012	Health Aff (Millwood). 2012 Feb;31(2):392- 8.	Government can regulate food advertising to children because cognitive research shows that it is inherently misleading.	Graff S, Kunkel D, Mermin SE.	Public Health Law and Policy, Oakland, California, USA. sgraff@phlpnet.org	The childhood obesity crisis has prompted repeated calls for government action to curb the marketing of unhealthy food to children. Food and entertainment industry groups have asserted that the First Amendment prohibits such regulation. However, case law establishes that the First Amendment does not protect "inherently misleading" commercial speech. Cognitive research indicates that young children cannot effectively recognize the persuasive intent of advertising or apply the critical evaluation required to comprehend commercial messages. Given this combination--that government can prohibit "inherently misleading" advertising and that children cannot adequately understand commercial messages--advertising to children younger than age twelve should be considered beyond the scope of constitutional protection.	22323170
2012	BMJ. 2012 Feb 3;344:e883. doi: 10.1136/bmj.e8 83.	Cancer charity rates TV shows in terms of junk food advertising.	Sweet M.			22306843

2012	Am J Public Health. 2012 Feb;102(2):214-22. Epub 2011 Dec 15.	Protecting young people from junk food advertising: implications of psychological research for first amendment law.	Harris JL, Graff SK.	Jennifer L. Harris is with the Rudd Center for Food Policy and Obesity, Yale University, New Haven, CT. Samantha K. Graff is with Public Health Law & Policy, Oakland, CA.	In the United States, one third of children and adolescents are overweight or obese, yet food and beverage companies continue to target them with advertising for products that contribute to this obesity crisis. When government restrictions on such advertising are proposed, the constitutional commercial speech doctrine is often invoked as a barrier to action. We explore incongruities between the legal justifications for the commercial speech doctrine and the psychological research on how food advertising affects young people. A proper interpretation of the First Amendment should leave room for regulations to protect young people from advertising featuring calorie-dense, nutrient-poor foods and beverages.	22390435
2012	Appetite. 2012 Feb;58(1):1-5. Epub 2011 Oct 5.	Association between food marketing exposure and adolescents' food choices and eating behaviors.	Scully M, Wakefield M, Niven P, Chapman K, Crawford D, Pratt IS, Baur LA, Flood V, Morley B; NaSSDA Study Team.	Centre for Behavioural Research in Cancer, Cancer Council Victoria, 1 Rathdowne Street, Carlton, VIC 3053, Australia. Maree.Scully@cancervic.org.au	The present study examined associations between food marketing exposure and adolescents' food choices and reported consumption of energy-dense and nutrient-poor (EDNP) foods. A cross-sectional survey of 12,188 Australian secondary students aged 12-17 years was conducted, using a web-based self-report questionnaire. Measures included students' level of exposure to commercial television and non-broadcast types of food marketing, whether they had tried a new product or requested a product they had seen advertised, and their reported consumption of fast food, sugary drinks and sweet and salty snacks. Results indicated greater exposure to commercial television, print/transport/school food marketing and digital food marketing were all independently associated with students' food choices. High commercial television viewers (>2h/day) were more likely to report higher consumption of EDNP foods (ORs ranged from 1.31 for fast food to 1.91 for sweet snacks). Some associations between digital food marketing exposure and students' eating behaviors were found; however, print/transport/school food marketing was only related to sweet snack consumption. These study results suggest that cumulative exposure to television food advertising and other food marketing sources are positively linked to adolescents' food choices and eating behaviors. Policy changes to restrict food marketing to young people should include both television and non-broadcast media.	22001023
2012	Prev Chronic Dis. 2012 Jan;9:E30; author reply E29. Epub 2011 Dec 15	Restricting unhealthful food advertising to children and the First Amendment.	Rossen LM. Prev Chronic Dis. 2011 Sep;8(5):A92.			22172197

2012	Am J Prev Med. 2012 Jan;42(1):56-60.	Food marketing to children through toys: response of restaurants to the first U.S. toy ordinance.	Otten JJ, Hekler EB, Krukowski RA, Buman MP, Saelens BE, Gardner CD, King AC.	Stanford Prevention Research Center, Department of Medicine, Stanford University School of Medicine, Stanford, California, USA. jotten@stanford.edu	BACKGROUND: On August 9, 2010, Santa Clara County CA became the first U.S. jurisdiction to implement an ordinance that prohibits the distribution of toys and other incentives to children in conjunction with meals, foods, or beverages that do not meet minimal nutritional criteria. Restaurants had many different options for complying with this ordinance, such as introducing more healthful menu options, reformulating current menu items, or changing marketing or toy distribution practices. PURPOSE: To assess how ordinance-affected restaurants changed their child menus, marketing, and toy distribution practices relative to non-affected restaurants. METHODS: Children's menu items and child-directed marketing and toy distribution practices were examined before and at two time points after ordinance implementation (from July through November 2010) at ordinance-affected fast-food restaurants compared with demographically matched unaffected same-chain restaurants using the Children's Menu Assessment tool. RESULTS: Affected restaurants showed a 2.8- to 3.4-fold improvement in Children's Menu Assessment scores from pre- to post-ordinance with minimal changes at unaffected restaurants. Response to the ordinance varied by restaurant. Improvements were seen in on-site nutritional guidance; promotion of healthy meals, beverages, and side items; and toy marketing and distribution activities. CONCLUSIONS: The ordinance appears to have positively influenced marketing of healthful menu items and toys as well as toy distribution practices at ordinance-affected restaurants, but did not affect the number of healthful food items offered.	22176847
2012	Erratum in:J Nutr Educ Behav. 2012 Jan;44(1):95	A menagerie of promotional characters: promoting food to children through food packaging.	Hebden L, King L, Kelly B, Chapman K, Innes-Hughes C.	Prevention Research Collaboration, School of Public Health, The University of Sydney, Camperdown, New South Wales, Australia. lana.hebden@sydney.edu.au	OBJECTIVE: To determine the extent to which (1) promotional characters are used on food packaging for healthful and less-healthful food and (2) different companies use this persuasive marketing strategy. DESIGN: Cross-sectional supermarket audit of all food and beverages featuring promotional characters on the packaging. SETTING: Three Australian supermarket chains. VARIABLES MEASURED: Frequency of observed products, package size, nutritional composition. ANALYSIS: Frequencies and bivariate analyses was conducted. Nutritional composition (healthful vs less healthful) was analyzed by character type and company type, that is, whether the company was signed to the Australian Food and Grocery Council Responsible Marketing to Children Initiative (RMCI) signatory. RESULTS: Products featuring promotional characters on packaging (n = 352) were predominantly less-healthful food and beverages (70%). [corrected]. Nutritional composition varied significantly by character type, with 69% of products with sportspersons, celebrities, or movie tie-ins being healthful, compared with 38% of licensed and 16% [corrected] of company-owned characters. Only 13 of the 75 companies using characters on packaging were RMCI signatory. CONCLUSIONS AND IMPLICATIONS: Promotional characters are largely used on food packaging to promote less-healthful food to children. Most of these characters are company-owned characters that are not subject to any form of regulation in Australia. Further efforts to limit this form of marketing to children are required.	21906547

2012	Adolesc Med State Art Rev. 2011 Dec;22(3):387-401, x	Social marketing: an underutilized tool for promoting adolescent health	Bryant CA, Mayer AB, McDermott RJ, Panzera AD, Trainor JK	Florida Prevention Research Center, University of South Florida College of Public Health, Department of Community and Family Health, 13201 Bruce B. Downs, Blvd. (MDC 056), Tampa, Florida 33612, USA	Social marketing applies some of the same principles used in commercial marketing for the analysis, planning, execution, and evaluation of programs designed to motivate voluntary behavioral change. It relies on consumer research for understanding the people they hope to change, including their values, aspirations, fears, lifestyle, and factors that motivate and deter them from adopting desired behaviors. Social marketing has been applied in public health settings since the 1980s for promoting such behaviors as safer sex, hypertension and cholesterol control, reduced occurrence of alcohol-impaired driving, improved utilization of public health prevention and screening services, and enactment of better school nutrition policies in schools. Although most evidence for social marketing's utility comes from interventions directed at adult audiences, its application with adolescents may help to address issues that have been challenging or unresponsive to health behavior change specialists. This article describes the basic tenets of social marketing as a behavior change process, identifies its previously successful applications with adolescent audience segments, and offers both lessons learned and projected future applications that employ emerging communication technologies	22423457
2011	Arch Pediatr Adolesc Med. 2011 Dec;165(12):1078-86. Epub 2011 Aug 1.	Trends in the nutritional content of television food advertisements seen by children in the United States: analyses by age, food categories, and companies.	Powell LM, Schermbeck RM, Szczypka G, Chaloupka FJ, Braunschweig CL.	Institute for Health Research and Policy, University of Illinois at Chicago, 1747 W Roosevelt Ave, Room 558, M/C 275, Chicago, IL 60608, USA. powelll@uic.edu	OBJECTIVE: To examine trends in children's exposure to food-related advertising on television by age, product category, and company.DESIGN: Nutritional content analysis using television ratings data for 2003, 2005, 2007, and 2009 for children.SETTING: Annual age-specific television ratings data captured children's exposure to broadcast network, cable network, syndicated, and spot television food advertising from all (except Spanish-language) programming.PARTICIPANTS: Children aged 2 to 5 and 6 to 11 years. Main Exposure Television ratings.MAIN OUTCOME MEASURES: Children's exposure to food-related advertising on television with nutritional assessments for food and beverage products for grams of saturated fat, sugar, and fiber and milligrams of sodium.RESULTS: Children aged 2 to 5 and 6 to 11 years saw, respectively, on average, 10.9 and 12.7 food-related television advertisements daily in 2009, down 17.8% and 6.9% from 2003. Exposure to food and beverage products high in saturated fat, sugar, or sodium fell 37.9% and 27.7% but fast-food advertising exposure increased by 21.1% and 30.8% among 2- to 5- and 6- to 11-year-olds, respectively, between 2003 and 2009. In 2009, 86% of ads seen by children were for products high in saturated fat, sugar, or sodium, down from 94% in 2003.CONCLUSIONS: Exposure to unhealthy food and beverage product advertisements has fallen, whereas exposure to fast-food ads increased from 2003 to 2009. By 2009, there was not a substantial improvement in the nutritional content of food and beverage advertisements that continued to be advertised and viewed on television by US children.	21810626
2011	Minerva Pediatr. 2011 Dec;63(6):483-90.	International epidemic of childhood obesity and television viewing.	Guran T, Bereket A.	Division of Pediatric Endocrinology, Marmara University, Istanbul, Turkey. tulayguran@yahoo.com	Childhood obesity is one of the most serious global public health challenges of the 21st century. The prevalence of this problem has increased at an alarming rate in many countries. The main causes of childhood obesity are; sedentary lifestyle, unhealthy eating patterns, genetic factors, socio-economic status, race/ethnicity, media and marketing, and the physical environment. Children are clearly being targeted as a receptive market by the manufacturing industry. Undoubtedly, television provides one of the most powerful media through which products can be advertised. Furthermore, food advertising accounted for the largest percentage of these advertisements in virtually all countries. Detailed nutritional analysis of food advertisements identified that up to 90% of food products have a high fat, sugar or salt content. Therefore TV viewing is recently identified as one of the risk factors contributing to	22075803

					development of childhood obesity by several mechanisms. This review provides some facts and figures about the global trend of rising obesity among children, amount and content of television and especially food advertisements being watched by children and its possible mechanisms how to cause adverse effects on children's health and contribute to childhood obesity.	
2011	Psychiatr Clin North Am. 2011 Dec;34(4):895-909. Epub 2011 Oct 5.	Obesity: a public health approach.	Novak NL, Brownell KD.	Department of Psychology, Rudd Center for Food Policy and Obesity, Yale University, 309 Edwards Street, New Haven, CT 06511, USA. nicole.novak@yale.edu	Obesity is an epidemic that likely will worsen without substantive changes to the current environment. Although treatment of the individual has conventionally been the focus of the obesity field, prevention using a public health model will be essential for making progress on a population level. There are encouraging signs that communities across the country are acknowledging the complex causes of obesity and making impressive reforms to improve their health and that of their children. Public policy changes long have been used to combat infectious and chronic diseases and will be vital in the attempt to reduce the toll of poor diet, physical inactivity, and obesity.	22098812
2011	Public Health Nutr. 2011 Dec 14:1-8. [Epub ahead of print]	Do television food commercials target children in Germany?	Effertz T, Wilcke AC	Institute for Commercial Law, University of Hamburg, Max Brauer Allee 60, D-22765 Hamburg, Germany.	<p>OBJECTIVE: To examine whether the German food industry directs commercials for unhealthy products to children and whether self-administered voluntary restrictions on the promotion of less healthy foods (the EU Pledge) are effective to mitigate this exposure.DESIGN: By analysing German data from television (TV) channels, advertised products were categorized and food products classified as core foods (healthy) and non-core foods (less healthy). Marketing techniques were documented. Food commercials were furthermore compared with commercials for toy products, and comparisons were made between advertising patterns before and after the EU Pledge.SETTING: Data for ten German TV channels were recorded for two weekdays and two weekend days from 06.00 to 22.00 hours in 2007 and 2008. A second sample containing one weekday and one weekend day of three German TV channels was recorded again in 2010 for comparison in the same time period.SUBJECTS: In total 16 062 advertisements from 2007-2008 and 2657 from 2010 were analysed.RESULTS: In 2007-2008 19.9 % of TV commercials were for food products, of which 73 % were for non-core foods, 21 % for core foods and 6 % not classified. In three specified channels widely viewed by children and youth, 14.5 % of commercials were for food products, of which 88.2 % were for non-core foods. Commercials for unhealthy foods were broadcast significantly more often during children's peak viewing and in children's programmes, with a higher use of promotional characters and premiums than found in commercials for non-food products. In 2010, analysis of the three specified channels found that 18.5 % of commercials were for food products, of which 98.2 % were for non-core foods. While the use of premiums decreased compared with other commercials, the use of promotional characters in non-core food commercials increased, especially during children's programmes.CONCLUSIONS: Children in Germany are exposed to large numbers of food commercials. The exposure to commercials for non-core foods and the use of techniques attractive to children are widespread and appear to have remained unaffected by the announcement of the EU Pledge in December 2007. We conclude that the industry's voluntary agreement has failed to fulfil its declared purpose.</p>	

2011	Nutr Hosp. 2011 Dec;26(6):1250-5.	[Effect of food television advertising on the preference and food consumption: systematic review].[Article in Spanish]	Díaz Ramírez G, Souto-Gallardo MC, Bacardí Gascón M, Jiménez-Cruz A.	Escuela de Ciencias de la Salud de Ensenada, Universidad Autónoma de Baja California, Tijuana, Baja California, México.	Objective: The aim of this study was to perform a systematic review of papers that assess the effect of television food advertisings (TFA) in the food preferences and consumption in different age groups. Methods: Randomized clinical trials published up to November 2010 were searched in Pubmed, Ebsco, Cochrane and Scielo. Studies were included if they assessed the effect of direct exposition to TFA over the food preferences, demand, and consumption. Results: Ten studies fulfilled the inclusion criteria. In the three studies conducted on preschooler children an increase in selection and demand of advertized foods was reported. All the fives studies conducted on scholar children reported negative outcomes in those children exposed to unhealthy food. An increase on food consumption was observed in two of the three studies conducted on adults. Conclusion: The assess studies show that in pre-school and school children the effect of advertising on food consumption was consistent, while in adults there is a trend toward an strong association of exposure food advertising and preference, consumption and demand of the food advertised.	22411368
2011	Public Health Nutr. 2011 Nov 29:1-7. [Epub ahead of print]	Availability and marketing of food and beverages to children through sports settings: a systematic review.	Carter MA, Edwards R, Signal L, Hoek J.	Department of Public Health, University of Otago, 23a Mein Street, PO Box 7343, Wellington South 6242, New Zealand.	OBJECTIVE: The current systematic review aimed to identify and critically appraise research on food environments in sports settings, including research into the types of food and beverages available, the extent and impact of food and beverage sponsorship and marketing, and views about food environments among key stakeholders.DESIGN: A systematic review. Fourteen English-language studies (two were papers describing different facets of the same study), published between 1985 and 2011, were identified from searches of electronic databases and bibliographies of primary studies.SETTING: Most studies originated from Australia (n 10), with the remaining studies originating in the UK (n 1), New Zealand (n 1), the USA (n 1) and Canada (n 1). Data were collected from observations in stadia, websites and televised sports events, through in-depth interviews, focus groups and surveys with sports club members, parents and quick serve restaurant managers.RESULTS: Literature exploring food environments in sports settings was limited and had some important methodological limitations. No studies comprehensively described foods available at clubs or stadia, and only one explored the association between food and beverage sponsorship and club incomes. Club policies focused on the impact of health promotion funding rather than the impact of sponsorship or food availability in sports settings.CONCLUSIONS: Further research, including comprehensive studies of the food environment in sports settings, is required to document the availability, sponsorship and marketing of food and beverages at national, regional and club levels and to estimate how sports settings may influence children's diets.	22123225

2011	J Nutr Educ Behav. 2011 Nov;43(6):441-8. Epub 2011 Jun 12.	Adolescent weight status and receptivity to food TV advertisements.	Adachi-Mejia AM, Sutherland LA, Longacre MR, Beach ML, Titus-Ernstoff L, Gibson JJ, Dalton MA.	Community Health Research Program, Hood Center for Children and Families, Dartmouth Medical School, Lebanon, NH 03756-0001, USA. anna.adachi-mejia@dartmouth.edu	OBJECTIVE: This study examined the relationship between adolescent weight status and food advertisement receptivity.DESIGN: Survey-based evaluation with data collected at baseline (initial and at 2 months), and at follow-up (11 months).SETTING: New Hampshire and Vermont.PARTICIPANTS: Students (n = 2,281) aged 10-13 in 2002-2005.MAIN OUTCOME MEASURE: Overweight.ANALYSIS: Generalized estimating equations to model the relationship between identifying a food advertisement as their favorite and being overweight.RESULTS: Overall, 35.9% of the adolescents were overweight. Less than one fifth named a food advertisement as their favorite (16.1%). Most of the food advertisements were for less-healthy food (89.6%). After controlling for school, age, sex, sociodemographics, physical activity, number of TV sessions watched, and having a TV in the bedroom, overweight adolescents were significantly less likely to be receptive to food advertisements (relative risk = 0.83, 95% confidence interval 0.70, 0.98) compared to non-overweight adolescents.CONCLUSIONS AND IMPLICATIONS: This study provides preliminary evidence that normal-weight adolescents are receptive to unhealthy food advertisements. Longitudinal studies are needed to evaluate whether consistent exposure to advertisements for unhealthy food, particularly if they are promoted with healthy behaviors such as being physically active, influence adolescents' food choices, and ultimately their body mass index, over the long term.	21665550
2011	J Paediatr Child Health. 2011 Nov;47(11):776-82. doi: 10.1111/j.1440-1754.2011.02025.x. Epub 2011 Jun 28.	Art of persuasion: an analysis of techniques used to market foods to children.	Hebden L, King L, Kelly B.	Prevention Research Collaboration, University of Sydney, Camperdown, New South Wales, Australia. lana.hebden@sydney.edu.au	AIM: Persuasive marketing techniques, such as promotional characters, influence children's food preferences and requests for foods. The aim of this research was to describe the techniques used to market unhealthy foods and beverages to children on Sydney free-to-air television.METHODS: Marketing techniques designed to appeal to children were identified from international literature and summarised into a systematic coding tool. Using this tool, the marketing techniques used in a random sample of 100 unique food advertisements, broadcasted on Sydney free-to-air television, were coded. Frequency of marketing techniques was analysed overall and for use in advertisements marketing unhealthy foods, emotionally or verbally appealing to parents, or featuring child actors.RESULTS: Advertisers' use of persuasive techniques generally did not differ by type of food advertised. Marketing techniques with greater prominence in unhealthy food advertising were palatability (54% of unhealthy food advertisements), convenience (52%), fantasy/imagination (28%), fun/happiness (17%) and cartoon characters (9%). Advertisements emotionally appealing to parents (24%) were significantly more likely to make general health or nutrition statements (38% vs. 17%), and appealed to children concurrently through fun/happiness and fantasy/imagination appeals. Children were depicted in advertisements as eating with friends or family, situated within the home and frequently snacking on less healthy foods.CONCLUSIONS: Food and beverage advertisers use a range of visual, audio and emotive techniques to appeal to children and their parents that do not discriminate by the type of food advertised. The range and complexity of these techniques complicate the restriction of their use in food advertising to children.	21707822

2011	J Health Commun. 2011 Oct;16(9):925-40. Epub 2011 May 24.	Health claims for food products advertised on Korean television and their regulation: a content analysis.	Choi WJ, Kim HK.	Department of Mass Communication, Konkuk University, Chungju, Republic of Korea. wjchoi6736@kku.ac.kr	This article reviews the landmark studies of advertising claims and analyzes the health claims for food products advertised on Korean TV. The present study examined 1,479 food commercials aired on three major television networks from 2005 to 2007. The commercials containing health claims accounted for 29.5% of the total. The health claims ranged from the nutrient content to the use of ambiguous expressions such as "healthy." Among the 5 types of health claims considered, specific nutrient claims ranked first (11.1%), followed by general health claims (9.4%). The regulatory policies of Korea concerning such advertising claims were compared with those of the United States. The results of this study are expected to have important implications for Korean policymakers who need better ways to regulate health claims for food products.	21534023
2011	J Appl Res Child. 2011 Oct 18;2(2). pii: 17	Saturday Morning Television Advertisements Aired on English and Spanish Language Networks along the Texas-Mexico Border	Barroso CS, Rodriguez D, Camacho PL.	University of Texas School of Public Health.	OBJECTIVES: The aim of this content analysis study is to characterize the TV advertisements aired to an at-risk child population along the Texas-Mexico border. METHODS: We characterized the early Saturday morning TV advertisements aired by three broadcast network categories (U.S. English language, U.S. Spanish language, and Mexican Spanish language) in Spring 2010. The number, type (food related vs. non-food related), target audience, and persuasion tactics used were recorded. Advertisements, based on nutrition content, were categorized as meeting or not meeting current dietary guidelines. RESULTS: Most commercials were non-food related (82.7%, 397 of 480). The majority of the prepared foods (e.g., cereals, snacks, and drinks) advertised did not meet the current U.S. Dietary Guidelines. Additionally, nutrition content information was not available for many of the foods advertised on the Mexican Spanish language broadcast network category. CONCLUSIONS: For U.S. children at risk for obesity along the Texas-Mexico border exposure to TV food advertisements may result in the continuation of sedentary behavior as well as an increased consumption of foods of poor nutritional quality. An international regulatory effort to monitor and enforce the reduction of child-oriented food advertising is needed.	22209760
2011	Psychol Rep. 2011 Oct;109(2):369-79.	Magical thinking and memory: distinctiveness effect for tv commercials with magical content	Subbotsky E, Mathews J.	Psychology Department, Lancaster University, Lancaster LA1 4YF, UK. e.subbotsky@lancaster.ac.uk	The aim of this study was to examine whether memorizing advertised products of television advertisements with magical effects (i.e., talking animals, inanimate objects which turn into humans, objects that appear from thin air or instantly turn into other objects) is easier than memorizing products of advertisements without such effects, by testing immediate and delayed retention. Adolescents and adults viewed two films containing television advertisements and were asked to recall and recognize the films' characters, events, and advertised products. Film 1 included magical effects, but Film 2 did not. On a free-recall test, no differences in the number of items recalled were noted for the two films. On the immediate recognition test, adolescents, but not adults, showed significantly better recognition for the magical than the nonmagical film. When this test was repeated two weeks later, results were reversed: adults, but not adolescents, recognized a significantly larger number of items from the magical film than the nonmagical one. These results are interpreted to accentuate the role of magical thinking in cognitive processes.	22238845

2011	Int J Pediatr Obes. 2011 Oct;6(5-6):401- 8. Epub 2011 Aug 12.	Self-regulation by industry of food marketing is having little impact during children's preferred television.	Potvin Kent M, Dubois L, Wanless A.	Institute of Population Health, University of Ottawa, 1 Stewart Street, Ottawa, Ontario K1N 6N5, Canada. mpk@rogers.com	OBJECTIVE: To examine the efficacy of self-regulation of food marketing to children by comparing, during children's preferred viewing on television, the differences in food/beverage marketing between two groups of corporations: 17 corporations participating in the Canadian Children's Food and Beverage Advertising Initiative (CAI) and 35 corporations not participating (non-CAI) in this initiative.METHODS: The food/beverage marketing activities of CAI and non-CAI corporations during 99.5 hours of children's preferred viewing on television were compared. First, the preferred television viewing of 272 children aged 10-12 years from Ontario and Quebec who completed TV viewing journals for a seven-day period was determined. A total of 32 television stations were simultaneously recorded, and a content analysis of children's preferred viewing was conducted and included coding all food/beverage promotions and their nutritional content. Each food/beverage promotion was classified by corporation type (i.e., CAI or non-CAI).RESULTS: The CAI was responsible for significantly more food/beverage promotions, and used media characters and repetition more frequently in their food/beverage promotions than the non-CAI group. Nutritionally, the CAI food/beverage promotions were higher in fats, sugar, sodium and energy per 100 grams. A significantly greater proportion of the CAI food/beverage promotions were considered 'less healthy' compared to the non-CAI promotions.CONCLUSION: With the exception of the four corporations that did not market to children at all, the commitments that have been made in the CAI are not having a significant impact on the food and beverage marketing environment on television which is viewed by 10-12-year-olds.	21838571
2011	Int J Pediatr Obes. 2011 Oct;6(5-6):455- 61. Epub 2011 Aug 16.	The extent of food advertising to children on UK television in 2008.	Boyland EJ, Harrold JA, Kirkham TC, Halford JC.	Department of Experimental Psychology, Institute of Psychology, Health and Society, University of Liverpool, Liverpool, UK. e.boyland@liverpool.ac.uk	OBJECTIVE: To provide the most comprehensive analysis to date of the extent of food advertising on UK television channels popular with young people following regulatory reform of this type of marketing activity.METHODS: UK television was recorded 06:00-22:00 h for a weekday and a weekend day every month between January and December 2008 for 14 of the most popular commercial channels broadcasting children's/family viewing. Recordings were screened for advertisements, which were coded according to predefined categories including whether they were broadcast in peak/non-peak children's viewing time. Food advertisements were coded as core (healthy)/non-core (unhealthy)/miscellaneous foods.RESULTS: Food and drinks were the third most heavily advertised product category, and there were a significantly greater proportion of advertisements for food/drinks during peak compared to non-peak children's viewing times. A significantly greater proportion of the advertisements broadcast around soap operas than around children's programmes were for food/drinks. Children's channels broadcast a significantly greater proportion of non-core food advertisements than the family channels. There were significant differences between recording months for the proportion of core/non-core/miscellaneous food advertisementsCONCLUSIONS: Despite regulation, children in the UK are exposed to more TV advertising for unhealthy than healthy food items, even at peak children's viewing times. There remains scope to strengthen the rules regarding advertising of HFSS foods around programming popular with children and adults alike, where current regulations do not apply. Ongoing, systematic monitoring is essential for evaluation of the effectiveness of regulations designed to reduce children's exposure to HFSS food advertising on television in the UK.	21846176

2011	Arch Latinoam Nutr. 2011 Sep;61(3):296-301	Regulation of food advertising on television for the prevention of childhood obesity	Hidalgo CG, Samur EA	Escuela de Salud Pública, Universidad de Chile, Santiago, Chile.	Obesity is a serious global epidemic and the prevention strategies implemented have been insufficient. Numerous environmental factors have been associated with risk of obesity and their full consideration in prevention policies is important. The connection between food advertising on television and childhood obesity has been demonstrated. The large number of advertisements for unhealthy foods targeted at children through television and its possible impact on health has led some countries to legislate on this matter. However, a conceptual framework of reference enabling legislation must be internationally defined in order to achieve a real impact in preventing childhood obesity. This paper reviews scientific evidence on the relationship between food advertising and childhood obesity as a basis for developing public policies to regulate food marketing on television	22696898
2011	Prev Chronic Dis. 2011 Sep;8(5):A92. Epub 2011 Aug 15.	Protecting children from harmful food marketing: options for local government to make a difference.	Harris JL, Graff SK.	Rudd Center for Food Policy and Obesity, Yale University, PO Box 208369, New Haven, CT 06520-8369, USA. Jennifer.harris@yale.edu	The obesity epidemic cannot be reversed without substantial improvements in the food marketing environment that surrounds children. Food marketing targeted to children almost exclusively promotes calorie-dense, nutrient-poor foods and takes advantage of children's vulnerability to persuasive messages. Increasing scientific evidence reveals potentially profound effects of food marketing on children's lifelong eating behaviors and health. Much of this marketing occurs in nationwide media (eg, television, the Internet), but companies also directly target children in their own communities through the use of billboards and through local environments such as stores, restaurants, and schools. Given the harmful effect of this marketing environment on children's health and the industry's reluctance to make necessary changes to its food marketing practices, government at all levels has an obligation to act. This article focuses on policy options for municipalities that are seeking ways to limit harmful food marketing at the community level.	21843422
2011	J Law Med. 2011 Sep;19(1):128-46	The regulatory pyramid meets the food pyramid: can regulatory theory improve controls on television food advertising to Australian children?	Reeve B.	Faculty of Law, University of Sydney, Camperdown, NSW 2006, Australia. Belinda.reeve@sydney.edu.au	This article examines whether responsive regulation has potential to improve the regulatory framework which controls free-to-air television advertising to children, so that the regulatory scheme can be used more effectively as a tool for obesity prevention. It presents two apparently conflicting arguments, the first being that responsive regulation, particularly monitoring and enforcement measures, can be used to refine the regulation of children's food advertising. The second argument is that there are limits to the improvements that responsive regulation can achieve, since it is trying to achieve the wrong goal, namely placing controls on misleading or deceptive advertising techniques rather than diminishing the sheer volume of advertisements to which children are exposed. These two positions reflect a conflict between public health experts and governments regarding the role of industry in chronic disease prevention, as well as a broader debate about how best to regulate industry.	21988015

2011	Int J Behav Nutr Phys Act. 2011 Sep 5;8:95.	"Food company sponsors are kind, generous and cool": (mis)conceptions of junior sports players.	Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ.	Prevention Research Collaboration, School of Public Health, University of Sydney, Sydney, Australia. bridget.kelly@sydney.edu.au	<p>BACKGROUND: Children's exposure to unhealthy food marketing influences their food knowledge, preferences and consumption. Sport sponsorship by food companies is widespread and industry investment in this marketing is increasing. This study aimed to assess children's awareness of sport sponsors and their brand-related attitudes and purchasing intentions in response to this marketing. METHODS: Sports clubs known to have food sponsors and representing the most popular sports for Australian children across a range of demographic areas were recruited. Interview-based questionnaires were conducted at clubs with children aged 10-14 years (n = 103) to examine their recall of local sports club and elite sport sponsors, and their attitudes towards sponsors and sponsorship activities. RESULTS: Most children (68%) could recall sponsors of their sports club, naming a median of two sponsors, including a median of one food company sponsor each. Almost half (47%) of children could recall any sponsors of their favourite elite sporting team. Children aged 10-11 years were more likely than older children to report that they thought about sponsors when buying something to eat or drink (P < 0.01); that they liked to return the favour to sponsors by buying their products (P < 0.01); and that sponsors were 'cool' (P = 0.02). Most children had received a voucher or certificate from a food or beverage company to reward sport performance (86% and 76%, respectively). Around one-third of children reported liking the company more after receiving these rewards. CONCLUSIONS: Children's high recall of food and beverage company sport sponsors and their positive attitudes towards these sponsors and their promotions is concerning as this is likely to be linked to children's food preferences and consumption. Limiting children's exposure to this marketing is an important initiative to improve children's nutrition.</p>	21888675
2011	Am J Prev Med. 2011 Sep;41(3):322-33; quiz A4.	Industry progress to market a healthful diet to American children and adolescents.	Kraak VI, Story M, Wartella EA, Ginter J.	Deakin Population Health Strategic Research Centre, School of Health and Social Development, Deakin University, 221 Burwood Highway, Melbourne, VIC 3125, Australia. vivica.kraak@deakin.edu.au	<p>CONTEXT: The IOM released an expert committee report in 2005 that assessed the nature, extent, and influence of food and beverage marketing practices on the diets and health of American children and adolescents. The report concluded that prevailing marketing practices did not support a healthful diet and offered recommendations for diverse stakeholders to promote a healthful diet. The investigators evaluated progress made by food, beverage, and restaurant companies; trade associations; entertainment companies; and the media to achieve the IOM report recommendations over 5 years. EVIDENCE ACQUISITION: A literature review was conducted of electronic databases and relevant government, industry, and media websites between December 1, 2005, and January 31, 2011. Evidence selection was guided by the IOM LEAD principles (i.e., locate, evaluate, and assemble evidence to inform decisions) and five qualitative-research criteria, and it was validated by data and investigator triangulation. The investigators selected and categorized 117 data sources into two evidence tables used to evaluate industry progress (i.e., no, limited, moderate, and extensive). EVIDENCE SYNTHESIS: Food and beverage companies made moderate progress; however, limited progress was made by other industry subsectors. Industry stakeholders used integrated marketing communications (IMC) to promote primarily unhealthy products, which threaten children's and adolescents' health and miss opportunities to promote a healthy eating environment. CONCLUSIONS: Diverse industry stakeholders have several untapped opportunities to advance progress by promoting IMC to support a healthful diet; substantially strengthening self-regulatory programs; supporting truthful and non-misleading product labeling and health claims; engaging in partnerships; and funding independent evaluations of collective efforts.</p>	21855748

2011	Am J Prev Med. 2011 Sep;41(3):291-6.	Child and adolescent exposure to food and beverage brand appearances during prime-time television programming	Speers SE, Harris JL, Schwartz MB.	Rudd Center for Food Policy and Obesity, Yale University, 309 Edwards Street, New Haven, CT 06520, USA.	BACKGROUND: The food industry disproportionately markets to young people through product placements. Children and adolescents may be more susceptible to these disguised persuasive attempts.PURPOSE: Quantify incidence and youth exposure to food and beverage brand appearances within shows on prime-time TV.METHODS: Data on the number of food, beverage, and restaurant brand appearances within shows during prime-time programming in 2008 were purchased from Nielsen and analyzed by product category and company in 2010. Exposure to these brand appearances by children, adolescents, and adults were examined and compared with exposure to prime-time TV advertisements for the same categories and companies using additional Nielsen data.RESULTS: Food, beverage, and restaurant brands appeared a total of 35,000 times within prime-time TV programming examined by Nielsen in 2008. Regular soft drinks, traditional restaurants (i.e., not quickserve), and energy/sports drinks made up 60% of all brand appearances. Young people viewed relatively few of these appearances with one notable exception. Coca-Cola products were seen 198 times by the average child and 269 times by the average adolescent during prime-time shows over the year, accounting for 70% of child exposure and 61% of adolescent exposure to brand appearances. One show, American Idol, accounted for more than 95% of these exposures. Exposure of children to Coca-Cola products through traditional advertisements was much less common.CONCLUSIONS: Brand appearances for most food industry companies, except for Coca-Cola, are relatively rare during prime-time programming with large youth audiences. Coca-Cola has pledged to refrain from advertising to children, yet the average child views almost four Coke appearances on prime-time TV every week. This analysis reveals a substantial, potential loophole in current food industry self-regulatory pledges to advertise only better-for-you foods to children.	21855743
2011	Prev Chronic Dis. 2011 Sep;8(5):A92. Epub 2011 Aug 15.	Protecting children from harmful food marketing: options for local government to make a difference.	Harris JL, Graff SK.	Rudd Center for Food Policy and Obesity, Yale University, PO Box 208369, New Haven, CT 06520-8369, USA. Jennifer.harris@yale.edu	The obesity epidemic cannot be reversed without substantial improvements in the food marketing environment that surrounds children. Food marketing targeted to children almost exclusively promotes calorie-dense, nutrient-poor foods and takes advantage of children's vulnerability to persuasive messages. Increasing scientific evidence reveals potentially profound effects of food marketing on children's lifelong eating behaviors and health. Much of this marketing occurs in nationwide media (eg, television, the Internet), but companies also directly target children in their own communities through the use of billboards and through local environments such as stores, restaurants, and schools. Given the harmful effect of this marketing environment on children's health and the industry's reluctance to make necessary changes to its food marketing practices, government at all levels has an obligation to act. This article focuses on policy options for municipalities that are seeking ways to limit harmful food marketing at the community level.	21843422
2011	Br J Nurs. 2011 Aug 11-Sep 8;20(15):940-1.	Does the media promote healthy nutrition for children?	Glasper A.			21841660

2011	BMJ. 2011 Aug 24;343:d5434. doi: 10.1136/bmj.d5434.	Drinks industry is using social networking to promote alcohol to young people, report warns.	Mooney H.			21865276
2011	Health Promot J Austr. 2011 Aug;22(2):91-6.	Tobacco and alcohol sponsorship of sporting events provide insights about how food and beverage sponsorship may affect children's health.	Kelly B, Baur LA, Bauman AE, King L.	Prevention Research Collaboration, School of Public Health, University of Sydney, NSW. bridget.kelly@sydney.edu.au	ISSUE ADDRESSED: Determining children's exposure to food and beverage company sponsorship, and the effect of this exposure, is important in establishing the extent to which there may be health and societal consequences. This paper aimed to provide preliminary evidence on the scope and potential effects on children of unhealthy food and beverage sponsorship. METHODS: A review of published literature and media and marketing reports was conducted to determine the types of food and beverage sponsorship campaigns that children are exposed to, and the effect of corporate sponsorship (including tobacco and alcohol) on children and adolescents. RESULTS: A large range of food and beverage sponsorship activities, in Australia and internationally, were identified for both school and sport settings. In particular, food and beverage companies have attempted to develop a marketing presence at all levels of professional and community sport. No information was identified measuring the effect of food and beverage company sponsorship on children and adolescents. However, empirical evidence from consumer studies relating to tobacco and alcohol sponsorship has repeatedly demonstrated that sponsorship has an impact on children's product recall and product-related attitudes and behavioural intentions. CONCLUSIONS: While there is no available research on the direct effect of food and beverage sponsorship, the demonstrated effects of tobacco and alcohol sponsorship on children's product awareness, preferences and consumption are likely to be applicable to food companies.	21819349
2011	Public Health Nutr. 2011 Aug;14(8):1403-14.	An analysis of the content of food industry pledges on marketing to children.	Hawkes C, Harris JL.	Consulting Services, Food and Nutrition Policy and Fellow, Centre for Food Policy, City University, London, UK. corinnah@usp.br	OBJECTIVE: To identify pledges made by the food industry to change food marketing to children worldwide, examine their content and discuss their potential to reduce the harmful effects of food marketing to children.DESIGN: A search for pledges and specific commitments made by participating companies and a content analysis of their scope and criteria used to define the marketing covered or excluded.SETTING: Global.SUBJECTS: Food industry pledges.RESULTS: Between 2005 and 2009, the food industry developed thirteen pledges on food marketing to children, involving fifty-two food companies. Two of the pledges were global, two were regional and nine applied to specific countries. Three were specific to the soft drinks industry and to the fast-food industry, with the rest being food industry wide. Ten of the pledges required companies to publish individual commitments; a total of eighty-two such commitments were published, many of which extended beyond the minimum standards set in the pledges. All pledges included definitions of children and child-targeted media, as well as the communication channels and marketing techniques covered, and permitted companies to set criteria for foods that are exempted from any restrictions. There were many similarities between the pledges and individual commitments; however, there were also many differences.CONCLUSIONS: The development of pledges on food marketing to children in such a short span of time is impressive. However, limitations and inconsistencies in the pledges and commitments suggest that the food industry has a long way to go if its pledges are to comprehensively reduce the exposure and power of marketing to children.	21718588

2011	Public Health Nutr. 2011 Aug;14(8):1337-44. Epub 2010 Dec 8.	An experimental study on the effects of exposure to magazine advertising on children's food choices	Jones SC, Kervin L.	Centre for Health Initiatives, University of Wollongong, Wollongong, NSW 2522, Australia. sandraj@uow.edu.au	<p>OBJECTIVE: The present study sought to determine the feasibility of an experimental research design to investigate the effects of exposure to magazine advertising on children's food choices. DESIGN: Children were randomized to read either a magazine with food advertisements or a magazine with no food advertisements. They then chose two food items from the intervention 'store' to eat after the session. Data were also collected on attitudes to advertising and snack food preferences. Finally, participants' parents were provided with a self-completion survey on food choices and other variables (n 24). SETTING: Three vacation care centres in regional New South Wales, Australia. SUBJECTS: Children aged 5-12 years (n 47). RESULTS: Children in the experimental condition were more likely to choose advertised foods than those in the control group. Interestingly, the majority reported taste and healthiness as the most important factors in snack food choices; however, when faced with the actual food choice, they predominantly chose unhealthy foods (eighty-two unhealthy and only twelve healthy items were chosen). CONCLUSIONS: This was the first study to assess the effects on children of exposure to food advertising within the context of reading a child-targeted magazine. Importantly, even with the small sample size and venue limitations, we found that exposure to magazine advertising influenced food choices. Children's magazines are an under-researched and poorly regulated medium, with considerable potential to influence children's food choices. The present study shows that the methodology is feasible, and future studies could replicate this with larger samples.</p>	21138610
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2011	Med J Aust. 2011 Jul 4;195(1):20-4.	Self-regulation by industry of food marketing is having little impact during children's preferred television.	Hebden LA, King L, Grunseit A, Kelly B, Chapman K.	Prevention Research Collaboration, University of Sydney, Sydney, NSW. lana.hebden@sydney.edu.au	<p>OBJECTIVE: To assess the impact of the quick-service restaurant industry (QSRI) selfregulatory initiative on fast-food advertising to children on Australian commercial television.DESIGN AND SETTING:Analysis of advertisements for foods on the three main free-to-air commercial television channels (channels 7, 9 and 10) in Sydney, Australia, over 4 days in both May 2009 and April 2010 in terms of: number of advertisements; types of food (coded core [healthy] foods, non-core [unhealthy] foods, miscellaneous foods; or fast foods); whether advertised meals were intended for children; whether advertisements were broadcast during children's peak viewing times; and whether the company in question was a signatory to the QSRI initiative.MAIN OUTCOME MEASURES: Change in the mean frequency and rate of food advertisements per hour from 2009 to 2010; change in the types of fast-food meals (healthier alternatives [at least one nutrient-dense, low-energy food considered part of a healthy diet for children], non-core [high in undesirable nutrients and not considered part of a healthy diet for children], and other) being advertised; and proportion of children's energy requirements provided by fast-food meals.RESULTS: From 2009 to 2010, the mean frequency of fast-food advertisements increased from 1.1 to 1.5 per hour. While non-core fast foods comprised a lesser share of fast-food advertising in 2010 than 2009, the mean frequency at which they were advertised during times when the largest numbers of children were watching television remained the same (1.3 per hour in both 2009 and 2010). Family meals advertised for children's consumption in 2010 provided energy far in excess of children's requirements.CONCLUSIONS: Children's exposure to unhealthy fast-food advertising has not changed following the introduction of self-regulation, and some fast foods advertised for children's consumption contain excessive energy. The limited impact of self-regulation suggests that governments should define the policy framework for regulating fast-food advertising to children.</p>	21728936
2011	Econ Hum Biol. 2011 Jul;9(3):221-33. Epub 2011 Mar 5.	Exposure to food advertising on television: associations with children's fast food and soft drink consumption and obesity.'	Andreyeva T, Kelly IR, Harris JL.	Yale University, Rudd Center for Food Policy & Obesity, 309 Edwards Street, New Haven, CT 06520-8369, United States. tatiana.andreyeva@yale.edu	<p>There is insufficient research on the direct effects of food advertising on children's diet and dietrelated health, particularly in non-experimental settings. We employ a nationally-representative sample from the Early Childhood Longitudinal Survey-Kindergarten Cohort (ECLS-K) and the Nielsen Company data on spot television advertising of cereals, fast food restaurants and soft drinks to children across the top 55 designated-market areas to estimate the relation between exposure to food advertising on television and children's food consumption and body weight. Our results suggest that soft drink and fast food television advertising is associated with increased consumption of soft drinks and fast food among elementary school children (Grade 5). Exposure to 100 incremental TV ads for sugar-sweetened carbonated soft drinks during 2002-2004 was associated with a 9.4% rise in children's consumption of soft drinks in 2004. The same increase in exposure to fast food advertising was associated with a 1.1% rise in children's consumption of fast food. There was no detectable link between advertising exposure and average body weight, but fast food advertising was significantly associated with body mass index for overweight and obese children (≥ 85th BMI percentile), revealing detectable effects for a vulnerable group of children. Exposure to advertising for calorie-dense nutrient-poor foods may increase overall consumption of unhealthy food categories.</p>	21439918

2011	Med J Aust. 2011 Jul 4;195(1):20-4.	Advertising of fast food to children on Australian television: the impact of industry self-regulation.	Hebden LA, King L, Grunseit A, Kelly B, Chapman K.	Prevention Research Collaboration, University of Sydney, Sydney, NSW. lana.hebden@sydney.edu.au	<p>OBJECTIVE: To assess the impact of the quick-service restaurant industry (QSRI) selfregulatory initiative on fast-food advertising to children on Australian commercial television.DESIGN AND SETTING:Analysis of advertisements for foods on the three main free-to-air commercial television channels (channels 7, 9 and 10) in Sydney, Australia, over 4 days in both May 2009 and April 2010 in terms of: number of advertisements; types of food (coded core [healthy] foods, non-core [unhealthy] foods, miscellaneous foods; or fast foods); whether advertised meals were intended for children; whether advertisements were broadcast during children's peak viewing times; and whether the company in question was a signatory to the QSRI initiative.MAIN OUTCOME MEASURES: Change in the mean frequency and rate of food advertisements per hour from 2009 to 2010; change in the types of fast-food meals (healthier alternatives [at least one nutrient-dense, low-energy food considered part of a healthy diet for children], non-core [high in undesirable nutrients and not considered part of a healthy diet for children], and other) being advertised; and proportion of children's energy requirements provided by fast-food meals.RESULTS: From 2009 to 2010, the mean frequency of fast-food advertisements increased from 1.1 to 1.5 per hour. While non-core fast foods comprised a lesser share of fast-food advertising in 2010 than 2009, the mean frequency at which they were advertised during times when the largest numbers of children were watching television remained the same (1.3 per hour in both 2009 and 2010). Family meals advertised for children's consumption in 2010 provided energy far in excess of children's requirements.CONCLUSIONS: Children's exposure to unhealthy fast-food advertising has not changed following the introduction of self-regulation, and some fast foods advertised for children's consumption contain excessive energy. The limited impact of self-regulation suggests that governments should define the policy framework for regulating fast-food advertising to children.</p>	21728936
2011	Pediatrics. 2011 Jul;128(1):201-8. Epub 2011 Jun 27.	Children, adolescents, obesity, and the media.	Council on Communications and Media, Strasburger VC.		<p>Obesity has become a worldwide public health problem. Considerable research has shown that the media contribute to the development of child and adolescent obesity, although the exact mechanism remains unclear. Screen time may displace more active pursuits, advertising of junk food and fast food increases children's requests for those particular foods and products, snacking increases while watching TV or movies, and late-night screen time may interfere with getting adequate amounts of sleep, which is a known risk factor for obesity. Sufficient evidence exists to warrant a ban on junk-food or fast-food advertising in children's TV programming. Pediatricians need to ask 2 questions about media use at every well-child or well-adolescent visit: (1) How much screen time is being spent per day? and (2) Is there a TV set or Internet connection in the child's bedroom?</p>	21708800

2011	Pediatrics. 2011 Jul;128(1):e93-100. Epub 2011 Jun 27.	Food commercials increase preference for energy-dense foods, particularly in children who watch more television.	Boyland EJ, Harrold JA, Kirkham TC, Corker C, Cuddy J, Evans D, Dovey TM, Lawton CL, Blundell JE, Halford JC.	Kissileff Laboratory for the Study of Human Ingestive Behaviour, Department of Experimental Psychology, University of Liverpool, Eleanor Rathbone Building, Bedford Street South, Liverpool L69 7ZA, United Kingdom. e.boyland@liv.ac.uk	OBJECTIVE: Our aim was to determine if levels of television viewing (a proxy measure for habitual commercial exposure) affect children's food preference responses to television food commercials.METHODS: A total of 281 children aged 6 to 13 years from northwest England viewed toy or food television commercials followed by a cartoon on 2 separate occasions; they then completed 3 food preference measures, a commercial recognition task, and a television viewing questionnaire.RESULTS: After viewing the food commercials, all children selected more branded and nonbranded fat-rich and carbohydrate-rich items from food preference checklists compared with after viewing the toy commercials. The food preferences of children with higher habitual levels of television viewing were more affected by food commercial exposure than those of low television viewers. After viewing food commercials, high television viewing children selected a greater number of branded food items compared with after the toy commercials as well as compared with the low television viewers. Children correctly recognized more food commercials than toy commercials.CONCLUSIONS: Exposure to television food commercials enhanced high television viewers' preferences for branded foods and increased reported preferences for all food items (branded and nonbranded) relative to the low television viewers. This is the first study to demonstrate that children with greater previous exposure to commercials (high television viewers) seemed to be more responsive to food promotion messages than children with lower previous advertising exposure.	21708808
2011	Obesity (Silver Spring). 2011 Jun 30. doi: 10.1038/oby.2011.161. [Epub ahead of print]	A Nutritional Comparison of Foods and Beverages Marketed to Children in Two Advertising Policy Environments.	Potvin Kent M, Dubois L, Wanless A.	Institute of Population Health, University of Ottawa, Ottawa, Ontario, Canada.	Childhood obesity is associated with children's exposure to food/beverage marketing. Policy options in this area are being sought in order to reduce childhood obesity rates on a populationlevel. We examined the nutritional quality of foods advertised to children during their preferred television viewing in Ontario (Canada), where advertising is self-regulated by industry, and in Quebec (Canada), where a child-directed advertising ban exists. A total of 428 children aged 10-12 years completed television viewing diaries for 7 days. Thirty-two television stations were recorded simultaneously between 6 am and midnight. A content analysis of 90 h of English Ontario, French Quebec, and English Quebec children's preferred viewing was then undertaken. A total of 429 food and beverage advertisements were analyzed and their nutritional quality was assessed. Food advertisements in the Quebec French sample were statistically significantly higher in total fat, saturated fat and protein, and lower in carbohydrates and sugar per 100 g, and as a percentage of energy than food ads in the two English samples. A statistically significantly lower percentage of the Quebec French food advertisements were classified as either high fat, sugar or sodium and a smaller proportion of food ads were classified as "less healthy" compared to the Ontario and Quebec English samples. These results suggest that the Quebec advertising ban is influencing the macronutrient profile of advertised foods viewed by French Quebec children during their preferred viewing and that their promotions are marginally healthier than that viewed by the English samples.	21720425

2011	Eur J Public Health. 2011 Jun;21(3):300-5. Epub 2010 May 16.	Distorted food pyramid in kids programmes: a content analysis of television advertising watched in Switzerland.	Keller SK, Schulz PJ.	Institute of Communication and Health, Università della Svizzera italiana, Lugano, Switzerland. simone.keller@lu.unisi.ch	BACKGROUND: In the light of increasing childhood obesity, the role of food advertisements relayed on television (TV) is of high interest. There is evidence of food commercials having an impact on children's food preferences, choices, consumption and obesity. We describe the product categories advertised during kids programmes, the type of food promoted and the characteristics of food commercials targeting children.METHODS:A content analysis of the commercials aired during the kids programmes of six Swiss, one German and one Italian stations was conducted. The commercials were collected over a 6-month period in 2006.RESULTS: Overall, 1365 h of kids programme were recorded and 11 613 advertisements were found: 3061 commercials (26.4%) for food, 2696 (23.3%) promoting toys, followed by those of media, cleaning products and cosmetics. Regarding the broadcast food advertisements, 55% were for fast food restaurants or candies.CONCLUSION: The results of the content analysis suggest that food advertising contributes to the obesity problem: every fourth advertisement is for food, half of them for products high in sugar and fat and hardly any for fruit or vegetables. Long-term exposure to this distortion of the pyramid of recommended food should be considered in the discussion of legal restrictions for food advertising targeting children.	20478835
2011	Int J Pediatr Obes. 2011 Jun;6(2-2):e390-8. Epub 2010 Sep 21.	Industry self regulation of television food advertising: responsible or responsive?	King L, Hebden L, Grunseit A, Kelly B, Chapman K, Venugopal K.	University of Sydney, Prevention Research Collaboration , Sydney, Australia. lking@health.usyd.edu.au	INTRODUCTION: This study evaluated the impact of the Australian Food and Grocery Council (AFGC) self-regulatory initiative on unhealthy food marketing to children, introduced in January 2009. The study compared patterns of food advertising by AFGC and non-AFGC signatory companies in 2009, 2007 and 2006 on three Sydney commercial free-to-air television channels.METHODS: Data were collected across seven days in May 2006 and 2007, and four days in May 2009. Advertised foods were coded as core, non-core and miscellaneous. Regression for counts analyses was used to examine change in rates of advertisements across the sampled periods and differential change between AFGC-signatory or non-signatory companies between 2007 and 2009.RESULTS: Of 36 food companies that advertised during the 2009 sample period, 14 were AFGC signatories. The average number of food advertisements decreased significantly from 7.0 per hour in 2007 to 5.9 in 2009. There was a significant reduction in non-core food advertising from 2007 to 2009 by AFGC signatories compared with non-signatory companies overall and during peak times, when the largest numbers of children were viewing. There was no reduction in the rate of non-core food advertisements by all companies, and these advertisements continue to comprise the majority during peak viewing times.DISCUSION: While some companies have responded to pressures to reduce unhealthy food advertising on television, the impact of the self-regulatory code is limited by the extent of uptake by food companies. The continued advertising of unhealthy foods indicates that this selfregulatory code does not adequately protect children	20858046

2011	Int J Pediatr Obes. 2011 Jun;6(2- 2):e433-41. Epub 2010 Nov 10.	Food marketing on children's television in two different policy environments.	Kent MP, Dubois L, Wanless A.	Institute of Population Health, University of Ottawa, Ottawa, Ontario, Canada. mpk@rogers.com	OBJECTIVE: To examine the differences in exposure to food marketing on television between English children in Ontario, and French and English children in Quebec as each group is influenced by different advertising policies.METHODS: In total, 428 children aged 10-12 completed television viewing diaries for 7 days. During the same week, 32 television stations were recorded between 6 am and 12 am. A content analysis of advertisements, contests and sponsorship announcements that aired during children's 90 hours of preferred programming was then undertaken.RESULTS: Twenty-six percent of advertisements, 18% of contests and 22% of sponsorships were food/beverage related. Similar rates of food marketing were seen across all three population groups. French Quebec subjects were exposed to significantly more beverage promotions and fewer grain products, candy and snack food promotions. French Quebec children were targeted less frequently, and media characters/celebrities were used less often than in the English groups.CONCLUSION: The Quebec advertising ban does not appear to be limiting the amount of food/beverage advertising seen by children aged 10-12. However, food categories and marketing techniques used differ in the preferred viewing of French Quebec children.	21062202
2011	Health Commun . 2011 Jun;26(4):323- 31. doi: 10.1080/104102 36.2010.549817 .	The mixed health messages of Millsberry: a critical study of online child- targeted food advergaming.	Thomson DM.	School of Communication, East Carolina University. thomsond@ecu.edu	This paper offers a critical study of the contradictions of Millsberry.com, a General Mills (GM) advergaming website used to market GM's breakfast cereal brands to children. The paper takes a critical semiotic approach to argue that Millsberry.com sends players contradictory messages about health by simultaneously promoting nutritional wellness and consumption of high-sugar cereals, essentially conflating the two. Players on Millsberry.com create a virtual self (a Buddy) who lives in the fictional town of Millsberry, and a Buddy's health is tracked over time as players make nutritional choices for the Buddy. Health on Millsberry equates to eating from multiple food groups (nutritional balance) and eating only until full (caloric moderation). Yet both of these health messages are essentially undermined by play on the site. Nutritional balance is undermined by both the excessive promotion of high-sugar cereals and the differences between depictions of branded and unbranded foods. Caloric moderation is contradicted by digital advergaming that operate on a logic of maximal consumption, by narratives of branded spokescharacters' endless appetites for cereal, and by giveaways of "free" boxes of virtual cereal that can be eaten by the Buddy in a single bite. The study concludes that such mixed messages about nutritional health are highly problematic, particularly given the alarming increase in diet and weight-related diseases among children.	21409671
2011	J Pediatr Nurs. 2011 Apr;26(2):165- 6.	Commercials on children's television channels.	McBride DL.	Kaiser Permanente Oakland Medical Center, Berkeley, CA 94703, USA. jrm2@berkeley.edu		21419977

2011	Int J Obes (Lond). 2011 Apr;35 Suppl 1:S137-43.	Instruments for analysing the influence of advertising on children's food choices	Gwozdz W, Reisch LA; IDEFICS Consortium.	Department of Intercultural Communication and Management, Copenhagen Business School, Frederiksberg, Denmark. wg.ikl@cbs.dk	<p>OBJECTIVE: The aim of this report was to present methodological aspects of assessing the effects of advertising on children's food choices and preferences. METHODS: Two instruments have been used: first, a choice experiment on children's food knowledge and preferences, and second, a questionnaire on children's knowledge about and attitudes towards advertising. The choice experiment employed 10 matched pairs of food items, each represented in two magazines, one that tested knowledge and the other food preferences. The children's questionnaire contained four dimensions that tested children's credibility and suspiciousness of, as well as entertainment by, advertising. Although based on already developed tools, both instruments were modified to suit the young target group and ensure cross-cultural comparability. The questionnaire was validated via Cronbach's alpha and factor analysis. SUBJECTS: A total of 393 children aged 5-11 years from seven European countries participated in the study. RESULTS: Both instruments proved to be valid and reliable to analyse the food knowledge and preferences of children, as well as knowledge about and attitudes towards advertising. While 92.2% of the children predominantly recognised the healthier food, only 33.2% also preferred the healthier food. The Cronbach's alpha values for the dimensions were 0.470 for credibility, 0.409 for suspiciousness and 0.295 for entertainment factor. The gathered data revealed that children are rather critical and suspicious of advertising and only moderately entertained. CONCLUSION: Both instruments are applicable for the 5- to 11-year-old age group in different European countries. Descriptive results indicate additional insights into the effects of advertising on children's food knowledge, preferences and food choice.</p>	21483414
2011	J Urban Health. 2011 Apr 14. [Epub ahead of print]	Convenience Stores Surrounding Urban Schools: An Assessment of Healthy Food Availability, Advertising, and Product Placement.	Gebauer H, Laska MN.	Convenience Stores Surrounding Urban Schools: An Assessment of Healthy Food Availability, Advertising, and Product Placement.	<p>Adolescent obesity is a national public health problem, particularly among urban populations. Recent evidence has linked neighborhood food environments to health and nutrition status, with easier access to convenience stores being associated with increased risk for obesity. Little is known about the availability of healthy purchasing options within small, urban food stores, or the extent to which these factors are relevant to youth. The objective of this research was to characterize various features of the food environment within small convenience stores located nearby urban junior high and high schools. In-store audits were conducted in 63 stores located within 800 m of 36 urban Minnesota public secondary schools. Results indicated that a limited number of healthier beverages (i.e., water and 100% fruit juice) and snack options (i.e., nuts and pretzels) were available at most stores ($\geq 85\%$). However, a wide range of healthy snack options were typically not available, with many specific items stocked in less than half of stores (e.g., low-fat yogurt in 27% of stores and low-fat granola bars in 43%). Overall, 51% of stores had fresh fruit and 49% had fresh vegetables. Few stores carried a range of healthier snack alternatives in single-serving packages. All stores had less healthful impulse purchase items available (e.g., candy) while only 46% carried healthier impulse items (e.g., fruit). Most stores (97%) had food/beverage advertising. Overall, convenience stores located in close proximity to secondary schools represent an important and understudied component of the youth food environment.</p>	21491151

2011	Health Promot Int. 2011 Apr 5.	Television food advertising in Singapore: the nature and extent of children's exposure	Huang L, Mehta K, Wong ML.	1Nutrition and Dietetics, Flinders Clinical and Molecular Medicine, Flinders University of South Australia, Bedford Park, SA 5042, Australia.	Television advertising is an effective medium for reaching young children and influencing their food choice. Studies have shown that messages conveyed by food advertisements are rarely consistent with healthy eating messages. With the increasing purchasing power of children, food companies are focusing on children as lucrative target audiences. Extensive marketing of energy-dense, nutrient-poor foods to children potentially contributes to the 'obesogenic' environment. This study aims to determine the degree and nature of food advertisements that Singaporean children are exposed to on television. Ninety-eight hours of children's television programmes broadcast by free-to-air stations were recorded and analysed. Advertisements with the intent of selling and sponsorships for programmes were included. Foods advertised were considered healthy if they met the criteria of the Healthier Choice Symbol in Singapore. Of the 1344 advertisements and sponsorships identified, 33% were for food. Of the food advertisements, 38% were considered healthy, while 57% were not. Candy, confectionery and fast food advertisements accounted for 46% of total food advertisements. Significantly more unhealthy food advertisements were screened on weekends compared with weekdays ($p < 0.001$). This is the first content analysis of television advertisements in Singapore and the results of this study provide background data on the extent of food advertising that children in Singapore are exposed to. Consistent with other countries, unhealthy food advertisements continue to dominate children's television programmes. This study suggests that Singaporean children are exposed to high levels of advertising for unhealthy foods. The study provides a baseline against which measures aimed at reducing children's exposure to television food advertising can be evaluated.	21467098
2011	Aust N Z J Public Health. 2011 Apr;35(2):131- 4. doi: 10.1111/j.1753- 6405.2011.0061 2.x. Epub 2011 Mar 7.	Trends in food advertising to children on free- to-air television in Australia.	Kelly B, Chapman K, King L, Hebden L.	Cancer Council New South Wales. bridgetk@health.usyd.edu.a u	OBJECTIVE: The issue of marketing unhealthy food to children and its contribution to childhood obesity has become a highly politicised debate in Australia. The aim of this study was to compare recent television food advertising patterns in 2008 to previously published Australian research on television advertising from 2006 and 2007, to examine any changes following policy debates. METHODS: Television broadcasting was recorded for two weekdays and two weekend days between 6:00 and 22:00 in February 2008 for all three commercial television channels. Food advertisements were classified as core/healthy, non-core/unhealthy or miscellaneous. Television audience data were obtained to determine broadcast periods corresponding to children's peak viewing times. RESULTS: The overall rate of food advertising decreased over time: from seven food advertisements/hour/channel in 2006/07 to five in 2008. However, the relative contribution of non-core food advertising to overall food advertising remained stable. In 2008, the proportion of food advertisements for non-core foods was significantly higher during children's peak viewing times ($p < 0.01$). CONCLUSIONS AND IMPLICATIONS: Australian children remain exposed to a disproportionate volume of television advertisements for unhealthy foods on commercial television, which are shown during time periods when the highest numbers of children are watching. Regulations to limit unhealthy food advertising during the time periods when a significant number of children are watching are required. © 2011 The Authors. ANZJPH © 2011 Public Health Association of Australia.	21463408

2011	Aust N Z J Public Health. 2011 Apr;35(2):127-30. doi: 10.1111/j.1753-6405.2011.00610.x. Epub 2011 Mar 7.	Food advertising on children's popular subscription television channels in Australia.	Hebden L, King L, Chau J, Kelly B.	Prevention Research Collaboration, University of Sydney, New South Wales. lanah@health.usyd.edu.au	<p>OBJECTIVE: Trends on Australian free-to-air television show children continue to be exposed to a disproportionate amount of unhealthy food advertising. This study describes the nature and extent of food marketing on the Australian subscription television channels most popular with children. METHODS: Advertisements broadcast on the six subscription television channels most popular with children were recorded over four days in February 2009. Advertised foods were coded as core/healthy, non-core/unhealthy or miscellaneous/other, and for persuasive marketing techniques (promotional characters, premium offers and nutrition claims). RESULTS: The majority of foods advertised were non-core (72%), with a mean rate of 0.7 non-core food advertisements broadcast per hour, per channel. The frequency of non-core food advertisements differed significantly across channels. Persuasive techniques were used to advertise non-core foods less frequently than core and miscellaneous foods. CONCLUSIONS AND IMPLICATIONS: Non-core foods make up the majority of foods advertised on children's popular subscription channels. However, Australian children currently view less non-core food advertising on subscription television compared with free-to-air. Unlike free-to-air television, subscription services have the unique opportunity to limit inappropriate food marketing to children, given they are less reliant on advertising revenue. © 2011 The Authors. ANZJPH © 2011 Public Health Association of Australia.</p>	21463407
2011	Econ Hum Biol. 2011 Mar 5. [Epub ahead of print]	Exposure to food advertising on television: Associations with children's fast food and soft drink consumption and obesity.	Andreyeva T, Kelly IR, Harris JL.	Yale University, Rudd Center for Food Policy & Obesity, 309 Edwards Street, New Haven, CT 06520-8369, United States.	<p>There is insufficient research on the direct effects of food advertising on children's diet and diet-related health, particularly in non-experimental settings. We employ a nationally-representative sample from the Early Childhood Longitudinal Survey-Kindergarten Cohort (ECLS-K) and the Nielsen Company data on spot television advertising of cereals, fast food restaurants and soft drinks to children across the top 55 designated-market areas to estimate the relation between exposure to food advertising on television and children's food consumption and body weight. Our results suggest that soft drink and fast food television advertising is associated with increased consumption of soft drinks and fast food among elementary school children (Grade 5). Exposure to 100 incremental TV ads for sugar-sweetened carbonated soft drinks during 2002-2004 was associated with a 9.4% rise in children's consumption of soft drinks in 2004. The same increase in exposure to fast food advertising was associated with a 1.1% rise in children's consumption of fast food. There was no detectable link between advertising exposure and average body weight, but fast food advertising was significantly associated with body mass index for overweight and obese children (≥ 85th BMI percentile), revealing detectable effects for a vulnerable group of children. Exposure to advertising for calorie-dense nutrient-poor foods may increase overall consumption of unhealthy food categories.</p>	21439918

2011	Soc Sci Med. 2011 Mar;72(6):962-8. Epub 2011 Feb 23.	Children's understanding of the selling versus persuasive intent of junk food advertising: implications for regulation.	Carter OB, Patterson LJ, Donovan RJ, Ewing MT, Roberts CM.	Centre for Behavioural Research in Cancer Control, Division of Health Sciences, Curtin University, GPO Box U1987, Perth WA 6845, Australia. o.carter@curtin.edu.au	Evidence suggests that until 8 years of age most children are cognitively incapable of appreciating the commercial purpose of television advertising and are particularly vulnerable to its persuasive techniques. After this age most children begin to describe the 'selling' intent of advertising and it is widely assumed this equips them with sufficient cognitive defences to protect against advertisers' persuasion attempts. However, much of the previous literature has been criticised for failing to differentiate between children's awareness of 'selling' versus 'persuasive' intent, the latter representing a more sophisticated understanding and superior cognitive defence. Unfortunately there is little literature to suggest at what age awareness of 'persuasive intent' emerges; our aim was to address this important issue. Children (n = 594) were recruited from each grade from Pre-primary (4-5 years) to Grade 7 (11-12 years) from ten primary schools in Perth, Western Australia and exposed to a McDonald's television advertisement. Understanding the purpose of television advertising was assessed both nonverbally (picture indication) and verbally (small discussion groups of 3-4), with particular distinction made between selling versus persuasive intent. Consistent with previous literature, a majority of children described the 'selling' intent of television advertising by 7-8 years both nonverbally and verbally, increasing to 90% by 11-12 years. Awareness of 'persuasive' intent emerged slowly as a function of age but even by our oldest age-group was only 40%. Vulnerability to television advertising may persist until children are far older than previously thought. These findings have important implications regarding the debate surrounding regulation of junk food (and other) advertising aimed at children.	21349621
2011	Appetite. 2011 Jun;56(3):607-16. Epub 2011 Feb 3.	Health discourse in Swedish television food advertising during children's peak viewing times.	Prell H, Palmblad E, Lissner L, Berg CM.	University of Gothenburg, Department of Food, Health and Environment, Läroverksgatan 5, Box 320, 405 30 Gothenburg, Sweden	Food marketing influences children's food preferences and consumption and is important to consider in the prevention of child obesity. In this paper, health messages in commercials during children's peak viewing times were analysed by examining how food is articulated in the health discourse. In total, 82 food commercials from 66h of television recordings of the most popular commercial channels with children in Sweden (TV3, TV4 and Channel 5) were analysed with discourse theoretical tools according to Laclau and Mouffe and with a focus on rhetoric. Physical, mental and social health aspects were present in 71% of the commercials. Three health discourse types; a medical (food as protection and treatment), a hedonic (food as feeling good) and a social discourse type (food as caring) were discerned. In relation to these, the heart symbol, lifestyle associations and nature/the natural were elements that could be interpreted in different ways. Moreover, foods carrying unhealthy associations were promoted in the health discourse and presented as especially healthy by offensive rhetoric. The analysis raises awareness of the prevailing health messages in food marketing. Children and parents should be encouraged to develop their critical thinking about television food advertising and how it may influence social norms and dietary practices.	21295628

2011	Appetite. 2011 Apr;56(2):440-6. Epub 2011 Jan 20.	Responsiveness to healthy television (TV) food advertisements/commercials is only evident in children under the age of seven with low food neophobia.	Dovey TM, Taylor L, Stow R, Boyland EJ, Halford JC.	Centre for Research into Eating Disorders (LUCRED), School of Sport, Exercise & Health Sciences (Psychology Division), Brockington Building, University Road, Loughborough University, Loughborough, LE11 3TU, UK. t.m.dovey@lboro.ac.uk	Exposure to television advertisements for unhealthy foods has been shown to subsequently increase the amount of snack food consumed in children between the ages of five and eleven. However, it has yet to be elucidated whether healthy food television advertisements have a different effect on subsequent food intake in children. The current study explored the role of food neophobia in 'responsiveness' to food adverts in children between the ages of five and seven. Sixty-six children were exposed to unhealthy food adverts, healthy food adverts and toy adverts embedded into a cartoon in a counterbalanced order on three different occasions. Following the cartoon, children were offered a snack consisting of six food items (chocolate, jelly sweets, potato crisps, Snack-a-Jacks, green seedless grapes and carrot sticks). Food advert exposure, irrespective of content (either unhealthy or healthy food items), increased food intake by 47 kcal (11%) in high food neophobic children. Children who scored lower on the food neophobia scale ate significantly more (63 kcal, 14%) following the unhealthy food adverts only. In the healthy advert condition low food neophobic children consumed less chocolate (p=0.003) but did not increase their consumption of fruit and vegetables. Presentation of healthy foods does not alter food preferences in the short-term. Children with low levels of food neophobia appear to respond to healthy food messages but children with higher levels of food neophobia do not. Instead, high food neophobic children will continue to consume more chocolate following exposure to food adverts irrespective of the healthy or unhealthy message they contain.	21256170
2011	Am J Prev Med. 2011 Feb;40(2):113-21.	Obesity-promoting food environments and the spatial clustering of food outlets around schools.	Day PL, Pearce J.	Department of Geography, University of Canterbury, Christchurch New Zealand. peter.day@canterbury.ac.nz	<p>BACKGROUND: The increasing prevalence of overweight and obesity in school-aged children is potentially linked to contextual influences such as the food environment around schools. The proximity of fast-food and convenience stores to schools may enhance access to unhealthy foods and have a negative impact on diet. PURPOSE: This study used spatial cluster analysis to determine whether food outlets are clustered around schools and evaluated the extent of food outlet clustering by school and school neighbourhood sociodemographic characteristics. METHODS: The locations in 2008 of all schools, fast-food outlets, and convenience stores in five urban regions across New Zealand were geocoded. Using GIS analysis conducted in 2009, the number and proportion of outlets within 400-m and 800-m road distance around each school was calculated. The spatial clustering of food outlets within 1.5 km of schools was determined using a multi-type K-function. Food outlet type, school level, SES, the degree of population density, and commercial land use zoning around each school were compared. RESULTS: Primary/intermediate schools had a total proportion of 19.3 outlets per 1000 students within 800 m compared to 6.6 for secondary schools. The most socially deprived quintile of schools had three times the number and proportion of food outlets compared to the least-deprived quintile. There was a high degree of clustering of food outlets around schools, with up to 5.5 times more outlets than might be expected. Outlets were most clustered up to 800 m from schools and around secondary schools, socially deprived schools, and schools in densely populated and commercially zoned areas. CONCLUSIONS: Food environments in New Zealand within walking proximity to schools are characterized by a high density of fast-food outlets and convenience stores, particularly in more-socially deprived settings. These obesogenic environments provide ready access to obesity-promoting foods that may have a negative impact on student diet and contribute to inequalities in health. Copyright © 2011 American Journal of Preventive Medicine. Published by Elsevier Inc. All rights reserved.</p>	21238858

2011	J Sch Health. 2011 Jan;81(1):21-8. doi: 10.1111/j.1746-1561.2010.00553.x.	Teaching healthful food choices to elementary school students and their parents: the Nutrition Detectives™ program.	Katz DL, Katz CS, Treu JA, Reynolds J, Njike V, Walker J, Smith E, Michael J.	Nutrition Detectives Program, Yale-Griffin Prevention Research Center, 130 Division Street, Derby, CT 06418, USA. katzdl@pol.net	<p>BACKGROUND: The purpose of this study was to evaluate the effects of a nutrition education program designed to teach elementary school students and their parents, and to distinguish between more healthful and less healthful choices in diverse food categories.METHODS: Three schools were assigned to receive the Nutrition Detectives™ program and 2 comparable schools served as controls. A total of 1180 second, third, and fourth grade elementary school students were included, with 628 students in the intervention and 552 in the control group. The program, delivered by physical education instructors over several sessions totaling less than 2 hours, taught the children how to read food labels and detect marketing deceptions, while learning to identify and choose healthful foods. Parents were introduced to the program through written materials sent home and at school functions. Assessments included a food label quiz, dietary pattern, and body mass index (BMI).RESULTS: Students in intervention schools showed a significant increase in nutrition label literacy ($p < .01$). Third grade students showed the most improvement, 23% ($p < .01$). The parents of intervention group students also showed a significant increase in nutrition label literacy by 8% ($p < .01$). Total caloric, sodium, and total sugar intake decreased no significantly among students in the intervention group ($p > .05$). BMI did not change over the short duration of the study. CONCLUSIONS: Nutrition Detectives effectively enhances the ability of students and their parents to identify more nutritious food choices. Further evaluation of the program and its potential to influence dietary pattern, BMI, and health outcomes in students and their families is warranted. © 2011, American School Health Association.</p>	21158862
2011	Int J Pediatr Obes. 2011 Apr;6(2):83-94. Epub 2010 Sep 27.	Regulating the commercial promotion of food to children: A survey of actions worldwide.	Hawkes C, Lobstein T.	Consulting Services, Food and Nutrition Policy.	<p>Abstract Objectives. To describe the global regulatory environment around food marketing to children in 2009 and to identify changes in this environment since 2006. Methods. Informants able to provide information on national controls on marketing to children were identified and sent a standardised template for data collection, developed and refined through iterative use with informants. Responses were encouraged by sending draft versions of completed templates to informants for their approval. Results. The policy environment was described in the 27 member states of the European Union, and in a further 32 countries. Of these 59 countries, 26 have made explicit statements on food marketing to children in strategy documents, and 20 have, or are developing, explicit policies in the form of statutory measures, official guidelines or approved forms of self-regulation. These figures reflect a change in the policy environment since 2006. Although there is still resistance to change, there has been significant movement towards greater restriction on promotional marketing to children, achieved through a variety of means. Government-approved forms of self-regulation have been the dominant response, but statutory measures are increasingly being adopted. The nature and degree of the restrictions differ considerably, with significant implications for policy impact. In many cases the policy objectives remain poorly articulated, resulting in difficulty in formulating indicators to monitor and assess impact. Conclusion. To address food marketing to children, governments need to develop clearer statements of the objectives to be achieved, define the indicators that can demonstrate this achievement, and require the relevant stakeholders to account for the progress being made.</p>	20874086

2011	J Health Commun. 2011 Jan;16(1):79-89.	Using brand characters to promote young children's liking of and purchase requests for fruit.	de Droog SM, Valkenburg PM, Buijzen M.	The Amsterdam School of Communications Research, University of Amsterdam, Amsterdam, The Netherlands. S.M.deDroog@uva.nl	The aim of this experiment was to investigate whether brand characters can enhance children's liking of and purchase request intent for fruit compared to candy. The authors assigned 216 preschool students between the ages of 4 and 6 years to 9 experimental conditions in which they were presented with a healthy snack (chopped bananas) and an unhealthy snack (banana candy). The packages of these snacks portrayed a familiar character (i.e., Dora from Dora the Explorer or SpongeBob from SpongeBob SquarePants), an unfamiliar character, or no character (control group). The authors' results showed that brand characters can increase children's liking of and purchase request intent for fruit up to a level similar to candy. However, the effects on liking and purchase request intent did not differ between familiar and unfamiliar characters. These results may be helpful for future marketing campaigns to promote children's consumption of healthy foods.	21058143
2011	Arch Pediatr Adolesc Med. 2011 Mar;165(3):229-34.	Influence of licensed spokescharacters and health cues on children's ratings of cereal taste.	Lapierre MA, Vaala SE, Linebarger DL.	Annenberg School for Communication, University of Pennsylvania, 3620 Walnut St., Philadelphia, PA 19104, USA.	OBJECTIVE: To investigate whether licensed media spokescharacters on food packaging and nutrition cues affect young children's taste assessment of products. DESIGN: In this experimental study, children viewed 1 of 4 professionally created cereal boxes and tasted a "new" cereal. Manipulations included presence or absence of licensed cartoon spokescharacters on the box and healthy or sugary cereal name. SETTING: Shopping center in a large northeastern city in December 2007. PARTICIPANTS: Eighty children (mean [SD] age, 5.6 [0.96] years; 53% girls) and their parents or guardians. MAIN EXPOSURE: Licensed cartoon characters and nutrition cues in the cereal name. OUTCOME MEASURES: Children rated the cereal's taste on a 5-point smiley face scale (1, really do not like; 5, really like). RESULTS: Children who saw a popular media character on the box reported liking the cereal more (mean [SD], 4.70 [0.86]) than those who viewed a box with no character on it (4.16 [1.24]). Those who were told the cereal was named Healthy Bits liked the taste more (mean [SD], 4.65 [0.84]) than children who were told it was named Sugar Bits (4.22 [1.27]). Character presence was particularly influential on taste assessments for participants who were told the cereal was named Sugar Bits. CONCLUSIONS: The use of media characters on food packaging affects children's subjective taste assessment. Messages encouraging healthy eating may resonate with young children, but the presence of licensed characters on packaging potentially overrides children's assessments of nutritional merit.	21383272
2011	Public Health Nutr. 2011 Jun;14(6):1071-9. Epub 2011 Feb 10.	Parent's responses to nutrient claims and sports celebrity endorsements on energy-dense and nutrient-poor foods: an experimental study.	Dixon H, Scully M, Wakefield M, Kelly B, Chapman K, Donovan R.	1Centre for Behavioural Research in Cancer, Cancer Council Victoria, 1 Rathdowne Street, Carlton, Victoria 3053, Australia.	OBJECTIVE: To assess parents' responses to common, potentially misleading strategies for marketing energy-dense and nutrient-poor (EDNP) child-oriented foods. DESIGN: Between-subjects online experiment to test whether nutrient claims and sports celebrity endorsements on the front of packs of EDNP products lead parents to prefer and rate these foods more favourably. SETTING: Australia.	21306666

2011	J Nutr Educ Behav. 2011 Jan-Feb;43(1):35-41. Epub 2010 Sep 18.	Impact of commercials on food preferences of low-income, minority preschoolers.	Nicklas TA, Goh ET, Goodell LS, Acuff DS, Reiher R, Buday R, Ottenbacher A.	Children's Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, Houston, TX 77030-2600, USA. tnicklas@bcm.edu	<p>OBJECTIVE: To determine whether fruit and vegetable (FV) commercials have an impact on preschool children's preferences for specific FV. DESIGN: A year of extensive formative assessment was conducted to develop 2 30-second commercials: "Judy Fruity" promoted apples and bananas and "Reggie Veggie" promoted broccoli and carrots. The commercials were embedded into a 15-minute TV program. Fruit and vegetable preferences were assessed before and after 4 exposures to each of the commercials. SETTING: Four Head Start centers in Houston, Texas. PARTICIPANTS: One hundred eighty-three preschool children (39% African American; 61% Hispanic American). MAIN OUTCOME MEASURES: Assessment of whether FV preferences were significantly higher in the treatment group than the control group, controlling for baseline FV preferences, age, race, and intervention dose in the model. ANALYSIS: A general linear model was used. RESULTS: There was a significantly higher preference for broccoli and carrots ($P = .02$) in the intervention group compared to the control group after multiple exposures to the vegetable commercial. CONCLUSIONS AND IMPLICATIONS: Data suggest that commercials promoting vegetables may be an effective strategy to influence young children's preferences for vegetables. This may not be the case with fruit preferences, which are already high in this age group.</p>	20851053
2011	Int J Behav Nutr Phys Act. 2011 Jan 28;8:6	Food compensation: do exercise ads change food intake?	van Kleef E, Shimizu M, Wansink B	Wageningen University, Marketing and Consumer Behaviour Group, Hollandseweg 1, 6706 KN Wageningen, The Netherlands. Ellen.vanKleef@wur.nl	<p>BACKGROUND: Past research has shown that promotional messages such as food advertising influence food consumption. However, what has gone largely unexplored is the effect of exercise advertising on food intake. This study experimentally tested the effects of exposure to exercise commercials on food intake at a lunch meal as compared to the effects of control commercials. METHODS: Prior to eating lunch, 125 participants (71 women, 54 men) watched 8 commercials, either all related to exercise or fitness ($n=67$) or neutral products (i.e. car insurance) ($n=58$). The meal consisted of a pasta dish with tomato sauce, salad and chocolate pudding. The post-lunch questionnaire included questions about body mass index, exercise habits, motivation and dietary restraint. RESULTS: Participants exposed to exercise commercials reduced their caloric intake by 21.7% relative to the control condition. Additionally, watching exercise messages increased the perceived healthiness and liking of the meal. Although exercise habits and intentions did not moderate the effect of commercial condition on food intake, we also found that this intake reduction was driven by participants with higher body mass index levels. CONCLUSIONS: These results imply that exercise messages may serve as a reminder of the link between food and physical activity and affect food consumption. It also highlights the need for increased awareness that these messages have powerful influences not only on exercise behavior, but also on closely related behaviors such as eating.</p>	21276218

	Public Health Nutr. 2010 Mar 26;1-8. [Epub ahead of print]	'Like me, want me, buy me, eat me': relationship-building marketing communications in children's magazines.	Jones SC, Mannino N, Green J.	Centre for Health Initiatives, Faculty of Health & Behavioural Sciences, University of Wollongong, Wollongong, NSW 2522, Australia.	OBJECTIVE: Television, Internet and print media are saturated with advertisements for unhealthy food that use marketing tactics aimed to build long-term brand loyalty and 'relationships' with children. While research in this area has largely focused on television, the current study examines children's responses to relationship-building marketing communications found in popular children's magazines. DESIGN: A qualitative study consisting of friendship-pair interviews in which children were interviewed and asked to comment on a range of recent food advertisements. SETTING: A university-based after-school care programme in New South Wales, Australia. SUBJECTS: Ten children aged 6-13 years, interviewed in self-selected friendship pairs. RESULTS: The children reported being attracted to the advertisements because of specific elements of the marketing strategies utilised. Some children were able to recognise the persuasive intent of the media, whereas others did not even identify the pages as advertisements. CONCLUSIONS: It was clear from the children's responses that these types of relationship-building marketing communications influence children's attitudes towards branded food products and their views on the nutritional value and social meanings of food.	20338084
2010	Salud Publica Mex. 2010 Mar-Apr;52(2):119-26.	[Food advertising in Mexican television: are children more exposed?] article in Spanish	Pérez-Salgado D, Rivera-Márquez JA, Ortiz-Hernández L.	Universidad Autónoma Metropolitana Xochimilco, México, DF, México.	OBJECTIVE: To evaluate food advertisements on broadcast television channels in Mexico City. MATERIAL AND METHODS: Between July and October, 2007 programming by the 11 broadcast channels (N=11) in Mexico City was recorded during one weekday and one weekend day. The length of advertisements (N = 9178), types of products, and nutritional content of foods advertised were analyzed. RESULTS: The time devoted to food products advertising was greater during children's television than during programming targeted to the general audience (25.8 vs. 15.4%). The foods more frequently advertised were sweetened beverages, sweets and cereals with added sugar. Calorie, carbohydrate and fat contents were higher in foods advertised during children's shows. The two most common marketing strategies were to offer some kind of gift and to link the item to positive emotions. CONCLUSION: The findings of this research indicate the need for an effective system to regulate advertising directed towards children and adolescents.	20485868
2010	Center for Science in the Public Interest [monografía en internet].	Guidelines for responsible food marketing to children. Center for Science in the Public Interest, editor. Washington DC. 2006 [last accessed 11th July 2010]. Available on: http://www.cspinet.org/marketingguidelines.pdf			These Guidelines for Responsible Food Marketing to Children are for food manufacturers, restaurants, supermarkets, television and radio stations, movie studios, magazines, public relations and advertising agencies, schools, toy and video game manufacturers, organizers of sporting or children's events, and others who manufacture, sell, market, advertise, or otherwise promote food to children. The Guidelines provide criteria for marketing food to children in a manner that does not undermine children's diets or harm their health.1 We hope the Guidelines will be helpful to parents, school officials, legislators, community and health organizations, and others who are seeking to improve children's diets.	

2010	Public Health Nutr. 2010 Dec 8:1-8. [Epub ahead of print]	An experimental study on the effects of exposure to magazine advertising on children's food choices.	Jones SC, Kervin L.	Centre for Health Initiatives, University of Wollongong, Room 41.G04, Wollongong, NSW 2522, Australia.	OBJECTIVE: The present study sought to determine the feasibility of an experimental research design to investigate the effects of exposure to magazine advertising on children's food choices. DESIGN: Children were randomized to read either a magazine with food advertisements or a magazine with no food advertisements. They then chose two food items from the intervention 'store' to eat after the session. Data were also collected on attitudes to advertising and snack food preferences. Finally, participants' parents were provided with a self-completion survey on food choices and other variables (n 24).SETTING: Three vacation care centres in regional New South Wales, Australia. SUBJECTS: Children aged 5-12 years (n 47). RESULTS: Children in the experimental condition were more likely to choose advertised foods than those in the control group. Interestingly, the majority reported taste and healthiness as the most important factors in snack food choices; however, when faced with the actual food choice, they predominantly chose unhealthy foods (eighty-two unhealthy and only twelve healthy items were chosen). CONCLUSIONS: This was the first study to assess the effects on children of exposure to food advertising within the context of reading a child-targeted magazine. Importantly, even with the small sample size and venue limitations, we found that exposure to magazine advertising influenced food choices. Children's magazines are an under-researched and poorly regulated medium, with considerable potential to influence children's food choices. The present study shows that the methodology is feasible, and future studies could replicate this with larger samples.	21138610
2010	Health Promot J Austr. 2010 Dec;21(3):229-35.	Industry self-regulation of food marketing to children: reading the fine print.	Hebden L, King L, Kelly B, Chapman K, Innes-Hughes C.	Prevention Research Collaboration, University of Sydney. lana.hebden@sydney.edu.au	ISSUE ADDRESSED: despite the evidence showing the negative influences of food marketing on children's dietary beliefs and behaviours, and risk of adiposity, regulatory action to limit unhealthy food marketing has made little progress within Australia. Our aim was to describe and critically examine the Australian Food and Grocery Council's (AFGC) approach to self-regulate food marketing to Australian children through the Responsible Marketing to Children Initiative (Initiative). METHODS: the Initiative's core principles and the commitments of the 16 signatory companies (as at December 2009) were assessed in terms of their capacity to limit unhealthy food advertising in media accessed by children. All information was publicly available from AFGC and signatory company websites (September- December 2009). RESULTS: limitations of the Initiative included inadequate definitions for when and where food marketing to children can occur, and permissive definitions of foods considered appropriate for advertising. The study also identified numerous examples of ongoing food marketing to children by AFGC companies that illustrate these limitations.	21118071
2010	Int J Pediatr Obes. 2010 Nov 10. [Epub ahead of print]	Food marketing on children's television in two different policy environments.	Kent MP, Dubois L, Wanless A.	Institute of Population Health, University of Ottawa, Ottawa, Ontario, Canada.	Abstract Objective. To examine the differences in exposure to food marketing on television between English children in Ontario, and French and English children in Quebec as each group is influenced by different advertising policies. Methods. In total, 428 children aged 10-12 completed television viewing diaries for 7 days. During the same week, 32 television stations were recorded between 6 am and 12 am. A content analysis of advertisements, contests and sponsorship announcements that aired during children's 90 hours of preferred programming was then undertaken. Results. Twenty-six percent of advertisements, 18% of contests and 22% of sponsorships were food/beverage related. Similar rates of food marketing were seen across all three population groups. French Quebec subjects were exposed to significantly more beverage promotions and fewer grain products, candy and snack food promotions. French Quebec children were targeted less frequently, and media characters/celebrities were used less often than in the English groups. Conclusion. The Quebec advertising ban does not appear to be limiting the amount of food/beverage advertising seen by children aged 10-12. However, food categories and marketing	21062202

					techniques used differ in the preferred viewing of French Quebec children.	
2010	Int J Pediatr Obes. 2010 Sep 21. [Epub ahead of print]	Industry self regulation of television food advertising: Responsible or responsive?	King L, Hebden L, Grunseit A, Kelly B, Chapman K, Venugopal K.	University of Sydney, Prevention Research Collaboration, Sydney, Australia.	Abstract Introduction. This study evaluated the impact of the Australian Food and Grocery Council (AFGC) self-regulatory initiative on unhealthy food marketing to children, introduced in January 2009. The study compared patterns of food advertising by AFGC and non-AFGC signatory companies in 2009, 2007 and 2006 on three Sydney commercial free-to-air television channels. Methods. Data were collected across seven days in May 2006 and 2007, and four days in May 2009. Advertised foods were coded as core, non-core and miscellaneous. Regression for counts analyses was used to examine change in rates of advertisements across the sampled periods and differential change between AFGC-signatory or non-signatory companies between 2007 and 2009. Results. Of 36 food companies that advertised during the 2009 sample period, 14 were AFGC signatories. The average number of food advertisements decreased significantly from 7.0 per hour in 2007 to 5.9 in 2009. There was a significant reduction in non-core food advertising from 2007 to 2009 by AFGC signatories compared with non-signatory companies overall and during peak times, when the largest numbers of children were viewing. There was no reduction in the rate of non-core food advertisements by all companies, and these advertisements continue to comprise the majority during peak viewing times. Discussion. While some companies have responded to pressures to reduce unhealthy food advertising on television, the impact of the self-regulatory code is limited by the extent of uptake by food companies. The continued advertising of unhealthy foods indicates that this self-regulatory code does not adequately protect children.	20858046
2010	J Nutr Educ Behav. 2011 Jan- Feb;43(1):35- 41. Epub 2010 Sep 18.	Impact of commercials on food preferences of low-income, minority preschoolers.	Nicklas TA, Goh ET, Goodell LS, Acuff DS, Reiher R, Buday R, Ottenbacher A.	Children's Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, Houston, TX 77030-2600, USA. tnicklas@bcm.edu	OBJECTIVE: To determine whether fruit and vegetable (FV) commercials have an impact on preschool children's preferences for specific FV.DESIGN: A year of extensive formative assessment was conducted to develop 2 30-second commercials: "Judy Fruity" promoted apples and bananas and "Reggie Veggie" promoted broccoli and carrots. The commercials were embedded into a 15-minute TV program. Fruit and vegetable preferences were assessed before and after 4 exposures to each of the commercials.SETTING: Four Head Start centers in Houston, Texas. PARTICIPANTS: One hundred eighty-three preschool children (39% African American; 61% Hispanic American). MAIN OUTCOME MEASURES: Assessment of whether FV preferences were significantly higher in the treatment group than the control group, controlling for baseline FV preferences, age, race, and intervention dose in the model. ANALYSIS: A general linear model was used. RESULTS: There was a significantly higher preference for broccoli and carrots (P = .02) in the intervention group compared to the control group after multiple exposures to the vegetable commercial. CONCLUSIONS AND IMPLICATIONS: Data suggest that commercials promoting vegetables may be an effective strategy to influence young children's preferences for vegetables. This may not be the case with fruit preferences, which	20851053

are already high in this age group. Copyright © 2011 Society for Nutrition Education. Published by Elsevier Inc. All rights reserved.

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Am J Public Health. 2010 Sep;100(9):1730-6. Epub 2010 Jul 15.

Kelly B, Halford JC, Boyland EJ, Chapman K, Bautista-Castaño I, Berg C, Caroli M, Cook B, Coutinho JG, Effertz T, Grammatika ki E, Keller K, Leung R, Manios Y, Monteiro R, Pedley C, Prell H, Raine K, Recine E, Serra-Majem L, Singh S, Summerbell C.

Cancer Council New South Wales, Sydney, Australia. bridgetk@health.usyd.edu.au

OBJECTIVES: We compared television food advertising to children in several countries. **METHODS:** We undertook collaboration among 13 research groups in Australia, Asia, Western Europe, and North and South America. Each group recorded programming for 2 weekdays and 2 weekend days between 6:00 and 22:00, for the 3 channels most watched by children, between October 2007 and March 2008. We classified food advertisements as core (nutrient dense, low in energy), noncore (high in undesirable nutrients or energy, as defined by dietary standards), or miscellaneous. We also categorized thematic content (promotional characters and premiums). **RESULTS:** Food advertisements composed 11% to 29% of advertisements. Noncore foods were featured in 53% to 87% of food advertisements, and the rate of noncore food advertising was higher during children's peak viewing times. Most food advertisements containing persuasive marketing were for noncore products. **CONCLUSIONS:** Across all sampled countries, children were exposed to high volumes of television advertising for unhealthy foods, featuring child-oriented persuasive techniques. Because of the proven connections between food advertising, preferences, and consumption, our findings lend support to calls for regulation of food advertising during children's peak viewing times.

2010	Arch Pediatr Adolesc Med. 2010 Sep;164(9):794-802. Epub 2010 Jul 5.	Trends in exposure to television food advertisements among children and adolescents in the United States.	Powell LM, Szczypka G, Chaloupka FJ.	Institute for Health Research and Policy, University of Illinois at Chicago, 1747 W Roosevelt Ave., Chicago, IL 60608, USA. powelll@uic.edu	OBJECTIVE: To examine the trends in food advertising seen by American children and adolescents. DESIGN: Trend analysis of children's and adolescents' exposure to food advertising in 2003, 2005, and 2007, including separate analyses by race. PARTICIPANTS: Children aged 2 to 5 years and 6 to 11 years and adolescents aged 12 to 17 years. MAIN EXPOSURE: Television ratings. MAIN OUTCOME MEASURES: Exposure to total food advertising and advertising by food category. RESULTS: Between 2003 and 2007 daily average exposure to food ads fell by 13.7% and 3.7% among young children aged 2 to 5 and 6 to 11 years, respectively, but increased by 3.7% among adolescents aged 12 to 17 years. Exposure to sweets ads fell 41%, 29.3%, and 12.1%, respectively, for 2- to 5-, 6- to 11-, and 12- to 17-year-olds and beverage ads were down by about 27% to 30% across these age groups, with substantial decreases in exposure to ads for the most heavily advertised sugar-sweetened beverages-fruit drinks and regular soft drinks. Exposure to fast food ads increased by 4.7%, 12.2%, and 20.4% among children aged 2 to 5, 6 to 11, and 12 to 17 years, respectively, between 2003 and 2007. The racial gap in exposure to food advertising grew between 2003 and 2007, particularly for fast food ads. CONCLUSIONS: A number of positive changes have occurred in children's exposure to food advertising. Continued monitoring of food advertising exposure along with nutritional analyses is needed to further assess self-regulatory pledges.	20603457
2010	Can J Public Health. 2010 Jul-Aug;101 Suppl 2:S14-7.	Policy options to support healthy eating in schools.	McKenna ML.	Department of Kinesiology, University of New Brunswick, PO Box 4400, Fredericton, NB E3B 5A3. mmckenna@unb.ca	OBJECTIVES: School nutrition policies offer a promising avenue by which to promote healthy eating and reduce the risk of chronic disease. This article reviews policy components that could support healthy eating, examines their evidence base and suggests directions for future research. METHOD: Information was drawn from research and other literature written in English between 1994 and 2008. Guided by recommendations from the World Health Organization, evidence pertaining to five potential components of policies was identified and reviewed: foods available, the food environment, health education, health services and counselling, and family and community outreach. RESULTS: A limited number of evaluations have examined the impact of school nutrition standards and have shown a positive impact on food availability and student nutrient intake. Results have shown that behaviourally focused nutrition education, especially when combined with food services and other initiatives, may affect students' eating habits positively but may not decrease obesity levels. Evidence pertaining to other potential policy subcomponents, such as limiting food marketing in schools, coordinating all food services and providing nutrition-related health services, is limited or lacking. CONCLUSION: Conceptually, comprehensive school nutrition policies comprising all five policy components offer an integrated and holistic approach to school nutrition. They could provide an umbrella to guide all school actions pertaining to nutrition and serve as a framework for accountability. Does conceptualization match reality? Further research is needed to determine how policy components affect implementation and outcomes.	21133196

2010	Pediatrics. 2010 Jul;126(1):88-93. Epub 2010 Jun 21.	Influence of licensed characters on children's taste and snack preferences.	Roberto CA, Baik J, Harris JL, Brownell KD.	Rudd Center for Food Policy and Obesity, Yale University, New Haven, CT 06511, USA. christina.roberto@yale.edu	OBJECTIVE: The goal was to study how popular licensed cartoon characters appearing on food packaging affect young children's taste and snack preferences.METHODS: Forty 4- to 6-year-old children tasted 3 pairs of identical foods (graham crackers, gummy fruit snacks, and carrots) presented in packages either with or without a popular cartoon character. Children tasted both food items in each pair and indicated whether the 2 foods tasted the same or one tasted better. Children then selected which of the food items they would prefer to eat for a snack.RESULTS: Children significantly preferred the taste of foods that had popular cartoon characters on the packaging, compared with the same foods without characters. The majority of children selected the food sample with a licensed character on it for their snack, but the effects were weaker for carrots than for gummy fruit snacks and graham crackers.CONCLUSIONS: Branding food packages with licensed characters substantially influences young children's taste preferences and snack selection and does so most strongly for energy-dense, nutrient-poor foods. These findings suggest that the use of licensed characters to advertise junk food to children should be restricted.	20566614
2010	Public Health Nutr. 2010 Dec;13(12):2064-7. Epub 2010 May 4.	Should we use popular brands to promote healthy eating among children?	Gunnarsdottir I, Thorsdottir I.	Unit for Nutrition Research, University of Iceland and Landspítali University Hospital, Eiríksgata 29, 101 Reykjavík, Iceland. ingigun@landspitali.is	OBJECTIVE: Studies indicate that food and beverages typically marketed to children are products high in fat, sugar and salt. LazyTown is an entertainment brand with a focus on healthy lifestyle, aimed at making health education entertaining. The aim of the present study was to assess whether children perceive food to taste better with a LazyTown label on the wrapping compared with the original packaging.DESIGN: Five pairs of identical food and beverage samples were introduced. We aimed to select healthy food and beverages from various food groups. Preference for the LazyTown food was coded as +1, no preference 0 and preference for the original food as -1. An average 'preference score' was calculated for each subject by adding up the answers. SETTING: Three pre-schools in the Greater Reykjavík area, Iceland. SUBJECTS: Subjects were pre-school children aged 3-5 to 6 years (n 66). RESULTS: Most children answered correctly that there was no difference in the taste between the two identical food samples. However, between 27 and 42 % (depending on the product) of children preferred the taste of LazyTown food and beverages despite the fact that the test food was identical. The mean preference score was 0.29 (sd 0.32, median 0.20, 95 % CI 0.21, 0.38).	20441663
2010	Arch Pediatr Adolesc Med. 2010 Sep;164(9):794-802. Epub 2010 Jul 5.	Trends in exposure to television food advertisements among children and adolescents in the United States.	Powell LM, Szczypka G, Chaloupka FJ.	Institute for Health Research and Policy, University of Illinois at Chicago, 1747 W Roosevelt Ave., Chicago, IL 60608, USA. powelll@uic.edu	OBJECTIVE: To examine the trends in food advertising seen by American children and adolescents. DESIGN: Trend analysis of children's and adolescents' exposure to food advertising in 2003, 2005, and 2007, including separate analyses by race. PARTICIPANTS: Children aged 2 to 5 years and 6 to 11 years and adolescents aged 12 to 17 years. MAIN EXPOSURE: Television ratings. MAIN OUTCOME MEASURES: Exposure to total food advertising and advertising by food category. RESULTS: Between 2003 and 2007 daily average exposure to food ads fell by 13.7% and 3.7% among young children aged 2 to 5 and 6 to 11 years, respectively, but increased by 3.7% among adolescents aged 12 to 17 years. Exposure to sweets ads fell 41%, 29.3%, and 12.1%, respectively, for 2- to 5-, 6- to 11-, and 12- to 17-year-olds and beverage ads were down by about 27% to 30% across these age groups, with substantial decreases in exposure to ads for the most heavily advertised sugar-sweetened beverages-fruit drinks and regular soft drinks. Exposure to fast food ads increased by 4.7%, 12.2%, and 20.4% among children aged 2 to 5, 6 to 11, and 12 to 17 years, respectively, between 2003 and 2007. The racial gap in exposure to food advertising grew between 2003 and 2007, particularly for fast food ads.CONCLUSIONS: A number of positive changes have occurred in children's exposure to food advertising. Continued monitoring of food advertising exposure along with nutritional analyses is needed to further assess self-regulatory pledges.	20603457

2010	Public Health Nutr. 2010 Dec;13(12):2064-7. Epub 2010 May 4.	Should we use popular brands to promote healthy eating among children?	Gunnarsdottir I, Thorsdottir I.	Unit for Nutrition Research, University of Iceland and Landspítali University Hospital, Eiríksgröta 29, 101 Reykjavík, Iceland. ingigun@landspitali.is	OBJECTIVE: Studies indicate that food and beverages typically marketed to children are products high in fat, sugar and salt. LazyTown is an entertainment brand with a focus on healthy lifestyle, aimed at making health education entertaining. The aim of the present study was to assess whether children perceive food to taste better with a LazyTown label on the wrapping compared with the original packaging.DESIGN: Five pairs of identical food and beverage samples were introduced. We aimed to select healthy food and beverages from various food groups. Preference for the LazyTown food was coded as +1, no preference 0 and preference for the original food as -1. An average 'preference score' was calculated for each subject by adding up the answers.SETTING: Three pre-schools in the Greater Reykjavík area, Iceland.SUBJECTS: Subjects were pre-school children aged 3-5 to 6 years (n 66). RESULTS: Most children answered correctly that there was no difference in the taste between the two identical food samples. However, between 27 and 42 % (depending on the product) of children preferred the taste of LazyTown food and beverages despite the fact that the test food was identical. The mean preference score was 0.29 (sd 0.32, median 0.20, 95 % CI 0.21, 0.38). CONCLUSIONS: Our findings add to past research by demonstrating children's preferences for child-oriented wrappings rather than regular wrapping. It might be suggested that popular brands could be useful to promote healthy eating among young children along with other actions.	20441663
2010	Appetite. 2010 Aug;55(1):117-23. Epub 2010 Mar 31.	Maternal encouragement to be thin moderates the effect of commercials on children's snack food intake.	Anschutz DJ, Engels RC, Van Strien T.	Behavioural Science Institute, Radboud University Nijmegen, The Netherlands. d.anschutz@bsi.ru.nl < d.anschutz@bsi.ru.nl >	The present study experimentally tested the effects of adult targeted food commercials (energy-dense and light food products) on actual snack food intake in young children while watching television. Furthermore, the moderating role of maternal behaviors was investigated. The children (N=121, aged between 8 and 12 years) were exposed to a neutral movie that was interrupted by two commercial breaks. These breaks contained commercials promoting either energy-dense foods, low energy versions of the same energy-dense foods (light food commercials), or neutral commercials aimed at adults. Snack food intake during watching television was measured. Children filled out questionnaires and were weighed and measured afterwards. Children who perceived maternal encouragement to be thin ate slightly more when exposed to energy-dense food commercials and especially when exposed to light food commercials than when exposed to neutral commercials. In contrast, children who perceived no maternal encouragement to be thin ate more when exposed to neutral commercials than when exposed to either energy-dense food commercials or light food commercials. These findings suggest that exposure to adult targeted light food cues produced disinhibiting in children who experienced maternal encouragement to be thin, resulting in elevated snack food intake.	20362022
2010	Appetite. 2010 Aug;55(1):49-55. Epub 2010 Mar 24.	Australian children's views about food advertising on television.	Mehta K, Coveney J, Ward P, Magarey A, Spurrier N, Udell T.	Flinders University, Adelaide, SA, Australia. kaye.mehta@flinders.edu.au < kaye.mehta@flinders.edu.au >	This study explored children's views about food advertising on television in the light of recent public interest in childhood obesity and obesogenic environments. Thirty-seven children aged between 8 and 11 years, discussed their perceptions of food advertising, in focus groups. The children engaged as consumers of advertising, noticing technical aspects, and expressing their likes and dislikes of particular techniques. While they understood the persuasive intent of advertising, they nevertheless desired products and made purchase requests. They particularly desired energy-dense nutrient-poor foods. The children demonstrated sophisticated levels of advertising literacy through their articulation of problems such as deception, impacts on children's health and wellbeing, and family conflict. They revealed themselves as sentient beings, with the capacity to react, respond and reflect on their experience of advertising. This study makes a contribution to research on consumer socialisation by introducing the perspective of Australian children. As stakeholders in the childhood obesity problem, the views of children should also be of interest to health	20346383

					policymakers.	
2010	Can J Diet Pract Res. 2010 Winter;71(4):166-71.	Online marketing of food and beverages to children: a content analysis.	Brady J, Mendelson R, Farrell A, Wong S.	Ryerson University.	Purpose: The goal was to assess websites sponsored by food and beverage manufacturers that have pledged to market branded food and beverage products to children responsibly, by ratifying the Children's Food and Beverage Advertising Initiative (CFBAI). Methods: A content analysis was conducted of 24 purposively sampled websites sponsored by 10 companies that promote food and beverage products to children. All are participant members of the CFBAI. Results: Of the 24 websites analyzed, the majority targeted children below age 12 (83%). An array of innovative online marketing techniques, most notably free website membership (63%), leader boards (50%), adver-games (79%), and branded downloadable content (76%), were used to encourage children's engagement with branded food and beverage promotions. Conclusions: Food and beverage manufacturers are engaging children with dynamic online marketing techniques that challenge regulatory codes governing broadcast media. These techniques may contradict the spirit of the CFBAI. Innovative regulatory guidelines are needed to address modern marketing media.	21144131
2010	Health Promot Int. 2010 Mar;25(1):24-32. Epub 2009 Nov 20.	A content analysis of British food advertisements aimed at children and adults.	Sixsmith R, Furnham A.	Department of Psychology, University College London, London, UK.	This study explored the differences between 35 child-focused and 52 adult-focused food advertisements sampled from 45 hrs of British television. More child-focused advertisements contained claims of health benefits; scientific information; were shot in 'Leisure' settings; with male characters; had cartoons; and were often fantasy-based. Conversely, significantly more adult-focused advertisements contained price/value information; were shot in 'Shop' settings; with female characters; and starring celebrities. Child-focused advertisements were mainly for convenience foods and snacks which are of considerable interest to health promotion policy makers.	19933308
2010	Public Health Nutr. 2010 Mar;13(3):393-9. Epub 2009 Aug 26.	Children's magazines: reading resources or food marketing tools?	Jones SC, Reid A.	Centre for Health Initiatives, University of Wollongong, Room G04 - Building 41, Wollongong, New South Wales 2522, Australia. sandraj@uow.edu.au	OBJECTIVE: Magazines targeted at children under 12 years old are growing in popularity; past studies have asserted that food items are rarely exposed, but methodological issues may have covered the true extent of covert promotion. The primary purpose of the present study was to quantify the nature and extent of the promotion of branded food products in Australian children's magazines. DESIGN: We conducted a content analysis of possible food promotions in seven top-selling Australian children's magazines published in 2005. In addition to regular food advertisements, the number of advertisements for premiums, editorials, puzzles or games, competitions and branded non-food promotions by food companies was recorded. Category frequencies are reported with a detailed description of the promotions present during September 2005. RESULTS: Only fifty-eight out of the 444 items identified could be classed as regular food advertisements. Several advertisements appeared to be in breach of codes regarding advertising to children and premiums. CONCLUSIONS: The pervasiveness of covert food marketing in the present study was contrary to previous findings and raises questions about the effectiveness of legal restrictions and self-regulation of advertising in protecting children from commercial food messages that may not be regarded as advertising.	19706222

2009	J Nutr Educ Behav. 2009 Nov-Dec;41(6):406-13.	Frequency and types of foods advertised on Saturday morning and weekday afternoon English- and Spanish-language American television programs.	Bell RA, Cassady D, Culp J, Alcalay R.	Department of Communication, University of California-Davis, Davis, CA 95616, USA. rabell@ucdavis.edu	OBJECTIVE: To describe food advertised on networks serving children and youth, and to compare ads on English-language networks with ads on Spanish networks. DESIGN: Analysis of television food advertisements appearing on Saturday morning and weekday afternoons in 2005-2006. A random sample of 1,130 advertisements appearing on 12 networks catering to Spanish-language, children, youth, Black youth, and general audiences were analyzed. MAIN OUTCOME MEASURES: Each advertisement was coded for the nature of the item promoted, the selling propositions used, and any nutritional claims made. ANALYSIS: Cross-tabulations using Fisher's exact test (P < .05 criterion). RESULTS: One-fifth of commercials were for food. Food ads were especially prevalent on Saturday programs and children's networks. Seventy percent of food ads were for items high in sugar or fat. More than one fourth of food advertisements were for fast-food restaurants, which were especially common on MTV and Spanish-language networks. Ads for fruits and vegetables were rare (1.7%). One nutrition-related public service announcement was found for every 63 food ads. CONCLUSIONS AND IMPLICATIONS: Food advertisements continue to promote less-healthy items. Until marketing of high calorie, low-nutrient food to children is restricted; education and media literacy remain the best strategies for mitigating advertising effects.	19879496
2009	Soc Sci Med. 2009 Nov;69(9):1402-8. Epub 2009 Sep 14.	Governing childhood obesity: framing regulation of fast food advertising in the Australian print media.	Henderson J, Coveney J, Ward P, Taylor A.	Flinders University, Adelaide, South Australia 5001, Australia. julie.henderson@flinders.edu.au	Childhood obesity is widely constructed as reaching epidemic proportions with consumption of fast food viewed as a contributing factor. This paper analyses media reporting of the regulation of fast food consumption to children. A media search of five Australian newspapers for the period January 2006 to June 2008 elicited 100 articles relating to the regulation of fast food advertising to children. Content and thematic analysis of the articles reveal conflicting perspectives on the role of the state; the level of accountability of the food and advertising industries; and responsibilities of parents for regulating fast food consumption in children. The Federal Government, food and advertising industries and free to air broadcasters favour industry self-regulation and personal responsibility for fast food consumption while the proponents of government regulation include consumer groups, state government health ministers, nutrition and public health academics and medical and health foundations. The regulation of fast food advertising to children is discussed in relation to ideas about governance and the public health strategies which follow from these ideas. The paper argues that all proposed solutions are indicative of a neoliberal approach to the governance of health insofar as the responsibility for regulation of food marketing is viewed as lying with industry and the regulation of lifestyle risk is viewed as an individual responsibility.	
2009	Health Commun. 2009 Oct;24(7):660-73.	Television viewing and unhealthy diet: implications for children and media interventions.	Harris JL, Bargh JA.	Department of Psychology, Yale University, New Haven, CT 06520-4369, USA.	The concern over increasing rates of obesity and associated health issues has led to calls for solutions to the potentially unhealthy influence of television and food advertising on children's diets. Research demonstrates that children's food preferences are acquired through learning processes, and that these preferences have long-lasting effects on diet. We examined food preferences and eating behaviours among college students, and assessed the relative influence of 2 potential contributors: parental communication and television experience. In line with previous studies with children, prior television experience continued to predict unhealthy food preferences and diet in early adulthood, and perceived taste had the most direct relationship to both healthy and unhealthy diets. In addition, both television experience and parenting factors independently influenced preferences and diet. These findings provide insights into the potential effectiveness of alternative media interventions to counteract the unhealthy influence of television on diet, including a) nutrition education; b) parental communication and media literacy education to teach children to defend against	20183373

					unwanted influence; and c) reduced exposure to unhealthy messages.	
2009	Int J Obes (Lond). 2009 Oct;33(10):1094-102. Epub 2009 Aug 4.	The cost-effectiveness of removing television advertising of high-fat and/or high-sugar food and beverages to Australian children.	Magnus A, Haby MM, Carter R, Swinburn B.	Health Economics Unit, Public Health Research, Evaluation and Policy Cluster, Deakin University, Burwood, Victoria, Australia. anne.magnus@deakin.edu.au	OBJECTIVE: To model the health benefits and cost-effectiveness of banning television (TV) advertisements in Australia for energy-dense, nutrient-poor food and beverages during children's peak viewing times. METHODS: Benefits were modelled as changes in body mass index (BMI) and disability-adjusted life years (DALYs) saved. Intervention costs (AUD\$) were compared with future health-care cost offsets from reduced prevalence of obesity-related health conditions. Changes in BMI were assumed to be maintained through to adulthood. The comparator was current practice, the reference year was 2001, and the discount rate for costs and benefits was 3%. The impact of the withdrawal of non-core food and beverage advertisements on children's actual food consumption was drawn from the best available evidence (a randomized controlled trial of advertisement exposure and food consumption). Supporting evidence was found in ecological relationships between TV advertising and childhood obesity, and from the effects of marketing bans on other products. A Working Group of stakeholders provided input into decisions surrounding the modelling assumptions and second-stage filters of 'strength of evidence', 'equity', 'acceptability to stakeholders', 'feasibility of implementation', 'sustainability' and 'side-effects'. RESULTS: The intervention had a gross incremental cost-effectiveness ratio of AUD\$ 3.70 (95% uncertainty interval (UI) \$2.40, \$7.70) per DALY. Total DALYs saved were 37 000 (95% UI 16,000, 59,000). When the present value of potential savings in future health-care costs was considered (AUD\$ 300m (95% UI \$130m, \$480m), the intervention was 'dominant', because it resulted in both a health gain and a cost offset compared with current practice. CONCLUSIONS: Although recognizing the limitations of the available evidence, restricting TV food advertising to children would be one of the most cost-effective population-based interventions available to governments today. Despite its economic credentials from a public health perspective, the initiative is strongly opposed by food and advertising industries and is under review by the current Australian government.	19652656
2009	Arch Dis Child. 2009 Sep;94(9):658-62. Epub 2009 May 28.	Food advertising during children's television in Canada and the UK.	Adams J, Hennessy-Priest K, Ingimarsdóttir S, Sheeshka J, Ostbye T, White M.	Institute of Health and Society, William Leech Building, Newcastle University, Newcastle upon Tyne NE2 4HH, UK. j.m.adams@ncl.ac.uk	BACKGROUND: Television advertisements for less healthy foods are thought to contribute to overweight and obesity in children. In the UK, new regulations on television food advertising to children came into effect in April 2007. These prohibit advertisements for "less healthy" foods during or around programmes "of particular appeal to" (OPAT) children. In Canada, self-regulated codes of practice on television food advertising to children were recently strengthened. OBJECTIVE: To document the nutritional content of food advertised and number of advertisements OPAT children broadcast in the UK and central Canada before the introduction of the new UK regulations. DESIGN: All food advertisements broadcast on four popular channels in Canada and the three terrestrial commercial channels in the UK during 1 week in 2006 were identified and linked to relevant nutritional data. Food advertisements OPAT children and for "less healthy" products were identified using the criteria in the UK regulations. RESULTS: 2315 food related advertisements broadcast in Canada and 1365 broadcast in the UK were included. 52-61% were for "less healthy" products; 5-11% were OPAT children. Around 5% of food advertisements would have been prohibited under the new UK regulations. There were few differences in the nutritional content of food described in advertisements that were and were not OPAT children. CONCLUSION: There was little evidence that food described in advertisements OPAT children were any less healthy than those that were not. Few food advertisements are likely to be prohibited by the new UK regulations.	19477912

2009	Health Place. 2009 Sep;15(3):811-8. Epub 2009 Feb 14.	Examining the interaction between food outlets and outdoor food advertisements with primary school food environments.	Walton M, Pearce J, Day P.	Department of Public Health, University of Otago, Wellington, Wellington 6242, New Zealand. mathew.walton@otago.ac.nz	Schools are commonly seen as a site of intervention to improve children's nutrition, and prevent excess weight gain. Schools may have limited influence over children's diets; however, with home and community environments also exerting an influence within schools. This study considered the environment of food outlets and outdoor food advertisements surrounding four case study primary schools in New Zealand, and the impact of that external environment on within-school food environments. The shortest travel route between school and home addresses, and the number of food outlets and advertisements passed on that route, was calculated for each student. Interviews with school management were conducted. The schools with a higher percentage of students passing food outlets and advertisements considered that their presence impacted on efforts within schools to improve the food environment. Limiting students' exposure to food outlets and outdoor food adverts through travel route planning, reducing advertising, or limiting the location of food outlets surrounding schools could be explored as intervention options to support schools in promoting nutrition.	19297234
2009	J Public Health (Oxf). 2009 Sep;31(3):383-8. Epub 2009 Jun 16.	Food-related advertising geared toward Mexican children.	Ramírez-Ley K, De Lira-García C, Souto-Gallardo Mde L, Tejeda-López MF, Castañeda-González LM, Bacardí-Gascón M, Jiménez-Cruz A.	Facultad de Medicina y Psicología, Graduate Nutrition Program, Universidad Autónoma de Baja California, Tijuana, Baja California, Mexico.	BACKGROUND: Overweight and obesity have dramatically increased in recent years. In 2006, the prevalence of overweight and obesity among 6- to 12-year-old children was 26% in Mexico. Food advertising has shown to be a contributor to childhood obesity. The purpose of this study was to evaluate the frequency and types of food advertisements geared toward children living in Baja California. METHODS: Two local channels and three national channels, during a period of 7 h on weekday afternoons and 6 h on weekend mornings, were recorded for 7 days. A total of 235 h were recorded and analyzed. RESULTS: A total of 8299 advertisements were registered; 22% were food-related and 50% were geared toward children. The average of food-related advertisements (FRAs) per half an hour was 4, and half of them were geared toward children. During the time that children may be watching television, 50% of all FRAs were potato and corn chips, desserts and cakes, juices, sweetened cereals, candies, cookies, sweetened beverages and fast foods, which comprises a higher percentage of adult-oriented FRA (32 versus 22%). CONCLUSION: Children are systematically more exposed than adults to advertisements for high-energy-dense foods.	19531604
2009	Eur J Public Health. 2009 Aug;19(4):365-9. Epub 2009 Mar 26.	By how much would limiting TV food advertising reduce childhood obesity?	Veerman JL, Van Beeck EF, Barendregt JJ, Mackenbach JP.	Department of Public Health, Erasmus University Rotterdam, Rotterdam, The Netherlands. l.veerman@uq.edu.au	BACKGROUND: There is evidence suggesting that food advertising causes childhood obesity. The strength of this effect is unclear. To inform decisions on whether to restrict advertising opportunities, we estimate how much of the childhood obesity prevalence is attributable to food advertising on television (TV). METHODS: We constructed a mathematical simulation model to estimate the potential effects of reducing the exposure of 6- to 12-year-old US children to TV advertising for food on the prevalence of overweight and obesity. Model input was based on body measurements from NHANES 2003-04, the CDC-2000 cut-offs for weight categories, and literature that relates advertising to consumption levels and consumption to body mass. In an additional analysis we use a Delphi study to obtain experts' estimates of the effect of advertising on consumption. RESULTS: Based on literature findings, the model predicts that reducing the exposure to zero would decrease the average BMI by 0.38 kg/m ² and lower the prevalence of obesity from 17.8 to 15.2% (95% uncertainty interval 14.8-15.6) for boys and from 15.9% to 13.5% (13.1-13.8) for girls. When estimates are based on expert opinion, these values are 11.0% (7.7-14.0) and 9.9% (7.2-12.4), respectively. CONCLUSION: This study suggests that from one in seven up to one in three obese children in the USA might not have been obese in the absence of advertising for unhealthy food on TV. Limiting the exposure of children to marketing of energy-dense food could be part of a broader effort to make children's diets	19324935

					healthier.	
2009	Health Psychol. 2009 Jul;28(4):404-13.	Priming effects of television food advertising on eating behavior.	Harris JL, Bargh JA, Brownell KD.	Department of Psychology, Yale University, New Haven, CT 06520, USA. jennifer.harris@yale.edu	OBJECTIVE: Health advocates have focused on the prevalence of advertising for calorie-dense low-nutrient foods as a significant contributor to the obesity epidemic. This research tests the hypothesis that exposure to food advertising during TV viewing may also contribute to obesity by triggering automatic snacking of available food. DESIGN: In Experiments 1a and 1b, elementary-school-age children watched a cartoon that contained either food advertising or advertising for other products and received a snack while watching. In Experiment 2, adults watched a TV program that included food advertising that promoted snacking and/or fun product benefits, food advertising that promoted nutrition benefits, or no food advertising. The adults then tasted and evaluated a range of healthy to unhealthy snack foods in an apparently separate experiment. MAIN OUTCOME MEASURES: Amount of snack foods consumed during and after advertising exposure. RESULTS: Children consumed 45% more when exposed to food advertising. Adults consumed more of both healthy and unhealthy snack foods following exposure to snack food advertising compared to the other conditions. In both experiments, food advertising increased consumption of products not in the presented advertisements, and these effects were not related to reported hunger or other conscious influences. CONCLUSION: These experiments demonstrate the power of food advertising to prime automatic eating behaviors and thus influence far more than brand preference alone.	19594263
2009	Qual Health Res. 2009 May;19(5):645-54.	The role of the media in influencing children's nutritional perceptions.	Dorey E, McCool J.	University of Auckland, Auckland, New Zealand.	Recently the mass media environment of children, in particular food advertising, has come under scrutiny as a contributing factor in the increasing prevalence of childhood obesity. Focus groups were used to explore how children's appraisals of various forms of media inform their health-related perceptions about eating and nutrition. Ninety participants aged 10 to 12 years were recruited from schools throughout Auckland, New Zealand. Schools were randomly selected from among those rated with low, medium, and high socioeconomic status. Results show that the media is a key factor shaping how young people conceptualize healthy eating and healthy bodies. Mass media food messages were not seen as a credible source of health information; rather, they assist in constructing and reinforcing dominant misconceptions about food, healthy eating, and nutrition. Nutritional messages embedded in both health promotion and advertising were perceived to be conflicting and ambiguous, and might serve to undermine the trustworthiness of health promotion initiatives.	19380500
2009	Br J Dev Psychol. 2009 Mar;27(Pt 1):105-21.	The effectiveness of parental communication in modifying the relation between food advertising and children's consumption behaviour.	Buijzen M.	The Amsterdam School of Communications Research, ASCoR, University of Amsterdam, Amsterdam, The Netherlands. m.a.buijzen@uva.nl	The aim of this study was to examine the effectiveness of various types of parental communication in modifying children's responses to television food advertising. In a combined diary-survey study among 234 parents of 4- to 12-year-old children, I investigated how different styles of advertising mediation (active vs. restrictive) and consumer communication (concept-oriented vs. socio-oriented) moderated the relation between children's advertising exposure and their consumption of advertised energy-dense food products. Interaction analysis in regression showed that active advertising mediation (i.e. explaining the purpose and nature of advertising), and socio-oriented consumer communication (i.e. emphasizing control and restrictions) significantly reduced the impact of advertising on children's food consumption. Parental restrictions of advertising exposure were only effective among younger children (<8). These results suggest that critical discussion about advertising and rule making about consumption are most effective in countering the impact of food advertising.	19972665

2009	J Community Health. 2009 Feb;34(1):73-8.	Brand name logo recognition of fast food and healthy food among children.	Arredondo E, Castaneda D, Elder JP, Slymen D, Dozier D.	Graduate School of Public Health, Center for Behavioral and Community Health Studies, San Diego State University, San Diego, CA 92123, USA. earredondo@projects.sdsu.edu	The fast food industry has been increasingly criticized for creating brand loyalty in young consumers. Food marketers are well versed in reaching children and youth given the importance of brand loyalty on future food purchasing behaviour. In addition, food marketers are increasingly targeting the Hispanic population given their growing spending power. The fast food industry is among the leaders in reaching youth and ethnic minorities through their marketing efforts. The primary objective of this study was to determine if young children recognized fast food restaurant logos at a higher rate than other food brands. Methods Children (n = 155; 53% male; 87% Hispanic) ages 4-8 years were recruited from elementary schools and asked to match 10 logo cards to products depicted on a game board. Parents completed a survey assessing demographic and psychosocial characteristics associated with a healthy lifestyle in the home. Results Older children and children who were overweight were significantly more likely to recognize fast food restaurant logos than other food logos. Moreover, parents' psychosocial and socio-demographic characteristics were associated with the type of food logo recognized by the children. Conclusions Children's high recognition of fast food restaurant logos may reflect greater exposure to fast food advertisements. Families' socio-demographic characteristics play a role in children's recognition of food logos.	18830690
2009	Am J Clin Nutr. 2009 May;89(5):1328-33. Epub 2009 Mar 25.	Side effects of television food commercials on concurrent nonadvertised sweet snack food intakes in young children.	Anschutz DJ, Engels RC, Van Strien T.	Behavioural Science Institute and the Institute for Gender Studies, Radboud University, Nijmegen, Netherlands. d.anschutz@bsi.ru.nl	BACKGROUND: Exposure to food commercials is assumed to be related to children's food preferences and snack food intake patterns. However, surprisingly few studies tested whether watching food commercials actually leads to elevated snack food intake. OBJECTIVE: We experimentally tested the side effects of television food commercials on concurrent no advertised sweet snack food intake in young children aged 8-12 y. DESIGN: The children (n = 120) watched a movie interrupted by 2 commercial breaks that contained either food commercials or neutral commercials. While watching, the children could freely eat palatable food. Afterward, they filled out questionnaires and were weighed and measured. RESULTS: The main finding of our study was the interaction between commercial type and sex of the child. Food intake in boys was higher when they watched the food commercials than when they watched the neutral commercials, whereas food intake in girls was slightly lower when they watched the food commercials than when they watched the neutral commercials. CONCLUSION: The results suggest that boys are susceptible to food cues in commercials.	19321557
2009	Am J Public Health. 2009 Mar;99(3):505-10. Epub 2008 Dec 23.	Proximity of fast-food restaurants to schools and adolescent obesity.	Davis B, Carpenter C.	School of Business and Management, Azusa Pacific University, Azusa, CA, USA. marketing_department@baylor.edu	OBJECTIVES: We examined the relationship between fast-food restaurants near schools and obesity among middle and high school students in California. METHODS: We used geocoded data (obtained from the 2002-2005 California Healthy Kids Survey) on over 500,000 youths and multivariate regression models to estimate associations between adolescent obesity and proximity of fast-food restaurants to schools. RESULTS: We found that students with fast-food restaurants near (within one half mile of) their schools (1) consumed fewer servings of fruits and vegetables, (2) consumed more servings of soda, and (3) were more likely to be overweight (odds ratio [OR] = 1.06; 95% confidence interval [CI] = 1.02, 1.10) or obese (OR = 1.07; 95% CI = 1.02, 1.12) than were youths whose schools were not near fast-food restaurants, after we controlled for student- and school-level characteristics. The result was unique to eating at fast-food restaurants (compared with other nearby establishments) and was not observed for another risky behaviour (smoking). CONCLUSIONS: Exposure to poor-quality food environments has important effects on adolescent eating patterns and overweight. Policy interventions limiting the proximity of fast-food restaurants to schools could help reduce adolescent obesity.	19106421

2009	J Paediatr Child Health. 2009 Sep;45(9):493-7. Epub 2009 Aug 21.	Parental awareness and attitudes of food marketing to children: a community attitudes survey of parents in New South Wales, Australia.	Kelly B, Chapman K, Hardy LL, King L, Farrell L.	Cancer Council New South Wales, Physical Activity, Nutrition and Obesity Research Group, School of Public Health, University of Sydney, Sydney, New South Wales, Australia. bridgetk@nswcc.org.au	AIM: To determine parents' attitudes and awareness of food marketing to children. METHOD: Computer-assisted telephone interviews of a random sample of 400 parents of children aged 5-17 years and who were the main grocery buyers for that household, living in NSW, Australia. The main outcome measures included parental awareness and attitudes relating to food marketing to children, the perceived role of government versus industry in food marketing regulation and children's food purchasing requests as a result of exposure to food marketing. RESULTS: The majority of parents were concerned about food marketing to children, with the highest level of concern registered for the positioning of food at supermarket checkouts (83% of parents concerned). Parental awareness of certain non-broadcast media food marketing (e.g. print, radio and premium offers) to children was low. The majority of parents (91%) did not trust the industry to protect children from food marketing. Most parents (81%) believed that the government should restrict the use of non-broadcast media marketing of unhealthy food to children. Parents of younger children were more likely to report that their child asked for advertised food products, compared with parents of adolescents (65% and 48% respectively, $P < 0.0001$). CONCLUSIONS: Reductions in point of sale food promotions would be welcomed by parents. Raising community awareness of the non-broadcast media channels used to market food to children is important as part of building family and policy efforts to limit exposure to this otherwise relatively unregulated media environment.	19702609
2009	Arch Pediatr Adolesc Med. 2009 Jul;163(7):633-7.	Tipping the balance: use of advergames to promote consumption of nutritious foods and beverages by low-income African American children.	Pempek TA, Calvert SL.	Children's Digital Media Center, Department of Psychology, Georgetown University, 37th & O Streets NW, Washington, DC 20057, USA.	OBJECTIVE: To examine how advergames, which are online computer games developed to market a product, affect consumption of healthier and less healthy snacks by low-income African American children. DESIGN: Cross-sectional, between-subjects examination of an advergame in which children were rewarded for having their computer character consume healthier or less healthy foods and beverages. Children were randomly assigned to 1 of the following 3 conditions: (1) the healthier advergame condition, (2) the less healthy advergame condition, or (3) the control condition. SETTING: Urban public elementary schools. PARTICIPANTS: Thirty low-income, African American children aged 9 to 10 years. Main Exposure Children in the treatment conditions played a less healthy or a healthier version of an advergame 2 times before choosing and eating a snack and completing the experimental measures. Children in the control group chose and ate a snack before playing the game and completing the measures. MAIN OUTCOME MEASURES: The number of healthier snack items children selected and ate and how much children liked the game. RESULTS: Children who played the healthier version of the advergame selected and ate significantly more healthy snacks than did those who played the less healthy version. Children reported liking the advergame. CONCLUSIONS: Findings suggest that concerns about online advergames that market unhealthy foods are justified. However, advergames may also be used to promote healthier foods and beverages. This kind of social marketing approach could tip the scales toward the selection of higher-quality snacks, thereby helping to curb the obesity epidemic.	19581546

2009	Br J Dev Psychol. 2009 Mar;27(Pt 1):71-83.	Young children's ability to recognize advertisements in web page designs.	Ali M, Blades M, Oates C, Blumberg F.	University of Sheffield, Sheffield, UK.	Identifying what is, and what is not an advertisement is the first step in realizing that an advertisement is a marketing message. Children can distinguish television advertisements from programmes by about 5 years of age. Although previous researchers have investigated television advertising, little attention has been given to advertisements in other media, even though other media, especially the Internet, have become important channels of marketing to children. We showed children printed copies of invented web pages that included advertisements, half of which had price information, and asked the children to point to whatever they thought was an advertisement. In two experiments we tested a total of 401 children, aged 6, 8, 10 and 12 years of age, from the United Kingdom and Indonesia. Six-year-olds recognized a quarter of the advertisements, 8-year-olds recognized half the advertisements, and the 10- and 12-year-olds recognized about three-quarters. Only the 10- and 12-year-olds were more likely to identify an advertisement when it included a price. We contrast our findings with previous results about the identification of television advertising, and discuss why children were poorer at recognizing web page advertisements. The performance of the children has implications for theories about how children develop an understanding of advertising.	19972663
2009	Public Health Nutr. 2010 Jul;13(7):1013-21. Epub 2009 Nov 16.	Compliance with self-regulation of television food and beverage advertising aimed at children in Spain.	Romero-Fernández MM, Royo-Bordonada MA, Rodríguez-Artalejo F.	Unidad de Medicina Preventiva, Hospital General de Ciudad Real, c/Tomelloso s/n, E-13005 Ciudad Real, Spain. mromerofer@yahoo.es	OBJECTIVE: To evaluate the level of compliance with the PAOS Code (Publicidad, Actividad, Obesidad y Salud), which establishes standards for the self-regulation of food marketing aimed at minors, in television advertising by food and beverage companies that have agreed to abide by the Code. DESIGN: The study sample consisted of food and beverage advertisements targeting children during 80 h of programming by four Spanish television networks. The level of compliance with each standard of the PAOS Code was classified into three categories: 'compliance', 'non-compliance' and 'uncertain compliance'. Overall, an advertisement was considered compliant with the PAOS Code if it met all the standards; non-compliant if it contravened one or more standards; and uncertain in all other cases. RESULTS: Of a total of 203 television advertisements from companies that agreed to the PAOS Code, the overall prevalence of non-compliance was 49.3% (v. 50.8% among those that did not agree to the code), with 20.7% of advertisements considered of uncertain compliance. Non-compliance was more frequent on Saturdays, in longer advertisements, in advertisements containing promotions or dairy products, and for advertisements from companies of French or US origin. CONCLUSIONS: Non-compliance with the PAOS Code was very high and was similar for companies that did and did not agree to the Code, casting doubt on the Code's effectiveness and oversight system. It seems the time has come to commit to statutory regulations that reduce the negative impact of advertising on children's diets, as demanded by public health experts and consumer associations.	20082746
2009	Public Health Nutr. 2010 Jul;13(7):1003-12. Epub 2009 Dec 17.	Television food advertising and the prevalence of childhood overweight and obesity: a multicountry comparison.	Goris JM, Petersen S, Stamatakis E, Veerman JL.	School of Population Health, MPH Program, The University of Queensland, Herston, QLD, Australia. Janny_Goris@health.qld.gov.au	OBJECTIVE: To estimate the contribution of television (TV) food advertising to the prevalence of obesity among 6-11-year-old children in Australia, Great Britain (England and Scotland only), Italy, The Netherlands, Sweden and the United States. DESIGN: Data from contemporary representative studies on the prevalence of childhood obesity and on TV food advertising exposure in the above countries were entered into a mathematical simulation model. Two different effect estimators were used to calculate the reduction in prevalence of overweight and obesity in the absence of TV food advertising in each country; one based on literature and one based on experts' estimates. SETTING: Six- to eleven-year-old children in six Western countries. RESULTS: Estimates of the average exposure of children to TV food advertising range from 1.8 min/d in The Netherlands to 11.5 min/d in the United States. Its contribution to the prevalence of childhood obesity is estimated at 16%-40% in the United States, 10%-28% in Australia and Italy and 4%-18% in Great Britain, Sweden and	20018123

					The Netherlands. CONCLUSIONS: The contribution of TV advertising of foods and drinks to the prevalence of childhood obesity differs distinctly by country and is likely to be significant in some countries.	
2009	J Nutr Educ Behav. 2009 Sep-Oct;41(5):353-9.	Food and beverage brands that market to children and adolescents on the internet: a content analysis of branded web sites.	Henry AE, Story M.	Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, Minneapolis, MN 55454, USA	OBJECTIVE: To identify food and beverage brand Web sites featuring designated children's areas, assess marketing techniques present on those industry Web sites, and determine nutritional quality of branded food items marketed to children.DESIGN: Systematic content analysis of food and beverage brand Web sites and nutrient analysis of food and beverages advertised on these Web sites.SETTING: The World Wide Web.PARTICIPANTS: One-hundred thirty Internet Web sites of food and beverage brands with top media expenditures based on the America's Top 2000 Brands section of Brandweek magazine's annual "Superbrands" report. MAIN OUTCOME MEASURES: A standardized content analysis rating form to determine marketing techniques used on the food and beverage brand Web sites. Nutritional analysis of food brands was conducted.RESULTS: Of 130 Web sites analyzed, 48% featured designated children's areas. These Web sites featured a variety of Internet marketing techniques, including advergames on 85% of the Web sites and interactive programs on 92% of the Web sites. Branded spokescharacters and tie-ins to other products were featured on the majority of the Web sites, as well. Few food brands (13%) with Web sites that market to children met the nutrition criteria set by the National Alliance for Nutrition and Activity. CONCLUSIONS AND IMPLICATIONS: Nearly half of branded Web sites analyzed used designated children's areas to market food and beverages to children, 87% of which were of low nutritional quality. Nutrition professionals should advocate the use of advertising techniques to encourage healthful food choices for children.	19717119
2009	Public Health Nutr. 2010 Mar;13(3):393-9. Epub 2009 Aug 26.	Children's magazines: reading resources or food marketing tools?	Jones SC, Reid A.	Centre for Health Initiatives, University of Wollongong, Room G04 - Building 41, Wollongong, New South Wales 2522, Australia. sandraj@uow.edu.au	OBJECTIVE: Magazines targeted at children under 12 years old are growing in popularity; past studies have asserted that food items are rarely exposed, but methodological issues may have covered the true extent of covert promotion. The primary purpose of the present study was to quantify the nature and extent of the promotion of branded food products in Australian children's magazines. DESIGN: We conducted a content analysis of possible food promotions in seven top-selling Australian children's magazines published in 2005. In addition to regular food advertisements, the number of advertisements for premiums, editorials, puzzles or games, competitions and branded non-food promotions by food companies was recorded. Category frequencies are reported with a detailed description of the promotions present during September 2005. RESULTS: Only fifty-eight out of the 444 items identified could be classed as regular food advertisements. Several advertisements appeared to be in breach of codes regarding advertising to children and premiums. CONCLUSIONS: The pervasiveness of covert food marketing in the present study was contrary to previous findings and raises questions about the effectiveness of legal restrictions and self-regulation of advertising in protecting children from commercial food messages that may not be regarded as advertising.	19706222

2009	Eur J Public Health. 2009 Aug;19(4):365-9. Epub 2009 Mar 26.	By how much would limiting TV food advertising reduce childhood obesity?	Veerman JL, Van Beeck EF, Barendregt JJ, Mackenbach JP.	Department of Public Health, Erasmus University Rotterdam, Rotterdam, The Netherlands. l.veerman@uq.edu.au	<p>BACKGROUND: There is evidence suggesting that food advertising causes childhood obesity. The strength of this effect is unclear. To inform decisions on whether to restrict advertising opportunities, we estimate how much of the childhood obesity prevalence is attributable to food advertising on television (TV). METHODS: We constructed a mathematical simulation model to estimate the potential effects of reducing the exposure of 6- to 12-year-old US children to TV advertising for food on the prevalence of overweight and obesity. Model input was based on body measurements from NHANES 2003-04, the CDC-2000 cut-offs for weight categories, and literature that relates advertising to consumption levels and consumption to body mass. In an additional analysis we use a Delphi study to obtain experts' estimates of the effect of advertising on consumption. RESULTS: Based on literature findings, the model predicts that reducing the exposure to zero would decrease the average BMI by 0.38 kg/m(-2) and lower the prevalence of obesity from 17.8 to 15.2% (95% uncertainty interval 14.8-15.6) for boys and from 15.9% to 13.5% (13.1-13.8) for girls. When estimates are based on expert opinion, these values are 11.0% (7.7-14.0) and 9.9% (7.2-12.4), respectively. CONCLUSION: This study suggests that from one in seven up to one in three obese children in the USA might not have been obese in the absence of advertising for unhealthy food on TV. Limiting the exposure of children to marketing of energy-dense food could be part of a broader effort to make children's diets healthier.</p>	19324935
2008	J Pediatr Health Care. 2009 May-Jun;23(3):150-7. Epub 2008 Mar 26.	Depiction of food as having drug-like properties in televised food advertisements directed at children: portrayals as pleasure enhancing and addictive.	Page RM, Brewster A.	Department of Health Science, 221 Richards Bldg, Brigham Young University, Provo, UT 84602, USA. randy_page@byu.edu	<p>INTRODUCTION: The purpose of this study was to examine food commercials airing during children's TV programming for portrayals of behaviors associated with substance use, violence, disrespect, and stealing. It was hypothesized that these behaviors would be present and would be more frequent in commercials advertising specific products (e.g., ready-to-eat cereals) than for those advertising restaurants (e.g., fast food). METHOD: A content analysis of 147 food commercials televised during children's TV programming on U.S. broadcast networks examined commercials for behaviors associated with substance use behavior, physical violence, and other problematic behaviors for children. RESULTS: Commercials contained depictions of exaggerated pleasure sensation and dependency/addiction, portrayals of physical violence, trickery, thievery/stealing, fighting and taking extreme measures to obtain a food, and treating adults with disrespect. More portrayals appeared in commercials for high-sugar cereals than in those for fast-food restaurants. DISCUSSION: Findings raise concern about the presence of this content in televised food advertisements targeting children and serve to alert pediatric health professionals and other child health advocates to take a closer look at this issue.</p>	19401247

2008	Public Health Nutr. 2009 May;12(5):614-23. Epub 2008 Jul 11.	Identifying 'unhealthy' food advertising on television: a case study applying the UK Nutrient Profile model.	Jenkin G, Wilson N, Hermanson N.	Department of Public Health, Health Promotion & Policy Research Unit, University of Otago, Wellington, New Zealand. Gabrielle.jenkin@otago.ac.nz	OBJECTIVES: To evaluate the feasibility of the UK Nutrient Profile (NP) model for identifying 'unhealthy' food advertisements using a case study of New Zealand television advertisements. DESIGN: Four weeks of weekday television from 15.30 hours to 18.30 hours was videotaped from a state-owned (free-to-air) television channel popular with children. Food advertisements were identified and their nutritional information collected in accordance with the requirements of the NP model. Nutrient information was obtained from a variety of sources including food labels, company websites and a national nutritional database. RESULTS: From the 60 h sample of weekday afternoon television, there were 1893 advertisements, of which 483 were for food products or retailers. After applying the NP model, 66 % of these were classified as advertising high-fat, high-salt and high-sugar (HFSS) foods; 28 % were classified as advertising non-HFSS foods; and the remaining 2 % were unclassifiable. More than half (53 %) of the HFSS food advertisements were for 'mixed meal' items promoted by major fast-food franchises. The advertising of non-HFSS food was sparse, covering a narrow range of food groups, with no advertisements for fresh fruit or vegetables. CONCLUSIONS: Despite the NP model having some design limitations in classifying real-world televised food advertisements, it was easily applied to this sample and could clearly identify HFSS products. Policy makers who do not wish to completely restrict food advertising to children outright should consider using this NP model for regulating food advertising.	18616851
2008	Aust N Z J Public Health. 2008 Dec;32(6):522-8.	The commercial food landscape: outdoor food advertising around primary schools in Australia.	Kelly B, Cretikos M, Rogers K, King L.	NSW Centre for Overweight and Obesity, School of Public Health, Medical Foundation Building, University of Sydney, New South Wales. Bridgetk@health.usyd.edu.au	OBJECTIVE: Food marketing is linked to childhood obesity through its influence on children's food preferences, purchase requests and food consumption. We aimed to describe the volume and nature of outdoor food advertisements and factors associated with outdoor food advertising in the area surrounding Australian primary schools. METHODS: Forty primary schools in Sydney and Wollongong were selected using random sampling within population density and socio-economic strata. The area within a 500 m radius of each school was scanned and advertisements coded according to pre-defined criteria, including: food or non-food product advertisement, distance from the school, size and location. Food advertisements were further categorised as core foods, non-core foods and miscellaneous drinks (tea and coffee). RESULTS: The number of advertisements identified was 9,151, of which 2,286 (25%) were for food. The number of non-core food advertisements was 1,834, this accounted for 80% of food advertisements. Soft drinks and alcoholic beverages were the food products most commonly advertised around primary schools (24% and 22% of food advertisements, respectively). Non-core food products were twice as likely to be advertised close to a primary school (95 non-core food advertisements per km(2) within 250 m vs. 46 advertisements per km(2) within 250-500 m). CONCLUSIONS: The density of non-core food advertisements within 500 m of primary schools, and the potential for repeated exposure of children to soft drink and alcoholic beverage advertisements in particular, highlights the need for outdoor food marketing policy intervention. IMPLICATIONS: Outdoor advertising is an important food marketing tool that should be considered in future debates on regulation of food marketing to children.	19076742

2008	Health Promot Int. 2008 Dec;23(4):337-44. Epub 2008 Aug 28.	Persuasive food marketing to children: use of cartoons and competitions in Australian commercial television advertisements.	Kelly B, Hattersley L, King L, Flood V.	NSW Centre for Overweight and Obesity, School of Public Health, University of Sydney, NSW, Australia. bridgetk@nswcc.org.au	While there is a recognized link between high levels of exposure to advertising of unhealthy foods and overweight and obesity among children, there is little research on the extent to which these exposures include persuasive marketing techniques. This study aimed to measure children's exposure to the use of persuasive marketing within television food advertisements. Advertisements broadcast on all three commercial Australian television channels were recorded for an equivalent 1 week period in May 2006 and 2007 (714 h). Food advertisements were analysed for their use of persuasive marketing, including premium offers, such as competitions, and the use of promotional characters, including celebrities and cartoon characters. Advertised foods were categorized as core, non-core or miscellaneous foods. Commercial data were purchased to determine children's peak viewing times and popular programs. A total of 20 201 advertisements were recorded, 25.5% of which were for food. Significantly more food advertisements broadcast during children's peak viewing times, compared to non-peak times, contained promotional characters ($P < 0.05$) and premium offers ($P < 0.001$). During programs most popular with children, there were 3.3 non-core food advertisements per hour containing premium offers, compared to 0.2 per hour during programs most popular with adults. The majority of advertisements containing persuasive marketing during all viewing periods were for non-core foods. Persuasive marketing techniques are frequently used to advertise non-core foods to children, to promote children's brand recognition and preference for advertised products. Future debate relating to television advertising regulations must consider the need to restrict the use of persuasive marketing techniques to children.	18755740
2008	Health Commun. 2008 Nov;23(6):573-84.	Food advertising during children's television programming on broadcast and cable channels.	Stitt C, Kunkel D.	Department of Communication Studies, California State University, Sacramento 95819, USA. stitt@csus.edu	The rise in the number of overweight and obese children in the United States is recognized as a serious health threat. Among the factors contributing to this increase is the preponderance of food marketing on television targeted at children. Previous content analysis studies have identified patterns of food product types that are commonly associated with unhealthy diets, but few have attempted to independently evaluate the nutritional quality of advertised foods. This study identifies the nature and extent of food marketing messages presented during children's television programs, while also classifying the products advertised using a U.S. Department of Health and Human Services consumer food rating scheme. The findings indicate that food advertising accounts for nearly half of all commercial messages on children's programs. An average hour includes 11 food ads that account for 4:25 of total ad time. Broadcast channels deliver more food advertising than cable channels, although the types of food products marketed on both channels are highly similar. The overwhelming majority of foods ads directed to children are for high-calorie, low nutrient food products that should not be part of a regular diet. These data provide a baseline for evaluating anticipated future industry efforts at reform, such as attempts to comply with a recent Institute of Medicine (2006) policy recommendation that food marketing to children should be balanced between more healthy and less healthy food products within two years time.	19089704

2008	Arch Dis Child. 2008 Oct;93(10):857-61. Epub 2008 May 2.	Television food advertising directed towards Bulgarian children.	Galcheva SV, Iotova VM, Stratev VK.	Department of Paediatrics and Medical Genetics, Varna University Hospital St. Marina, Varna, Bulgaria. sonya_galcheva@mail.bg	<p>BACKGROUND: Childhood obesity is a serious health problem worldwide with a prevalence rising to epidemic proportions. Television viewing is suspected as an important contributor and along with food advertisements significantly influence children's unhealthy dietary habits, purchase requests and adiposity. OBJECTIVES: To examine the exposure of Bulgarian children to television food advertising and to make a content analysis of the food/beverage advertisements during children's television programmes. DESIGN: 41.5 h of children's television programming on three national networks, were videotaped. All recorded food advertisements were evaluated to identify the marketing strategies used for the stimulation of children's purchase requests. RESULTS: Food/beverage advertisements accounted for 124 (33.4%) of all commercials, with 96.8% being for unhealthy foods. 57% of them were aimed specifically at children as the most advertised products were salty/sweetened snacks and cereals, sweets, soft drinks/carbohydrate juices and salty foods, with no fruit or vegetable commercials. Food advertisements used more themes of adventure, animation, music and gifts to attract children's attention, and gave information based on the product's taste, physical qualities, novelty, and presence of premiums/prizes. Of all food/beverage advertisements, 27.4% contained health-related information about the products; three-quarters of the advertisements were shot with young normal-weight actors with a good/healthy appearance. CONCLUSION: Almost all recorded food advertisements do not support the Bulgarian dietary recommendations for healthy and balanced eating. More activities to reduce the unhealthy food promotion to children are mandatory as restrictions by type of advertised food, target group or limits on the advertisements' account and times shown, as well as parental/self-regulation.</p>	18456691
2008	Public Health Nutr. 2008 Sep;11(9):978-81. Epub 2008 Mar 20.	Impact of food advertising on food purchases by students in primary and secondary schools in south-eastern Poland.	Mazur A, Telega G, Kotowicz A, Małek H, Jarochowicz S, Gierczak B, Mazurkiewicz M, Pop T, Zajkiewicz K, Dobrucki M, Mazur D.	Institute of Physiotherapy, University of Rzeszow, St. Warszawska 26a, 35-205 Rzeszow, Poland. drmazur@poczta.onet.pl	<p>AIM: The aim of the present study was to determine the impact of food advertising in primary and secondary schools on the food purchasing habits of children. METHODS: All forty-four primary and secondary schools in Rzeszow, Poland were included in the investigation; 15000 children attend primary and secondary schools in the region. Schools were visited by members of the research team, who filled in a questionnaire regarding the type of food products displayed or advertised in the school shop window and recorded the presence of direct corporate advertising in the proximity of the school shop. Shop owners were asked to fill in a form describing food purchases by students within the week preceding the visit. The school principal (or one of teachers) completed a form describing the school's policy regarding food advertising and the sponsorship of school activities by food companies. RESULTS: Recommended foods like milk, yogurts and fruit were offered by only 40.9 % of shops. There was a correlation between foods offered in the shop and foods purchased by students. In schools, 40.9% (95% CI 25.8, 56.0%) of shop windows displayed or advertised 'healthy' foods while 9.1% (95% CI 0.0, 17.9%) of shops displayed advertisements of food companies. The difference between display of 'healthy' food in shop windows and display of food on company advertisements was significant (likelihood ratio chi2 test, P < 0.04). Type of school (primary v. secondary) was not significant factor in advertising or purchasing pattern. CONCLUSIONS: Educational programmes should be introduced in schools with the aim of improving the understanding of nutritional principles among pupils, teachers and parents.</p>	18353194

2008	Public Health Nutr. 2008 Sep;11(9):897-904. Epub 2007 Nov 16.	Beyond-brand effect of television food advertisements on food choice in children: the effects of weight status.	Halford JC, Boyland EJ, Hughes GM, Stacey L, McKean S, Dovey TM.	Kissileff Laboratory for the Study of Human Ingestive Behaviour, School of Psychology, Eleanor Rathbone Building, Bedford Street South, University of Liverpool, Liverpool L69 7ZA, UK. j.c.g.halford@liverpool.ac.uk	OBJECTIVE: To investigate the effect of television food advertising on children's food intake, specifically whether childhood obesity is related to a greater susceptibility to food promotion. DESIGN: The study was a within-subject, counterbalanced design. The children were tested on two occasions separated by two weeks. One condition involved the children viewing food advertisements followed by a cartoon, in the other condition the children viewed non-food adverts followed by the same cartoon. Following the cartoon, their food intake and choice was assessed in a standard paradigm. SETTING: The study was conducted in Liverpool, UK. SUBJECTS: Fifty-nine children (32 male, 27 female) aged 9-11 years were recruited from a UK school to participate in the study. Thirty-three children were normal-weight (NW), 15 overweight (OW) and 11 obese (OB). RESULTS: Exposure to food adverts produced substantial and significant increases in energy intake in all children ($P < 0.001$). The increase in intake was largest in the obese children ($P = 0.04$). All children increased their consumption of high-fat and/or sweet energy-dense snacks in response to the adverts ($P < 0.001$). In the food advert condition, total intake and the intake of these specific snack items correlated with the children's modified age- and gender-specific body mass index score. CONCLUSIONS: These data suggest that obese and overweight children are indeed more responsive to food promotion, which specifically stimulates the intake of energy-dense snacks.	18005487
2008	Aust N Z J Public Health. 2008 Aug;32(4):341-7.	Parental awareness and attitudes about food advertising to children on Australian television.	Morley B, Chapman K, Mehta K, King L, Swinburn B, Wakefield M.	Centre for Behavioural Research in Cancer, The Cancer Council Victoria, Carlton Victoria. Belinda.Morley@cancervic.org.au	OBJECTIVE: To assess parents' concern regarding television food advertising to children and the marketing methods used, their awareness of existing regulations and support for strengthening restrictions, and to determine whether these factors differ across sociodemographic groups. METHODS: A randomly selected sample of 400 parents of children under 14 years in all Australian States and Territories completed the cross-sectional telephone survey in March 2007. Data were weighted by metropolitan and regional population proportions. RESULTS: Parents were concerned about unhealthy food advertising to children (67.3%), use of popular personalities (67.7%), toys (76.4%), and advertising volume (79.7%). Older parents, of high socioeconomic status (SES), with fewer household televisions were more likely to be concerned. Only 47.4% of parents were aware of current regulations and those with a tertiary education were more likely to be aware: odds ratio (OR) 2.96 (95% CI: 1.55-5.65). Parents supported a change from self-regulation (92.8%), a ban on unhealthy food advertising to children (86.8%) and, to a lesser extent, a ban on all food advertising (37.3%). CONCLUSIONS AND IMPLICATIONS: There was widespread parental concern about food advertising and strong support for tighter restrictions. Given that the existing regulations rely on complaints and awareness is low, particularly among parents with lower education levels, a system of external monitoring and enforcement is essential. Clearly more effective regulations are needed to protect children and parental support for this is high.	18782397
2008	J Law Med. 2008 Aug;16(1):49-56.	UNCROC and the prevention of childhood obesity: the right not to have food advertisements on television.	Ingleby R, Prosser L, Waters E.	Faculty of Business and Law, School of Law, Deakin University.	This article discusses how legal rights-based discourse could inform the response of Australian State and federal governments to the increasing prevalence of childhood obesity. The authors contend that the principles in the United Nations Convention on the Rights of the Child (a treaty which has been ratified but not implemented) are capable of providing a basis for a legislative program to prevent childhood obesity. It is argued that an approach to legislation which is grounded on the basis of children's rights would require that there be restrictions on advertising food to children. The authors set out specific proposals for legislative reforms which the federal Parliament could enact to implement the Convention so as to restrict advertising to children. The scope of the discussion is then expanded to consider the implications of rights-based discourse in broader public health contexts.	18807794

2008	Nutrition. 2008 Jul-Aug;24(7-8):781-2. Epub 2008 May 19.	Food advertisements on children's programs on TV in South Africa.	Temple NJ, Steyn NP, Nadomane Z.	PMID: 18490138 [PubMed - indexed for MEDLINE]		
2008	J Am Diet Assoc. 2008 Apr;108(4):673-8.	Nine out of 10 food advertisements shown during Saturday morning children's television programming are for foods high in fat, sodium, or added sugars, or low in nutrients.	Batada A, Seitz MD, Wootan MG, Story M.	Center for Science in the Public Interest, Washington, DC 20009, USA. abatada@cspinet.org	A 2005 review by the Institute of Medicine of the National Academies concluded that food marketing influences children's food preferences, consumption, and health. Given the powerful influence of marketing on children's diets, this cross-sectional study examined the types of foods, the nutritional quality of those foods, and the marketing techniques and messages used in food advertising during Saturday morning children's television programming. During 27.5 hours of programming in May 2005, 49% of advertisements shown were for food (281 food advertisements out of 572 total advertisements). The most commonly advertised food categories were ready-to-eat breakfast cereal and cereal bars (27% of all food advertisements), restaurants (19% of food advertisements), and snack foods (18% of food advertisements). Ninety-one percent of food advertisements were for foods or beverages high in fat, sodium, or added sugars or were low in nutrients. Cartoon characters were used in 74% of food advertisements, and toy or other giveaways were used in 26% of food advertisements. About half of food advertisements contained health/nutrition or physical activity messages and 86% of food advertisements contained emotional appeals. This study provides food and nutrition professionals with information about the amount and types of food children are encouraged to eat during Saturday morning television programming. The findings can help food and nutrition professionals counsel children about healthful eating and/or develop programs or policies to balance those advertisements with healthful eating messages.	18375225
2008	Asia Pac J Clin Nutr. 2008;17(3):483-91.	What's on Malaysian television? - A survey on food advertising targeting children.	Karupaiah T, Chinna K, Mee LH, Mei LS, Noor MI.	Department of Nutrition and Dietetics, Faculty of Allied Health Sciences, National University of Malaysia, Kuala Lumpur, Malaysia. tilly_karu@yahoo.co.uk	The Malaysian government recently introduced a ban on fast food advertisements targeting children on television. This study reports on data covering 6 months of television food advertising targeting children. Six out of seven of the Nation's commercial television networks participated (response rate = 85.7%). Based on reported timings of children's programmes, prime time significantly differed (p <0.05) between weekdays (mean = 1.89 +/- 0.18 hr) and weekends (mean = 4.61 +/- 0.33 hr). The increased trend during weekends, school vacation and Ramadhan was evident. Over the six-month period, the mean number of food advertisements appearing per month varied greatly between television stations (C = 1104; D = 643; F = 407; B = 327; A = 59; E = 47). Food advertising also increased the most in September (n = 3158), followed by July (n = 2770), August (n = 2431), October (n = 2291), November (n = 2245) and June (n = 2211). Content analysis of advertisements indicated snacks were the highest (34.5%), followed by dairy products (20.3%), sugars and candies (13.4%), biscuits (11.2%), fast food (6.7%), breakfast cereal (6.4%), beverages (4.1%), supplements (0.9%), rice (0.6%), noodles (0.5%), bread (0.3%), miscellaneous and processed foods (0.2%). Paradoxically, we found that the frequency of snack food advertised during children's prime time was 5 times more than fast foods. The sodium content (mean = 620 mg per 100g) of these snack foods was found to be highest.	18818170
2008	Adolesc Med State Art Rev. 2008 Dec;19(3):431-49, viii-ix.	Does adolescent media use cause obesity and eating disorders?	Jordan AB, Kramer-Golinkoff EK, Strasburger VC.	Annenberg Public Policy Center, University of Pennsylvania, 3620 Walnut Street, Philadelphia, PA 19104-6220, USA. ajordan@asc.upenn.edu	Abstract In this article we examine media use and its relationship to adolescent overweight/obesity and adolescent eating disorders. We consider the potential mechanisms through which exposure to media during adolescence (both amount of time and choice of content) might exacerbate unhealthy eating and physical activity patterns. We consider strategies that health care providers can use to identify problematic media use and suggestions they might offer to adolescents and their parents for ways to make media a more	19227385

					positive agent in young people's healthy development.	
2008	J Am Diet Assoc. 2008 Apr;108(4):710-3.	Food marketing on popular children's web sites: a content analysis.	Alvy LM, Calvert SL.	University of Illinois at Chicago, Psychology, Chicago, IL 60607, USA. ealvy2@uic.edu	In 2006 the Institute of Medicine (IOM) concluded that food marketing was a contributor to childhood obesity in the United States. One recommendation of the IOM committee was for research on newer marketing venues, such as Internet Web sites. The purpose of this cross-sectional study was to answer the IOM's call by examining food marketing on popular children's Web sites. Ten Web sites were selected based on market research conducted by KidSay, which identified favourite sites of children aged 8 to 11 years during February 2005. Using a standardized coding form, these sites were examined page by page for the existence, type, and features of food marketing. Web sites were compared using chi2 analyses. Although food marketing was not pervasive on the majority of the sites, seven of the 10 Web sites contained food marketing. The products marketed were primarily candy, cereal, quick serve restaurants, and snacks. Candystand.com, a food product site, contained a significantly greater amount of food marketing than the other popular children's Web sites. Because the foods marketed to children are not consistent with a healthful diet, nutrition professionals should consider joining advocacy groups to pressure industry to reduce online food marketing directed at youth.	18375231
2008	Public Health Nutr. 2008 Dec;11(12):1267-79. Epub 2008 Jun 12.	Social factors and television use during meals and snacks is associated with higher BMI among pre-school children.	Dubois L, Farmer A, Girard M, Peterson K.	Department of Epidemiology and Community Medicine, Faculty of Medicine, University of Ottawa, Institute of Population Health, 1 Stewart Street - Office 303, Ottawa, Ontario, Canada, K1N 6N5. lise.dubois@uottawa.ca	AIM: The present paper examines the relationship between social factors, food consumption during television viewing, and overall television viewing and how these are associated with BMI when the role of familial and social factors are considered in a population-based birth cohort of pre-school children from Québec (Canada). METHODS: The analyses were performed using data from the Longitudinal Study of Child Development in Québec (1998-2002) (LSCDQ). The study follows a representative sample (n 2103) of children born in 1998 in the Canadian province of Québec. A nutrition assessment was conducted on 1549 children aged 4.5 years and included a 24 h dietary recall, an eating behaviour and television viewing questionnaire, and a measurement of children's heights and weights. Statistical analyses were performed. RESULTS: Nearly one-quarter of children ate at least twice daily in front of the television. Children who consumed snacks while watching television on a daily basis had higher BMI than children who did so less frequently. Children who ate snacks in front of the television every day, or some times during the week, ate more carbohydrates (total), more fat and less protein, fewer fruits and vegetables, and drank soft drinks more often than children who never ate snacks in front of the television. CONCLUSIONS: Health professionals should target parents of children at risk of overweight/obesity with focused strategies to help children change the types of foods consumed during television viewing and to reduce the time spent watching television, particularly during meal times, which may change children's dietary intake and eating patterns.	18547454

2008	Eur J Pediatr. 2009 Jul;168(7):801-8. Epub 2008 Oct 3.	Television viewing and food habits in toddlers and preschoolers in Greece: the GENESIS study.	Manios Y, Kondaki K, Kourlaba G, Grammatika ki E, Birbilis M, Ioannou E.	Department of Nutrition and Dietetics, Harokopio University of Athens, Kallithea, Athens, Greece. manios@hua.gr	The aim of the current study was to evaluate the association between television (TV) viewing time and dietary habits of preschoolers. A representative sample of 2,374 Greek children aged 1-5 years was examined (GENESIS study). The majority of participants (74.0%) spent less than 2 h/day watching TV. Children spending > or =2 h/day watching TV seem to have higher energy intake compared to children watching TV less than 2 h/day, even after adjustment for potential confounders (p < 0.001). Furthermore, it was detected that the former were more likely to consume more than 5, 2, and 1.5 exchanges of fat, meat, and other carbohydrates per day, respectively, compared to the latter. In conclusion, the current findings indicate that prolonged TV viewing time may be associated with increased consumption of high-fat and high-sugar foods resulting in increased daily energy intake. Therefore, interventions aiming to modify children's TV viewing behaviour might need to be implemented.	18836742
2007	Public Health Nutr. 2008 Jun;11(6):588-95. Epub 2007 Sep 3.	Gross for kids but good for parents: differing messages in advertisements for the same products.	Jones S, Fabrianesi B.	Centre for Health Initiatives, University of Wollongong, Wollongong, New South Wales 2522, Australia. sandraj@uow.edu.au	OBJECTIVES: There has been surprisingly little research into the effects of food advertising on parents' perception of commonly consumed children's food items, although the available research suggests that parents may find nutritional claims in these advertisements confusing. The purpose of the present study was to investigate parents' perceptions of branded snack foods targeted at children, and the extent to which these perceptions are influenced by advertising messages. DESIGN: Using an intercept survey, participants were shown either adult-targeted or child-targeted advertisements for the same food products. SETTING: Central business district of a major Australian city. SUBJECTS: One hundred adults, mean age 40 years. RESULTS: The study results suggest that: (1) adults' perceptions of advertised food products and, most importantly, purchase intentions for those products differ according to the version of the advertisement seen (for three of the products, 42-54% would buy the product after seeing the child version compared with 82-84% after seeing the adult version); and (2) adults clearly perceive distinctly different messages in advertisements for the same products which are targeting parents vs. those targeting children (e.g. for three of the products, 74-92% perceived that the adult version of the advertisement suggested the food was nutritionally beneficial compared with 2-14% perceiving this for the child version). CONCLUSIONS: It is clear that the messages conveyed to children about specific foods are quite different to the messages conveyed to adults - and importantly parents - about the same foods.	17764605
2007	Appetite. 2008 Mar-May;50(2-3):231-9. Epub 2007 Jul 25.	Associations between children's television advertising exposure and their food consumption patterns: a household diary-survey study.	Buijzen M, Schuurman J, Bomhof E.	The Amsterdam School of Communications Research ASCoR, University of Amsterdam, Kloveniersburgwal 48, 1012 CX Amsterdam, The Netherlands. m.a.buijzen@uva.nl	In a diary-survey study in 234 households with children aged 4-12 years, we investigated the associations between children's exposure to food advertising and their consumption of (a) advertised food brands, (b) advertised energy-dense food product categories, and (c) food products overall. Relations were examined using multiple hierarchical regression analysis, while controlling for various child (i.e., age, sex, television viewing time) and family variables (i.e., family income and consumption-related communication styles). Results showed that children's exposure to food advertising was significantly related to their consumption of advertised brands (beta=.21) and energy-dense product categories (beta=.19). The relation between advertising exposure and overall food consumption only held in lower-income families (beta=.19). In addition, consumption-related family communication was an important moderator of the relations between advertising and the food consumption variables. Socio-oriented family communication (i.e., striving for harmony and conformity) was particularly successful in reducing these relations. In conclusion, consistent with communication theories predicting spill-over effects of advertising, the impact of television food advertising exceeded the advertised brand and generalized to more generic unhealthy consumption patterns. Theoretical and societal	17804119

					consequences, as well as the important role of the family are discussed.	
2007	Prev Med. 2008 Feb;46(2):177-8. Epub 2007 Jun 21.	Watching children watch food advertisements on TV.	Folta SC, Bourbeau J, Goldberg JP.	PMID: 17688930 [PubMed - indexed for MEDLINE]		17688930
2007	J Child Health Care. 2007 Dec;11(4):323-40.	Emotional and rational product appeals in televised food advertisements for children: analysis of commercials shown on US broadcast networks.	Page RM, Brewster A.	Department of Health Science, Brigham Young University, Provo, UT 84602, USA. randy_page@byu.edu	The aggressive advertising and marketing of high caloric food products to children is implicated as a potential causative factor in the childhood obesity epidemic. This study analyzed 147 commercials appearing during children's programming on U.S. broadcast networks for a wide range of potential emotional and rational advertising appeals. The most prominent emotional appeals were fun/happiness and play followed by fantasy/ imagination, social enhancement/peer acceptance, and coolness/hipness. Many of the products used the term; 'super-charged' or a similar adjective to describe the powerful taste or other physical properties of the product. More than one-third of all the commercials used a fruit appeal or association. Statements or depictions that a product was healthy or nutritious were quite rare among the commercials. This seems to imply that health and nutrition claims are understood by food marketers to not be salient concerns among children and as such are not a selling point to children. Commercials for high sugar cereal products and fast food restaurants differed in several respects. This study can serve to guide child health care professionals and other child advocates in designing measures that counter food advertising messages directed at children.	18039734
2007	J Public Health (Oxf). 2007 Dec;29(4):358-67.	Advertising of food to children: is brand logo recognition related to their food knowledge, eating behaviours and food preferences?	Kopelman CA, Roberts LM, Adab P.	Birmingham University Medical School, University of Birmingham, Department of Primary Care and General Practice, Birmingham B15 2TT, UK.	BACKGROUND: There remains controversy about the contribution of food advertising targeted at children to the epidemic of childhood obesity in the UK. The aim of this study is to explore the relationship between the ability to recognize brand logos featured in promotional campaigns of the food industry and eating behaviours, food knowledge and preferences in children aged 9-11 attending six primary schools in Birmingham, West Midlands. METHODS: A '20 flashcard' brand logo quiz assessed children's brand logo recognition ability; a self-completed questionnaire collected information on children's socio-demographic characteristics, eating behaviours, food knowledge and preferences (n=476). RESULTS: Children demonstrated both high brand logo recognition abilities with 88.4% (420/476) recognizing at least 16/20 brand logos in the quiz and high levels of poor diet. No strong correlation was found between higher brand logo recognition ability and poorer eating behaviours, food knowledge and preferences. CONCLUSION: Although many children are familiar with commonly presented logos of food products, brand awareness does not appear to be a major influence on the consumption of a poor diet amongst children. The regulation or restriction of food advertising to children is unlikely to have a significant impact on obesity rates among children unless combined with measures to address other detrimental influences.	17998259

2007	Public Health Nutr. 2007 Nov;10(11):123-40. Epub 2007 Mar 5.	Television food advertising to children: the extent and nature of exposure.	Kelly B, Smith B, King L, Flood V, Bauman A.	Australian Centre for Health Promotion, School of Public Health, University of Sydney, Sydney, New South Wales, Australia.	OBJECTIVE: To describe the pattern and prevalence of food and drink advertisements to children on commercial television in Sydney, Australia, and compare these with advertising regulations set out in the Children's Television Standards and results from a similar study in 2002. DESIGN: Data were collected by recording television from 06.00 hours until 23.00 hours on all three commercial channels from Sunday 14 May 2006 to Saturday 20 May 2006 (357 h). The study analysed advertisements in two children's viewing periods, one as defined in the 2002 study and the other according to current standards. Food advertisements were coded using 18 food categories and were analysed by time period and popular children's programmes. RESULTS: Food advertisements occurred in similar proportions during children's viewing hours and adult's viewing hours (25.5 vs. 26.9% of all advertisements, respectively), although there was a higher rate of high-fat/high-sugar food advertisements during children's viewing hours (49 vs. 39% of all food advertisements, $P < 0.001$). There were even more advertisements for high-fat/high-sugar foods during popular children's programmes, contributing to 65.9% of all food advertisements. Estimates of exposure indicate that children aged 5-12 years were exposed to 96 food advertisements, including 63 high-fat/high-sugar advertisements per week. Since 2002, there has been a reduction in overall food and high-fat/high-sugar food advertisements. CONCLUSION: Despite reductions in overall levels of food advertising, children continue to experience high levels of exposure to food advertisements, which remain skewed towards unhealthy foods. Further food advertising regulation should be required to curtail the current levels of advertising of high-fat/high-sugar foods to children, to make them commensurate with recommended levels of consumption.	17381920
2007	Am J Prev Med. 2007 Oct;33(4 Suppl):S251-6.	Adolescent exposure to food advertising on television.	Powell LM, Szczypka G, Chaloupka FJ.	Department of Economics, University of Illinois at Chicago, Chicago, Illinois 60305, USA. powellll@uic.edu	BACKGROUND: Television viewing is hypothesized to contribute to obesity among children and adolescents through several mechanisms that include the displacement of physical activity, snacking while watching TV, and the influence of food advertising. METHODS: This study drew on television ratings to examine the distribution of food advertising exposure among adolescents aged 12 through 17 based on 170 top-rated shows across network, cable and syndicated TV stations over the 9-month period from September 2003 to May 2004. A total of 238,353 30-second equivalent advertisements on the top-rated shows were assessed. Each advertisement was weighted by its rating to measure actual exposure to advertisements. RESULTS: The results showed that among total nonprogram content time, food-related products accounted for roughly one fifth of advertising exposure. Excluding TV promotions and public service announcements, as a proportion of all product advertising, total food-related advertising made up 26% of advertised products viewed by adolescents. By race, the proportion of advertising exposure to food products was 14% greater for African-American versus white adolescents and total exposure to food advertising would be even larger for African-American teens given that, on average, they watched more TV. Fast food was the most frequently viewed food product category comprising 23% of all food-related advertisements among adolescents. CONCLUSIONS: Food ads made up just over one quarter of TV ads viewed by adolescents with the most commonly viewed products of fast food, sweets, and beverage products well within the reach of their own purchasing power.	17884573
2007	J Leg Med. 2007 Oct-Dec;28(4):561-77.	Where have all the parents gone? Do efforts to regulate food advertising to	Willette AL.	Southern Illinois University School of Law, Carbondale 62901, USA.		18066979

		curb childhood obesity pass constitutional muster?				
2007	Public Health Nutr. 2007 Oct;10(10):1024-31. Epub 2007 May 22.	Magazines for children and young people and the links to Internet food marketing: a review of the extent and type of food advertising.	Cowburn G, Boxer A.	British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford, Rosemary Rue Building, Old Road Campus, Headington, Oxford OX3 7LF, UK. gill.cowburn@dphpc.ox.ac.uk	OBJECTIVE: To examine the nature of the link between food advertising in UK magazines aimed at children and young people and Internet food marketing, to establish whether consideration should be given to tightening existing controls. DESIGN: A review and descriptive analysis of food advertising found in a sample of the top five magazine titles aimed at a range of ages of children and young people between November 2004 and August 2005 and of the Internet food marketing sites to which readers were directed. RESULTS: Food advertising appeared as 'cover-mount' free gifts and as part of the main bound issue. Children aged 6-10 years were the most frequent recipients of food-based free gifts, all of which were confectionery. No food advertising was found in magazines aimed at pre-school children and it formed a small percentage of total advertising in the magazines aimed at children of school age and above. Most food advertisements were for 'less healthy' foods, although advertisements for 'healthier' food products did appear infrequently. Almost half of food advertisements directed readers towards Internet food marketing sites. We found evidence that these sites are using at least some of the 'marketing tricks' which have been identified as a cause for concern. CONCLUSIONS: Proposed restrictions on broadcast media may lead to more food advertising via other non-broadcast means. We suggest monitoring the effect of such changes in print and online advertising and that consideration be given to restricting marketing techniques used on websites aimed at children and young people.	17517153
2007	Soc Sci Med. 2007 Oct;65(7):1311-23. Epub 2007 Jun 22.	The effects of television advertisements for junk food versus nutritious food on children's food attitudes and preferences.	Dixon HG, Scully ML, Wakefield MA, White VM, Crawford DA.	Centre for Behavioural Research in Cancer, The Cancer Council Victoria, Australia. Helen.Dixon@cancervic.org.au	Television (TV) food advertising has attracted criticism for its potential role in promoting unhealthy dietary practices among children. Content analyses indicate junk food advertising is prevalent on Australian children's TV; healthy eating is rarely promoted. This paper presents (a) a cross-sectional survey examining associations between children's regular TV viewing habits and their food-related attitudes and behaviour; and (b) an experiment assessing the impact of varying combinations of TV advertisements (ads) for unhealthy and healthy foods on children's dietary knowledge, attitudes and intentions. The experimental conditions simulated possible models for regulating food ads on children's TV. Participants were 919 grade five and six students from schools in Melbourne, Australia. The survey showed that heavier TV use and more frequent commercial TV viewing were independently associated with more positive attitudes toward junk food; heavier TV use was also independently associated with higher reported junk food consumption. The experiment found that ads for nutritious foods promote selected positive attitudes and beliefs concerning these foods. Findings are discussed in light of methodological issues in media effects research and their implications for policy and practice. It is concluded that changing the food advertising environment on children's TV to one where nutritious foods are promoted and junk foods are relatively unrepresented would help to normalize and reinforce healthy eating.	17587474

2007	Pediatrics. 2007 Sep;120(3):576-83.	Nutritional content of television food advertisements seen by children and adolescents in the United States.	Powell LM, Szczypka G, Chaloupka FJ, Braunschweig CL.	University of Illinois, Institute for Health Research and Policy, 1747 W Roosevelt Rd, Room 558, MC 275, Chicago, IL 60608, USA. powell@uic.edu	<p>OBJECTIVE: In light of the high rates of child and adolescent obesity, we examined the nutritional content of food advertising seen by American children and adolescents.</p> <p>METHODS: We drew samples of top-rated television shows by using ratings data to examine the nutritional content for fat, saturated fat, sugar, sodium, and fiber of food-product advertisements seen on television by both children and adolescents. Food products were examined in aggregate and by 5 separate categories that included cereal, sweets, snacks, drinks, and other food products. For 2- to 11-year-olds and 12- to 17-year-olds, respectively, a sample of 50,351 and 47,955 30-second-equivalent food-product advertisements and their related nutritional content were weighted by television ratings data to provide actual exposure measures of the nutritional content of food advertising seen by children and adolescents.</p> <p>RESULTS: Study results showed that 97.8% and 89.4% of food-product advertisements viewed by children 2 to 11 years old and adolescents 12 to 17 years old, respectively, were high in fat, sugar, or sodium. On average, 46.1% and 49.1% of total calories among the products advertised came from sugar in the advertisements seen by these respective age groups. A total of 97.6% of cereal advertisements seen by children 2 to 11 years old were for high-sugar cereals. No substantial differences were found in the nutritional content of advertisements seen by black and white children 2 to 11 years old. However, a slightly higher proportion of food advertisements in general and across all food-product categories seen by black versus white adolescents were for high-sugar products.</p> <p>CONCLUSION: The overwhelming majority of food-product advertisements seen on television by American children and adolescents are of poor nutritional content.</p>	17766531
2007	Aust N Z J Public Health. 2007 Aug;31(4):340-3.	The effects of different regulation systems on television food advertising to children.	Kelly B, King L, Bauman A, Smith BJ, Flood V.	Australian Centre for Health Promotion, School of Public Health, University of Sydney, New South Wales. bridgetk@health.usyd.edu.au Comment in: Aust N Z J Public Health. 2008 Feb;32(1):92-3.	<p>OBJECTIVE: The aim of this study was to model children's potential exposure to television food advertisements under different regulatory scenarios to demonstrate the policy implications of regulatory change in Australia.</p> <p>METHODS: Television advertising data was collected from Sydney commercial television channels from 14-20 May 2006. Extrapolating from these data, the patterns of food advertising under four regulatory scenarios were examined, including arrangements restricting the content, volume and timing of advertisements.</p> <p>RESULTS: Each scenario resulted in a reduction of total and non-core food advertisements. The scenario to restrict non-core food advertisements during the major viewing period (7:00-20:30) led to the largest reduction in total and non-core food advertisements (79.2% reduction), with no change in the frequency of core food advertisements.</p> <p>CONCLUSIONS: The results illustrate the potential for reducing children's exposure to food advertising through simple regulatory restrictions.</p> <p>IMPLICATIONS: This research contributes to future debates on the regulation of television food advertising. It is particularly relevant as Australian regulations will be under review in 2007.</p>	17725013

2007	Health Promot Int. 2007 Mar;22(1):11-8. Epub 2006 Oct 16.	Australian parents' views on their 5-6-year-old children's food choices.	Campbell KJ, Crawford DA, Hesketh KD.	Centre for Physical Activity and Nutrition Research, School of Exercise and Nutrition Sciences, Deakin University, Burwood 3125, Australia. kcamp@deakin.edu.au	The home food environment is central to the development of healthy eating behaviours, but associations between the home food environment and children's food choices are not yet fully understood. The aims of this study were to explore parents' views regarding factors that influence children's food choices and parents' decision-making regarding the food they provide to their children. In-depth one-on-one interviews were conducted using a semi-structured interview schedule. Key concepts and themes were coded independently by two investigators. Participants include seventeen parents (16 mothers and 1 father) of children in their first year of formal schooling (aged 5-6 years). Five main themes emerged from the interviews: food marketing, food availability/food exposure, feeding strategies, modelling of eating and opportunities for food involvement. Parents believed that food marketing influenced their child's food preferences but differed in the ways they managed these influences. The food made available to children was also seen to influence what a child ate. Yet, although some parents believed it was the parents' role to determine what foods were made available to their child, others offered food on the basis of the child's tastes or preferences. The use of food as a reward was a feeding strategy employed by many parents. Family mealtimes were seen as an important opportunity for modelling of eating behaviour by parents. Peers were also seen to influence children's food preferences and eating behaviour. Finally, many parents believed that involving children in the preparation of food had a positive impact on children's food choices. Associations between the home food environment and children's food choices are complex and involve multiple mediators. Parents' views on the promoters and reinforcers of their decision-making regarding food and their child's food choices provide useful insights into these mediating factors. Increased understanding of these relationships is likely to enhance obesity prevention efforts.	17043065
2007	J Am Diet Assoc. 2007 Jul;107(7):1183-90.	Children's preference for large portions: prevalence, determinants, and consequences.	Colapinto CK, Fitzgerald A, Taper LJ, Veugelers PJ.	Health Promotion Division, Sudbury & District Health Unit, Sudbury, Ontario, Canada.	BACKGROUND: Proliferation of large portions of snack and fast foods parallels dramatic increases in childhood obesity. This study investigates the prevalence, determinants, and consequences of large portions in children's diets. METHODS: As part of the 2003 Children's Lifestyle and School-performance Study, we surveyed 4,966 children in Nova Scotia regarding their usual portion sizes of french fries, meats, vegetables, and potato chips using three-dimensional graduated food models. We measured heights and weights and assessed dietary intake with the Harvard Youth Adolescent Food Frequency Questionnaire. Diet quality was summarized using the Diet Quality Index International . Parents were surveyed on food habits and socioeconomic background. STATISTICAL ANALYSIS: We used multilevel regression methods to examine determinants of children's large portion size choice and to evaluate the effect of this selection on energy intake, diet quality, and overweight. RESULTS: Children reported preference for portions of french fries, meats, and potato chips that are larger and vegetable portions that are smaller than what is recommended. Children from socioeconomically disadvantaged families or who frequently eat while watching tv and in fast-food restaurants preferred larger portions of french fries and potato chips. Consequences of consuming large portions of these foods included poor diet quality and increased energy intake. Consuming large portions of vegetables was associated with lower energy intake and better diet quality. CONCLUSIONS: Successful marketing of large portions of french fries and potato chips may be at the expense of diet quality and appropriate energy intake. Policy regulations and nutrition education emphasizing appropriate portion sizes provide opportunities to prevent overweight and improve future health.	17604749

2007	Public Health Nutr. 2008 Sep;11(9):897-904. Epub 2007 Nov 16.	Beyond-brand effect of television food advertisements on food choice in children: the effects of weight status.	Halford JC, Boyland EJ, Hughes GM, Stacey L, McKean S, Dovey TM.	Kissileff Laboratory for the Study of Human Ingestive Behaviour, School of Psychology, Eleanor Rathbone Building, Bedford Street South, University of Liverpool, Liverpool L69 7ZA, UK. j.c.g.halford@liverpool.ac.uk	OBJECTIVE: To investigate the effect of television food advertising on children's food intake, specifically whether childhood obesity is related to a greater susceptibility to food promotion. DESIGN: The study was a within-subject, counterbalanced design. The children were tested on two occasions separated by two weeks. One condition involved the children viewing food advertisements followed by a cartoon, in the other condition the children viewed non-food adverts followed by the same cartoon. Following the cartoon, their food intake and choice was assessed in a standard paradigm. SETTING: The study was conducted in Liverpool, UK. SUBJECTS: Fifty-nine children (32 male, 27 female) aged 9-11 years were recruited from a UK school to participate in the study. Thirty-three children were normal-weight (NW), 15 overweight (OW) and 11 obese (OB). RESULTS: Exposure to food adverts produced substantial and significant increases in energy intake in all children ($P < 0.001$). The increase in intake was largest in the obese children ($P = 0.04$). All children increased their consumption of high-fat and/or sweet energy-dense snacks in response to the adverts ($P < 0.001$). In the food advert condition, total intake and the intake of these specific snack items correlated with the children's modified age- and gender-specific body mass index score. CONCLUSIONS: These data suggest that obese and overweight children are indeed more responsive to food promotion, which specifically stimulates the intake of energy-dense snacks.	18005487
2007	J Paediatr Child Health. 2007 Dec;43(12):806-10. Epub 2007 Sep 4.	Mothers of pre-school children talk about childhood overweight and obesity: The Weight Of Opinion Study.	Pagnini DL, Wilkenfeld RL, King LA, Booth ML, Booth SL.	NSW Centre for Overweight and Obesity, University of Sydney, Sydney, New South Wales, Australia.	AIM: To investigate the perceptions of parents of young children aged 2-5 years regarding childhood overweight and obesity. METHODS: Parents with children in seven pre-schools and long day-care centres from diverse socio-economic areas across metropolitan Sydney and one rural area were recruited for focus groups. Focus group transcripts were analysed using content analysis. RESULTS: Providing food was an emotional issue for the mothers in this study. They were more concerned about their young children being underweight than overweight, and this increased their stress around children's eating. Food treats were perceived as entitlements. Mothers did believe that they were responsible for their children's eating, but acknowledged the influence of other environmental factors related to food retail and marketing. Practical and safety issues limited opportunities for their children to be physically active beyond the formal child-care setting. Parents had practical suggestions for solutions to some of the barriers they experienced, and wanted support for their role. CONCLUSIONS: The emotional intensity of the mothers' perceptions about their children's eating and weight status suggests that interventions, including communications, need to go beyond information and engage with parents' emotions. Some food concerns were actually related to broader parenting issues and indicate the potential value for interventions to focus on behavioural parenting techniques. Preventive interventions need to acknowledge the issues faced by parents and support their role directly, such as through making healthy and active behaviours easily available, and indirectly, through providing local services, including early childhood services.	17803669
2006	Appetite. 2007 Jul;49(1):263-7. Epub 2006 Dec 23.	Beyond-brand effect of television (TV) food advertisements/commercials on caloric intake and food choice of 5-7-year-old	Halford JC, Boyland EJ, Hughes G, Oliveira LP, Dovey TM.	Kissileff Laboratory for the Study of Human Ingestive Behaviour, School of Psychology, Eleanor Rathbone Building, Bedford Street South, University of Liverpool, Liverpool L69 7ZA, UK. j.c.g.halford@liverpool.ac.uk	Food advert exposure has been shown to influence calorie intake and food choice in 9-11 year olds. However, little is known about the effect of food advertisements on feeding behaviour in younger children. Therefore, we conducted a study with 93 children aged 5-7 years, 28 of whom were overweight or obese. The children were exposed to 10 non-food adverts and 10 food adverts in a repeated measures design. Their consumption of sweet and savoury, high and low fat snack foods, and fruit were measured following both sessions. Food advert exposure produced a significant increase in total food intake in young children. The collection of recognition data was incomplete. These data replicate previous findings in that exposure to food adverts increases food intake in all children, but recognition of food	17258351

		children.		k	adverts is related to body mass index (BMI). Beyond their effects on brand choice, exposure to food advertisements (commercials) promotes over-consumption in younger children.	
2006	Arch Pediatr Adolesc Med. 2007 Jun;161(6):553-60.	Exposure to food advertising on television among US children.	Powell LM, Szczypka G, Chaloupka FJ.	Institute for Health Research and Policy, University of Illinois at Chicago, 1747 W Roosevelt Ave, Room 558, Mail Code 275, Chicago, IL 60608, USA. powellll@uic.edu	OBJECTIVE: To examine exposure to food advertising on television (TV) among children aged 2 through 11 years. DESIGN: Weighted examination of the distribution of national advertisements (ads) using TV ratings data. SETTING: National ads from 170 top-rated TV shows viewed by children aged 2 through 11 years from September 1, 2003, through May 31, 2004. PARTICIPANTS: Sample of 224,083 ads. MAIN OUTCOME MEASURES: Television nonprogram content time was assessed across 6 mutually exclusive categories that included food products, non-fast food restaurants, fast food restaurants, other products, public service announcements, and TV promotions. Food advertising was assessed according to 7 food categories--cereal, snacks, sweets, beverages, fast food restaurants, non-fast food restaurants, and other food products--and then examined across more detailed categories. RESULTS: In 2003-2004, 27.2% and 36.4% of children's exposure to total nonprogram content time and product advertising, respectively, was for food-related products. Similar distributions were found by race. Cereal was the most frequently seen food product, making up 27.6% of all food ads. Comparisons with previous studies suggest that, over time, food ads account for a smaller share of the product ads seen by US children. CONCLUSIONS: Children aged 2 through 11 years are exposed to a substantial amount of food advertising through TV, but the dramatic increase in childhood obesity rates during the past few decades was not mirrored by similar changes in food advertising exposure. However, we found evidence of a very recent (2000-2005) upward trend in the amount of exposure to food advertising on TV among US children.	17548759
2006	Pediatrics. 2006 Oct;118(4):1478-85.	Food-related advertising on preschool television: building brand recognition in young viewers.	Connor SM.	Department of Pediatrics, Case Western Reserve University, and Injury Prevention Center, Rainbow Babies and Children's Hospital, 11100 Euclid Ave, HPV B55, Cleveland, OH 44106-6039, USA. susan.connor@cwru.edu	OBJECTIVES: This study used content analysis to explore how much and what type of advertising is present in television programming aimed at toddlers and preschool-aged children and what methods of persuasion are being used to sell products and to promote brands to the youngest viewers. METHODS: Four randomly selected, 4-hour blocks (9 am to 1 pm) were recorded in spring 2005 from each of 3 stations airing programming aimed specifically at toddlers and preschool-aged children (Public Broadcasting Service, Disney, and Nickelodeon). All content that aired in the spaces between programs was examined. Data recorded for food-related advertisements included the primary appeals used to promote products or brands, whether advertisements were aimed at children or adults, whether advertisements used primarily animation or live action, whether advertisements showed food, and whether licensed characters were used. RESULTS: In 96 half-hour blocks of preschool programming, the 3 stations had a total of 130 food-related advertisements (1.354 food advertisements per half-hour). More than one half of all food advertisements (76 of 130 advertisements) were aimed specifically at children, and the majority of those were for fast food chains (50 advertisements) or sweetened cereals (18 advertisements). The primary advertising appeals used associated products with fun and happiness and/or with excitement and energy. Fast food advertisements in particular seemed to focus on building brand recognition and positive associations, through the use of licensed characters, logos, and slogans. CONCLUSIONS: The majority of child-oriented food advertisements viewed seemed to take a branding approach, focusing on creating lifelong customers rather than generating immediate sales. Promotional spots on advertisement-supported (Nickelodeon) and sponsor-supported (Public Broadcasting Service and Disney) networks took similar approaches and used similar appeals, seeming to promote the equation that food equals fun and happiness.	17015538

2006	Health Promot Int. 2006 Sep;21(3):172-80. Epub 2006 Jul 11.	How much food advertising is there on Australian television?	Chapman K, Nicholas P, Supramaniam R.	Health Strategies Division, The Cancer Council NSW, Kings Cross NSW 1340, Australia. kathyc@nswcc.org.au	The purpose of this study was to conduct a comprehensive content analysis of television food advertising and provide data on current levels of food advertising in Australia. All three commercial stations available on free-to-air Australian television were concurrently videotaped between 7 a.m. and 9 p.m. on two weekdays and both weekend days in four locations across Australia to provide a total of 645 h for analysis. Each advertisement was categorized as 'non-food ad', 'healthy/core food ad' or 'unhealthy/non-core food ad' according to set criteria. Thirty-one percent of the advertisements analyzed were for food. Eighty-one percent of the food advertisements identified were for unhealthy/non-core foods. When comparing the results of this study with previous research, it was found that the number of unhealthy advertisements screened per hour had not changed over the past few years. On weekdays, the number of advertisements increased throughout the day to peak at more than five advertisements per hour in the 6 p.m. to 9 p.m. time slot. The early morning time slot on Saturday was the most concentrated period for advertising unhealthy/non-core food with more than six advertisements screened per hour. The regional areas screened a significantly lower level of unhealthy/non-core food advertisements (19.5%) compared with the metropolitan areas (29.5%). Fast food and takeaway was the most advertised food category, followed by chocolate and confectionery. A total 194 breaches of the Children's Television Standards were identified according to our interpretation of the standard. It is well recognized that childhood obesity is a worldwide problem. The heavy marketing of energy-dense, nutrient-poor foods influences food choices and contributes to the incidence of overweight and obesity in children. Despite the recognition of this growing problem, little has been done to ensure children are protected against the use of large volumes of unhealthy/non-core food advertising.	16835276
2006	Public Health Nutr. 2006 Aug;9(5):596-605.	Television advertising and children: lessons from policy development.	Caraher M, Landon J, Dalmeny K.	Department of Health Management and Food Policy, Institute of Health Sciences, City University, Goswell Place, Northampton Square, London EC1 0HB, UK. m.caraher@city.ac.u	AIM: To conduct a policy review of the regulations related to food advertising on television aimed at children. DESIGN: The study consisted of documentary analysis of relevant legislation and policy documents related to children's advertising from both industry and non-governmental organisations at a global level and in 20 countries. This was supported with semi-structured telephone interviews with individuals from 11 countries. RESULTS: The initial findings resulted in a listing of regulatory impacts from which we developed a taxonomy of regulatory schemes. There was a tension between the development of legislation to cover this area and the use of voluntary agreements and codes. This tension represents a food industry/civic society split. The food and advertising industries are still engaged in a process of denying the impact of advertising on food choice and children as well as commissioning their own research. Outright bans are unusual, with most countries addressing the situation through voluntary agreements and self-regulation. We found a deep division over the way forward and the role and place of legislation. Policy-makers expressed concerns that national legislation was increasingly less relevant in dealing with broadcast media transmitted from outside national boundaries and therefore not subject to the receiving countries' laws but to the laws of the country from which they were transmitted. CONCLUSIONS: The options for the regulation of advertising targeted at children range from (1) a complete ban on advertising as in the case of Sweden, through (2) partial restrictions on advertising by type of food, target group or limits on the amount of advertisements or times shown, to (3) continuation of self-regulation by the advertising and food industries. There is a global dimension to regulation that needs to be built in, as national frontiers are no barriers to broadcast media and public health nutrition needs to ensure that its concerns are heard and addressed.	16923291

2006	J Nutr Educ Behav. 2006 Jul-Aug;38(4):244-8.	Food advertising targeted at school-age children: a content analysis.	Folta SC, Goldberg JP, Economos C, Bell R, Meltzer R.	Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA 02111, USA. sara.folta@tufts.edu	OBJECTIVE: To determine whether the contents of food and beverage advertisements are associated with physical activity and athletic ability more often than those for toys and games, and to describe persuasive techniques used in advertising food and beverages to children. DESIGN: A content analysis of advertisements during 31 hours of school-age children's television programming. ANALYSIS: Chi-square tests were used to examine differences in depictions of physical activity. Types of persuasive techniques were tabulated and, within each advertisement, categorized as implicit or explicit. RESULTS: Food and beverage ads depicted children engaged in physical activity and associated the advertised product with athletic ability significantly more than toy and game ads. Food was most often associated with fun and good times (75%), pleasant taste (54.1%), being hip or cool (43.2%), and feelings of happiness (43.2%). IMPLICATIONS FOR RESEARCH AND PRACTICE: These findings raise concern that greater levels of physical activity and athletic ability in food advertising, in which the product is frequently associated with fun, may promote overconsumption, especially of calorie-dense, nutrient-poor foods. Further research would elucidate whether this concern is warranted. On the other hand, since food advertisements are presumably effective, health educators can use these techniques to formulate messages for nutritious foods. This concept should be tested with well-designed interventions.	16785094
2006	Arch Pediatr Adolesc Med. 2006 Apr;160(4):436-42.	When children eat what they watch: impact of television viewing on dietary intake in youth.	Wiecha JL, Peterson KE, Ludwig DS, Kim J, Sobol A, Gortmaker SL.	Departments of Society, Human Development, and Health, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115, USA. jwiecha@hsph.harvard.edu	OBJECTIVES: To test whether increased television viewing is associated with increased total energy intake and with increased consumption of foods commonly advertised on television, and to test whether increased consumption of these foods mediates the relationship between television viewing and total energy intake. DESIGN: Prospective observational study with baseline (fall 1995) and follow-up (spring 1997) measures of youth diet, physical activity, and television viewing. We used food advertising data to identify 6 food groups for study (sweet baked snacks, candy, fried potatoes, main courses commonly served as fast food, salty snacks, and sugar-sweetened beverages). SETTING AND PARTICIPANTS: Five public schools in 4 communities near Boston. The sample included 548 students (mean age at baseline, 11.70 years; 48.4% female; and 63.5% white). MAIN OUTCOME MEASURES: Change in total energy intake and intake of foods commonly advertised on television from baseline to follow-up. RESULTS: After adjusting for baseline covariates, each hour increase in television viewing was associated with an additional 167 kcal/d (95% confidence interval, 136-198 kcal/d; P<.001) and with increases in the consumption of foods commonly advertised on television. Including changes in intakes of these foods in regression models provided evidence of their mediating role, diminishing or rendering no significant the associations between change in television viewing and change in total energy intake. CONCLUSIONS: Increases in television viewing are associated with increased calorie intake among youth. This association is mediated by increasing consumption of calorie-dense low-nutrient foods frequently advertised on television.	16585491

2006	Arch Pediatr Adolesc Med. 2006 Apr;160(4):432-5.	A content analysis of health and physical activity messages marketed to African American children during after-school television programming.	Outley CW, Taddese A.	School of Kinesiology, University of Minnesota, 1900 University Avenue SE, Minneapolis, MN 55443, USA. coutley@umn.edu	<p>OBJECTIVE: To examine the number of food advertisements African American children are exposed to during children's television programming aired on predominantly African American and general television stations. DESIGN: A content analysis was conducted to identify and analyze the health-related content (HRC) and physical activity-related content (PARC) of food advertisements shown during children's television programming. SETTING: Three sets of television advertisements from 3 stations (Black Entertainment Television, The WB [Warner Bros], and Disney Channel) served as the sample during a 1-week period in July 2005 (July 11-15), from 3 pm to 9 pm. RESULTS: In total, 1098 advertisements were recorded, with 256 food and beverage commercials used for this study. Results indicate that 36.3% of all commercials were based on fast food restaurants, 31.3% were for drinks, 16.8% were for candy, 13.7% were for cereals, and 2.0% were for snacks (percentages do not total 100 because of rounding). Compared with The WB and Disney Channel, Black Entertainment Television had significantly ($P=.001$) more food and beverage advertisements. Few HRC or PARC advertisements were shown. Of 256 food and beverage commercials, only 8.2% contained HRC and 9.4% had PARC. Also, the HRC and PARC scenes contained messages that were implied vs explicitly talking about the health or physical benefits of the product. CONCLUSIONS: African American children are overexposed to numerous types of food and beverage advertisements. These advertisements do not provide an adequate level of positive HRC and PARC messages. Consequently, the messages that are portrayed may undermine efforts to teach African American children about the importance of healthy living and physical activity.</p>	16585490
2006	Health Promot J Austr. 2006 Apr;17(1):5-11.	The weighty issue of Australian television food advertising and childhood obesity.	Carter OB.	Centre for Behavioural Research in Cancer Control, Curtin University of Technology, Western Australia, Australia. o.carter@curtin.edu.au	<p>ISSUE ADDRESSED: The aim of this paper is to provide an accessible overview of research literature on the link between childhood obesity and food advertising on Australian television. METHODS: A systematic review of current medical, public health, psychological and marketing research literature surrounding the topics of childhood obesity and television food advertising, with emphasis on Australian data. RESULTS: Childhood obesity rates have tripled since 1985, mirrored by increases in consumption of energy-dense foods. Energy-dense food advertising is ubiquitous in children's television programming, but children's ability to perceive the commercial intent of advertisements only emerges gradually as a function of age. Until such time, children are trusting, and hence vulnerable, to food advertising, influencing their desires and purchase requests to parents. There is robust evidence to suggest that television viewing and childhood obesity are related. However, the direction of causation and specific contribution of food advertising remains equivocal. Moreover, the link between television and childhood obesity is surprisingly weak, with only a small independent effect size (approximately 1%). CONCLUSIONS: Television food advertising seems to have only a very small, indirect link to childhood obesity.</p>	16619929

2006	Pediatr Int. 2006 Apr;48(2):138-45.	The effects of television food advertisement on children's food purchasing requests.	Aktaş Arnas Y.	Cukurova University, Faculty of Education, Subdepartment of Kindergarten Teacher Training, Adana, Turkey. yasare@cu.edu.tr	<p>BACKGROUND: Children's eating habits and their food consumption have direct relations with obesity, diabetes, cancers, hypertension and coronary heart disease. Television advertisements directly affect children's eating habits and their food consumption. This study was conducted in order to examine television advertisements and children's food consumption while watching television and their desire to purchase goods that they see on television advertisements. METHODS: In the first stage of the study, content analysis of the television advertisements was conducted. In the second stage of the study, a questionnaire (check list) was developed in order to examine children's food consumption while watching television and their purchasing requests while shopping in the supermarket. It was given to 347 mothers who have children aged between 3 and 8 years. RESULTS: When the results of the study were examined it was found that the time devoted to children's programs was approximately 121 min and the advertisements during this period were approximately 35 min. A total of 344 of the 775 television advertisements shown were related to food. It was also found that most of the food advertisements were about candy/chocolate, chips, milk and milk products such as cheese, yoghurt, and breakfast cereals. The results also revealed that 89.6% of the children either drank or ate something while watching television and the food they consumed most while watching television were fruits, soft drinks, popcorn/nuts, cake, chips and candy/chocolate. The results also revealed that 40.3% of the children asked their parents to purchase the goods that they saw on the television advertisements and that 8.9% of them argued with their parents and/or cried in order for their parents to buy that particular product. It was found that the children tended to request more sweetened products such as candy, ice-cream, biscuit, cake or soft drinks. CONCLUSION: More than half of the food presented in television advertisements was rich in fat and sugar. Children ask their parents to buy the goods they see on television advertisements both while watching television and while shopping. Television advertisements especially affect young children's unhealthy food consumption.</p>	16635172
2006	Arch Pediatr Adolesc Med. 2006 Apr;160(4):363-8.	Does children's screen time predict requests for advertised products? Cross-sectional and prospective analyses.	Chamberlain LJ, Wang Y, Robinson TN.	Division of General Pediatrics, Department of Pediatrics and Stanford Prevention Research Center, Stanford University School of Medicine, 750 Welch Road, Palo Alto, CA 94304, USA. lchamberlain@stanford.edu	<p>OBJECTIVE: To examine children's screen media exposure and requests for advertised toys and food/drinks. DESIGN: Prospective cohort study. SETTING: Twelve elementary schools in northern California. PARTICIPANTS: Eight hundred twenty-seven third grade children participated at baseline; 386 students in 6 schools were followed up for 20 months. INTERVENTION: None. MAIN OUTCOME MEASURES: Child self-reported requests for advertised toys and foods/drinks. RESULTS: At baseline, children's screen media time was significantly associated with concurrent requests for advertised toys (Spearman $r = 0.15$ [TV viewing] and $r = 0.20$ [total screen time]; both $P < .001$) and foods/drinks (Spearman $r = 0.16$ [TV viewing] and $r = 0.18$ [total screen time]; both $P < .001$). In prospective analysis, children's screen media time at baseline was significantly associated with their mean number of toy requests 7 to 20 months later (Spearman $r = 0.21$ [TV viewing] and $r = 0.24$ [total screen time]; both $P < .001$) and foods/drinks requests (Spearman $r = 0.14$ [TV viewing] and $r = 0.16$ [total screen time]; both $P < .01$). After adjusting for baseline requests and sociodemographic variables, the relationship between screen media exposure and future requests for advertised foods/drinks remained significant for total TV viewing and total screen media exposure. The relationship with future requests for toys remained significant for total screen media exposure. CONCLUSIONS: Screen media exposure is a prospective risk factor for children's requests for advertised products. Future experimental studies on children's health- and consumer-related outcomes are warranted.</p>	16585480

2006	Health Promot Int. 2006 Sep;21(3):172-80. Epub 2006 Jul 11.	How much food advertising is there on Australian television?	Chapman K, Nicholas P, Supramaniam R.	Health Strategies Division, The Cancer Council NSW, Kings Cross NSW 1340, Australia. kathyc@nswcc.org.au	The purpose of this study was to conduct a comprehensive content analysis of television food advertising and provide data on current levels of food advertising in Australia. All three commercial stations available on free-to-air Australian television were concurrently videotaped between 7 a.m. and 9 p.m. on two weekdays and both weekend days in four locations across Australia to provide a total of 645 h for analysis. Each advertisement was categorized as 'non-food ad', 'healthy/core food ad' or 'unhealthy/non-core food ad' according to set criteria. Thirty-one percent of the advertisements analyzed were for food. Eighty-one percent of the food advertisements identified were for unhealthy/non-core foods. When comparing the results of this study with previous research, it was found that the number of unhealthy advertisements screened per hour had not changed over the past few years. On weekdays, the number of advertisements increased throughout the day to peak at more than five advertisements per hour in the 6 p.m. to 9 p.m. time slot. The early morning time slot on Saturday was the most concentrated period for advertising unhealthy/non-core food with more than six advertisements screened per hour. The regional areas screened a significantly lower level of unhealthy/non-core food advertisements (19.5%) compared with the metropolitan areas (29.5%). Fast food and takeaway was the most advertised food category, followed by chocolate and confectionery. A total 194 breaches of the Children's Television Standards were identified according to our interpretation of the standard. It is well recognized that childhood obesity is a worldwide problem. The heavy marketing of energy-dense, nutrient-poor foods influences food choices and contributes to the incidence of overweight and obesity in children. Despite the recognition of this growing problem, little has been done to ensure children are protected against the use of large volumes of unhealthy/non-core food advertising.	16835276
2006	Pediatr Int. 2006 Apr;48(2):138-45.	The effects of television food advertisement on children's food purchasing requests.	Aktaş Arnas Y.	Cukurova University, Faculty of Education, Subdepartment of Kindergarten Teacher Training, Adana, Turkey. yasare@cu.edu.tr	BACKGROUND: Children's eating habits and their food consumption have direct relations with obesity, diabetes, cancers, hypertension and coronary heart disease. Television advertisements directly affect children's eating habits and their food consumption. This study was conducted in order to examine television advertisements and children's food consumption while watching television and their desire to purchase goods that they see on television advertisements. METHODS: In the first stage of the study, content analysis of the television advertisements was conducted. In the second stage of the study, a questionnaire (check list) was developed in order to examine children's food consumption while watching television and their purchasing requests while shopping in the supermarket. It was given to 347 mothers who have children aged between 3 and 8 years. RESULTS: When the results of the study were examined it was found that the time devoted to children's programs was approximately 121 min and the advertisements during this period were approximately 35 min. A total of 344 of the 775 television advertisements shown were related to food. It was also found that most of the food advertisements were about candy/chocolate, chips, milk and milk products such as cheese, yoghurt, and breakfast cereals. The results also revealed that 89.6% of the children either drank or ate something while watching television and the food they consumed most while watching television were fruits, soft drinks, popcorn/nuts, cake, chips and candy/chocolate. The results also revealed that 40.3% of the children asked their parents to purchase the goods that they saw on the television advertisements and that 8.9% of them argued with their parents and/or cried in order for their parents to buy that particular product. It was found that the children tended to request more sweetened products such as candy, ice-cream, biscuit, cake or soft drinks. CONCLUSION: More than half of the food presented in television advertisements was rich in fat and sugar. Children ask their parents to buy the goods they see on television advertisements both while watching television and	16635172

					while shopping. Television advertisements especially affect young children's unhealthy food consumption.	
2006	Public Health Nutr. 2006 Aug;9(5):606-12.	Associations between television viewing and consumption of commonly advertised foods among New Zealand children and young adolescents.	Utter J, Scragg R, Schaaf D.	Epidemiology and Biostatistics, School of Population Health, University of Auckland, Private Bag 92019, Auckland, New Zealand. j.utter@auckland.ac.nz	OBJECTIVES: To explore how time spent watching television (TV) is associated with the dietary behaviours of New Zealand children and young adolescents. DESIGN: Secondary data analysis of a nationally representative, cross-sectional survey. SETTING: In homes or schools of New Zealand school students. PARTICIPANTS: In total, 3275 children aged 5 to 14 years. RESULTS: The odds of being overweight or obese increased with duration of TV viewing for children and adolescents when controlling for age, sex, ethnicity, socio-economic status and physical activity. Children and adolescents who watched the most TV were significantly more likely to be higher consumers of foods most commonly advertised on TV: soft drinks and fruit drinks, some sweets and snacks, and some fast foods. Both children and adolescents watching two or more hours of TV a day were more than twice as likely to drink soft drinks five times a week or more (P = 0.03 and P = 0.04, respectively), eat hamburgers at least once a week (both P = 0.02), and eat French fries at least once a week (both P < 0.01). CONCLUSIONS: These findings suggest that longer duration of TV watching (thus, more frequent exposure to advertising) influences the frequency of consumption of soft drinks, some sweets and snacks, and some fast foods among children and young adolescents. Efforts to curtail the amount of time children spend watching TV may result in better dietary habits and weight control for children and adolescents. Future studies examining the impact of advertising on children's diets through interventions and international comparisons of legislation would provide more definitive evidence of the role of advertising in child and adolescent obesity.	16923292
2006	Pediatrics. 2006 Oct;118(4):1478-85.	Food-related advertising on preschool television: building brand recognition in young viewers.	Connor SM.	Department of Pediatrics, Case Western Reserve University, and Injury Prevention Center, Rainbow Babies and Children's Hospital, 11100 Euclid Ave, HPV B55, Cleveland, OH 44106-6039, USA. susan.connor@cwru.edu	OBJECTIVES: This study used content analysis to explore how much and what type of advertising is present in television programming aimed at toddlers and preschool-aged children and what methods of persuasion are being used to sell products and to promote brands to the youngest viewers. METHODS: Four randomly selected, 4-hour blocks (9 am to 1 pm) were recorded in spring 2005 from each of 3 stations airing programming aimed specifically at toddlers and preschool-aged children (Public Broadcasting Service, Disney, and Nickelodeon). All content that aired in the spaces between programs was examined. Data recorded for food-related advertisements included the primary appeals used to promote products or brands, whether advertisements were aimed at children or adults, whether advertisements used primarily animation or live action, whether advertisements showed food, and whether licensed characters were used. RESULTS: In 96 half-hour blocks of preschool programming, the 3 stations had a total of 130 food-related advertisements (1.354 food advertisements per half-hour). More than one half of all food advertisements (76 of 130 advertisements) were aimed specifically at children, and the majority of those were for fast food chains (50 advertisements) or sweetened cereals (18 advertisements). The primary advertising appeals used associated products with fun and happiness and/or with excitement and energy. Fast food advertisements in particular seemed to focus on building brand recognition and positive associations, through the use of licensed characters, logos, and slogans. CONCLUSIONS: The majority of child-oriented food advertisements viewed seemed to take a branding approach, focusing on creating lifelong customers rather than generating immediate sales. Promotional spots on advertisement-supported (Nickelodeon) and sponsor-supported (Public Broadcasting Service and Disney) networks took similar approaches and used similar appeals, seeming to promote the equation that food equals fun and happiness.	17015538

2005	Prev Med. 2006 Feb;42(2):96-101. Epub 2005 Dec 5.	Marketing fat and sugar to children on New Zealand television.	Wilson N, Signal L, Nicholls S, Thomson G.	Department of Public Health, Wellington School of Medicine and Health Sciences, Otago University, Mein St., Newtown, New Zealand. nwilson@actrix.gen.nz	BACKGROUND: We aimed to determine the frequency and content of television food advertisements during children's viewing times on various New Zealand television channels. METHODS: A content analysis was conducted of two free-to-air channels covering a total of 155 h of television time during children's viewing times (n = 858 food advertisements in 2005). Comparisons were made with data from 1997 and data from Australia. RESULTS: Compared to Australian channels, both New Zealand channels (TV3 and TV2) had significantly higher proportions of food advertisements that were classified as being "high in fat and/or sugar" (54% versus 80% and 69%, respectively). Using a more detailed classification system, 70.3% of food advertisements on the New Zealand channels were for foods "counter to improved nutrition" (95% CI: 67.1%, 73.3%) compared to those "favouring improved nutrition" at 5.1% (95% CI: 3.8%, 6.9%). The number of food advertisements per hour was higher in 2005 than in 1997 for the channel (TV2) for which there was time trend data (12.8 versus 8.0 per hour for the afternoon time slot). CONCLUSIONS: These findings provide further evidence that the majority of food advertising on New Zealand television is counter to nutritional guidelines. They suggest the need for further regulatory or other controls.	16330089
2005	Br Dent J. 2005 Dec 10;199(11):710-2; discussion 713.	Content analysis of children's television advertising in relation to dental health.	Rodd HD, Patel V.	Paediatric Dentistry, School of Clinical Dentistry, Sheffield, UK. h.d.rodd@sheffield.ac.uk	This paper provides some disturbing facts and figures about the amount of television being watched by children. In addition, it reports on the volume and type of television advertising aimed at young people, both in the United Kingdom and other developed countries. In view of recent public and professional concern as to the possible adverse effects of food advertising on children's health, this study set out to examine what proportion of television advertisements, directed at children, promoted products potentially harmful to dental health. Forty-one hours of children's television programming broadcast on ITV1, the main UK commercial channel, were recorded on to videotape for subsequent analysis. Almost 1,000 adverts were analysed; each was timed and broadly categorised as relating to a food/drink product or non food/drink product. Advertisements for food and drink were further subdivided according to their sugar and/or acid content. We found that, on average, 24 adverts were shown per broadcast hour, which accounted for 15.8% of the total schedule time. 34.8% of adverts related to food/drink products, and 95.3% of these promoted products that were deemed potentially cariogenic or erosive. The most frequently promoted food/drink products included breakfast cereals with added sugar (26.3%), confectionery (23.7%) and non-carbonated soft drinks (18.1%). It is very concerning that, despite recent specific codes of practice outlined by the Independent Television Commission for Children's Advertising, many food and drink products promoted during children's programming are potentially damaging to dental health.	16341178
2005	Am J Public Health. 2005 Sep;95(9):1568-74.	Nutritional content of foods advertised during the television programs children watch most.	Harrison K, Marske AL.	Department of Speech Communication, University of Illinois, 244 Lincoln Hall, 702 South Wright Street, Urbana IL 61801, USA. krishar@uiuc.edu	OBJECTIVES: We sought to code food (nutritional content and food type and eating occasion) and character (cartoon and live action) attributes of food advertisements airing during television programs heavily viewed by children, and to represent and evaluate the nutritional content of advertised foods in terms of the nutrition facts label. METHODS: Food advertisements (n=426) aimed at general and child audiences were coded for food and character attributes. "Nutrition Facts" label data for advertised foods (n=275) were then analyzed. RESULTS: Convenience/fast foods and sweets comprised 83% of advertised foods. Snacktime eating was depicted more often than breakfast, lunch, and dinner combined. Apparent character body size was unrelated to eating behaviour. A 2000-calorie diet of foods in the general-audience advertisements would exceed recommended daily values (RDVs) of total fat, saturated fat, and sodium. A similar diet of foods in the child-audience advertisements would exceed the sodium RDV and provide 171 g (nearly 1 cup) of	16118368

					added sugar. CONCLUSIONS: Snack, convenience, and fast foods and sweets continue to dominate food advertisements viewed by children. Advertised foods exceed RDVs of fat, saturated fat, and sodium, yet fail to provide RDVs of fiber and certain vitamins and minerals.	
2005	Obes Rev. 2005 Aug;6(3):203-8.	Evidence of a possible link between obesogenic food advertising and child overweight.	Lobstein T, Dobb S.	International Obesity TaskForce, London, UK. childhood@iotf.org	A recent review of the literature concluded that advertising of foods on television may influence children's food choices and encourage unhealthy diets, but the review acknowledged there was a lack of clear evidence in coming to this conclusion. The present paper examines ecological evidence for a link between advertising to children and the risk of overweight using data from surveys of advertising on children's television and estimates of the prevalence of overweight among children, in the USA, Australia and eight European countries. A significant association was found between the proportion of children overweight and the numbers of advertisements per hour on children's television, especially those advertisements that encourage the consumption of energy-dense, micronutrient-poor foods ($r = 0.81, P < 0.005$). A weaker, negative association was found between the proportion of children overweight and the number of advertisements encouraging healthier diets ($r = -0.56, P < 0.10$). The quantity of advertising on children's television appears to be related to the prevalence of excess body weight among children. Furthermore, the content of the advertising appears to have a specific effect. The findings justify the need for taking precautionary measures to reduce children's exposure to obesogenic marketing practices.	16045635
2005	N Z Med J. 2005 Jul 15;118(1218):U1556.	Advertising and availability of 'obesogenic' foods around New Zealand secondary schools: a pilot study.	Maher A, Wilson N, Signal L.	Department of Public Health, Wellington School of Medicine and Health Sciences, University of Otago, Wellington. mahan560@student.otago.ac.nz	AIMS: To examine the extent and content of outdoor food advertisements and food availability from outlets in the vicinity of secondary schools. METHODS: The sample of schools ($n=10$) was randomly selected from a sample frame of schools in both an urban and rural region (Wellington and Wairarapa regions respectively) and at each extreme of the socioeconomic status (SES) distribution (based on school characteristics). An area of 1-km radius around the schools was examined for food and non-food product advertisements and shops/outlets. RESULTS: Out of 1408 outdoor advertisements for products, 61.5% were for food (i.e. 28 per square kilometre). The major categories were soft drinks (21.6%), frozen confectionary (16.2%), savoury snacks (11.4%), and alcohol (8.1%). Overall, 70.2% of food advertisements were for foods classified as 'unhealthy' (i.e. inconsistent with the national nutritional guidelines for adolescents). A majority of the 224 outlets sold food (i.e. 56.3%). Those that primarily sold food were (on average) closer than other outlets to the secondary schools ($p=0.03$). Out of those schools that sold meals, the proportion of these that advertised a salad option was significantly lower in the low SES neighbourhoods ($p=0.006$). Other significantly different patterns for food outlet distribution, and category of advertised food were found by SES and rurality. CONCLUSION: Although only a pilot study, the information obtained suggests that food advertising and food outlets are prevalent in the vicinity of secondary schools and that the advertising is generally not compatible with nutritional guidelines for adolescents. Larger studies into such advertising are needed as well as consideration of policy options to control aspects of the 'obesogenic environment.'	16027747

2005	Health Promot Int. 2005 Jun;20(2):105-12. Epub 2005 Feb 18.	Food advertising on Australian television: the extent of children's exposure.	Neville L, Thomas M, Bauman A.	NSW Public Health Training and Development Branch, NSW Department of Health, LMB 961, North Sydney, NSW 2059, Australia. Inevi@doh.health.nsw.gov.au	The objective of this study was to investigate the extent and nature of food advertising during Australian children's television (TV) viewing hours and programs, and to determine whether confectionery and fast food restaurant advertisements were more likely to be broadcast during children's programs than during adults' programs on Sydney television stations. One week (390 h) of Australian advertising data broadcast during children's TV viewing hours over 15 television stations were analysed to determine the proportion of food advertisements and, in turn, the proportion of those advertisements promoting foods high in fat and/or sugar. One week (346 h) of confectionery and fast food restaurant advertisements broadcast over three Sydney television stations were analysed to determine whether these types of advertisements were more likely to be advertised during children's programs than adults' programs. Half of all food advertisements promoted foods high in fat and/or sugar. 'Confectionery' and 'fast food restaurants' were the most advertised food categories during children's TV viewing hours. Confectionery advertisements were three times as likely, and fast food restaurant advertisements twice as likely, to be broadcast during children's programs than adults' programs. It can be concluded that foods most advertised during children's viewing hours are not those foods that contribute to a healthy diet for children. Confectionery and fast food restaurant advertising appears to target children. Australian children need protection from the targeted promotion of unhealthy foods on television, but currently little exists.	15722367
2004	Appetite. 2004 Apr;42(2):221-5.	Effect of television advertisements for foods on food consumption in children.	Halford JC, Gillespie J, Brown V, Pontin EE, Dovey TM.	Department of Psychology, Kissileff Laboratory for the Study of Human Ingestive Behaviour, University of Liverpool, Eleanor Rathbone Building, Bedford Street South, Liverpool L69 7ZA, UK. j.c.g.halford@liv.ac.uk	The impact of television (TV) advertisements (commercials) on children's eating behaviour and health is of critical interest. In a preliminary study we examined lean, over weight and obese children's ability to recognise eight food and eight non-food related adverts in a repeated measures design. Their consumption of sweet and savoury, high and low fat snack foods were measured after both sessions. Whilst there was no significant difference in the number of non-food adverts recognised between the lean and obese children, the obese children did recognise significantly more of the food adverts. The ability to recognise the food adverts significantly correlated with the amount of food eaten after exposure to them. The overall snack food intake of the obese and overweight children was significantly higher than the lean children in the control (non-food advert) condition. The consumption of all the food offered increased post food advert with the exception of the low-fat savoury snack. These data demonstrate obese children's heightened alertness to food related cues. Moreover, exposure to such cues induce increased food intake in all children. As suggested the relationship between TV viewing and childhood obesity appears not merely a matter of excessive sedentary activity. Exposure to food adverts promotes consumption.	15010186
2004	Int J Behav Nutr Phys Act. 2004 Feb 10;1(1):3.	Food Advertising and Marketing Directed at Children and Adolescents in the US.	Story M, French S.	Division of Epidemiology, University of Minnesota, Minneapolis, MN USA. story@epi.umn.edu	In recent years, the food and beverage industry in the US has viewed children and adolescents as a major market force. As a result, children and adolescents are now the target of intense and specialized food marketing and advertising efforts. Food marketers are interested in youth as consumers because of their spending power, their purchasing influence, and as future adult consumers. Multiple techniques and channels are used to reach youth, beginning when they are toddlers, to foster brand-building and influence food product purchase behaviour. These food marketing channels include television advertising, in-school marketing, product placements, kids clubs, the Internet, toys and products with brand logos, and youth-targeted promotions, such as cross-selling and tie-ins. Foods marketed to children are predominantly high in sugar and fat, and as such are inconsistent with national dietary recommendations. The purpose of this article is to examine the food advertising and marketing channels used to target children and adolescents in the US, the impact of food advertising on eating behaviour, and current regulation and policies.	15171786

2004	J R Soc Med. 2004 Feb;97(2):51-2.	Food advertising and childhood obesity.	Ashton D.	Comment in: J R Soc Med. 2004 May;97(5):254.		14749396
2004	Nurs Times. 2004 Jan 20-26;100(3):19.	Should junk food advertisements be banned?	Patchell C, Paterson M.	Birmingham Children's Hospital NHS Trust.		14963952
2004	WHO.	Marketing food to children : the global regulatory environment / by Corinna Hawkes. 2004. ISBN 92 4 159157 9. (Last time accessed 11th July 2010). Available on: http://whqlibdoc.who.int/publications/2004/9241591579.pdf			Responding to concerns over the threat of an epidemic of diet-related non communicable diseases (NCDs), such as heart diseases, certain types of cancer, diabetes and obesity, the World Health Organization (WHO) has prepared a draft global strategy on diet, physical activity and health that will be considered by Member States in May 2004. As part of the strategy development process, WHO has been examining a range of interventions that have the potential to play a role in tackling the globally rising rates of NCDs. In this respect, the regulation of the marketing of food, especially to children, has emerged as one area necessitating further attention. In an attempt to broach this issue in more depth,WHO commissioned the present review of the regulatory environment that surrounds the marketing of food (including non-alcoholic beverages) to children. Although formal definitions of "marketing" are very broad, for the purposes of this review the term was used to refer only to those processes that are very visible to the consumer, namely: advertising and promotion. Six marketing techniques widely used by companies to promote food to children were singled out: television advertising, in-school marketing, sponsorship, product placement, Internet marketing and sales promotions. Information about regulations governing each of these six marketing practices was obtained by conducting a thorough search of a wide range of information resources, including web sites of government ministries and industry organizations, legal databases, published books and papers, and governmental and nongovernmental reports. The data so obtained was then cross-checked against alternative sources, a process which involved personal contact with marketing experts worldwide. In all, the search process yielded verified information about marketing regulations in a set of 73 countries from all world regions, although some are less well represented than others owing to difficulties in accessing the relevant information. Although the present review is primarily concerned with regulations governing the marketing of food to children, it was recognized that a wide range of regulations have the potential to affect the techniques used to market food to children, including those that apply to all age groups and all products. In fact, non-child-specific consumer protection laws have been used as the basis for litigation against several large food companies. Of the six techniques, television advertising is perhaps the most popular means of promoting food and beverage products worldwide and consequently has been the subject of more debate, in terms of its effects on children, than any other marketing practice. It is also the most widely regulated; 85% of the 73 countries surveyed had some form of regulation on television advertising to children and almost half (44%) had specific restrictions on the timing and content of television advertisements directed at children. Two countries and one province have banned television advertising to children. The effect of such bans on children's diets is, however, difficult to evaluate; existing bans tend to be undermined by cross-border advertising (i.e. advertising that originates from another country) and other marketing techniques, factors which complicate evaluation. Twenty-two countries have some form of regulatory or self-regulatory clause on food advertising, but the degree of implementation of these clauses and their effect on children's diets has likewise not been evaluated. Countries differ in their approach to the regulation of television advertising. Some rely solely on statutory	

				<p>regulations (i.e. those enshrined in laws or statutes, or rules designed to fill in the details of the broad concepts mandated by legislation), others preferring self-regulation (i.e. regulations put in place by a self-regulatory system whereby industry actively participates in, and is responsible for, its own regulation). In many cases, both forms of regulation coexist. The principle underlying many regulations is that advertising should not be deceitful or misleading. Most national regulations recognize children as a special group in need of special consideration and stipulate that advertising should not be harmful or exploitative of their credulity. The marketing of food products to children in the school environment, be it in the form of direct advertising (e.g. signage), indirect advertising (e.g. sponsorship of educational materials) or product sales, is second only to television advertising in terms of the amount of controversy that it has attracted in recent years. Indeed, attempts to regulate sales of high-fat snacks and carbonated soft drinks in schools in the United States of America have become something of a cause célèbre amongst anti-obesity advocates and lawmakers. Although the practice is growing almost everywhere, many countries do not have specific regulations on in-school marketing; 33% of the countries surveyed were identified as having any form of regulation of this type and only a handful of countries place any restrictions on the sales of selected food products in schools. There are, however, signs that attitudes are changing, with national governments and the food industry taking a more proactive stance in developing new approaches to the regulation of product sales in schools. Regulation of non-traditional forms of marketing, including Internet marketing, sponsorship, product placement and sales promotions can be described as patchy with regard to children. Although regulations on sponsorship and sales promotions are fairly common, very few countries have regulations on these forms of marketing that are specific to children and/or food. Partly because of the embedded nature of product placement, regulations on this form of marketing are especially open to the vagaries of Interpretation. Children have been identified as an ideal target group for Internet-based advertisers, but as marketing on the Internet is relatively new; its regulation is still at the developmental stage in most countries. The main difficulty here lies in the fact that although many existing regulations in theory also apply to online advertising, in practice it is not always feasible to transfer the existing rules to Internet marketing owing to the complex and interactive nature of the technologies involved. Sponsorship and sales promotions are widely used techniques used to market food to children, but seldom do regulations account for their potential effects on children's eating patterns. The review concludes that many countries have in place a range of regulations applicable to the marketing of food to children. But there are also gaps and variations in the existing global regulatory environment. Importantly, existing regulations do not consider food as a special category from the viewpoint of public health; regulations aim to guide the content and form of promotions, not to minimize their ability to encourage consumption of certain foods. Still, the regulatory environment is evolving; new regulations are continually being proposed and developed, industry is making new efforts, and consumer and public health groups are making new demands. These on-going efforts tend, however, to focus on television advertising and in-school product marketing in the developed world, and less so on non-traditional forms of marketing and the growing use of promotional activities in developing countries. Mechanisms for implementation and enforcement of regulations, which may involve a complaints system, penalties for non-compliance and/or most stringent of all, systems for preapproval of advertisements, vary considerably between countries. Although implementation and enforcement issues were beyond the scope of this review, case studies and anecdotal evidence cited indicate wide variations in the degree of</p>	
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				enforcement of regulations. Some consensus is emerging that the issue of food marketing to children needs to be addressed by all stakeholders. More objective research on the effects of marketing regulations on dietary patterns is warranted. Progress could be achieved by ensuring that health is at the centre of further policy development concerning the marketing of food to children.	
2004	Kunkel D.	Report of the APA Task Force on Advertising and Children Section: Psychological Issues in the Increasing Commercialization of Childhood. February 20, 2004. (Last accessed 11th July 2010). Available on: http://www.chawisconsin.org/Obesity/O2ChildAds.pdf			
2004	WHO.	Marketing food to children : the global regulatory environment / by Corinna Hawkes. 2004. ISBN 92 4 159157 9. (Last time accessed 11th July 2010). Available on: http://whqlibdoc.who.int/publications/2004/9241591579.pdf		Responding to concerns over the threat of an epidemic of diet-related non communicable diseases (NCDs), such as heart diseases, certain types of cancer, diabetes and obesity, the World Health Organization (WHO) has prepared a draft global strategy on diet, physical activity and health that will be considered by Member States in May 2004. As part of the strategy development process, WHO has been examining a range of interventions that have the potential to play a role in tackling the globally rising rates of NCDs. In this respect, the regulation of the marketing of food, especially to children, has emerged as one area necessitating further attention. In an attempt to broach this issue in more depth, WHO commissioned the present review of the regulatory environment that surrounds the marketing of food (including non-alcoholic beverages) to children. Although formal definitions of "marketing" are very broad, for the purposes of this review the term was used to refer only to those processes that are very visible to the consumer, namely: advertising and promotion. Six marketing techniques widely used by companies to promote food to children were singled out: television advertising, in-school marketing, sponsorship, product placement, Internet marketing and sales promotions. Information about regulations governing each of these six marketing practices was obtained by conducting a thorough search of a wide range of information resources, including web sites of government ministries and industry organizations, legal databases, published books and papers, and governmental and nongovernmental reports. The data so obtained was then cross-checked against alternative sources, a process which involved personal contact with marketing experts worldwide. In all, the search process yielded verified information about marketing regulations in a set of 73 countries from all world regions, although some are less well represented than others owing to difficulties in accessing the relevant information. Although	

				<p>the present review is primarily concerned with regulations governing the marketing of food to children, it was recognized that a wide range of regulations have the potential to affect the techniques used to market food to children, including those that apply to all age groups and all products. In fact, non child-specific consumer protection laws have been used as the basis for litigation against several large food companies. Of the six techniques, television advertising is perhaps the most popular means of promoting food and beverage products worldwide and consequently has been the subject of more debate, in terms of its effects on children, than any other marketing practice. It is also the most widely regulated; 85% of the 73 countries surveyed had some form of regulation on television advertising to children and almost half (44%) had specific restrictions on the timing and content of television advertisements directed at children. Two countries and one province have banned television advertising to children. The effect of such bans on children's diets is, however, difficult to evaluate; existing bans tend to be undermined by cross-border advertising (i.e. advertising that originates from another country) and other marketing techniques, factors which complicate evaluation. Twenty-two countries have some form of regulatory or self-regulatory clause on food advertising, but the degree of implementation of these clauses and their effect on children's diets has likewise not been evaluated. Countries differ in their approach to the regulation of television advertising. Some rely solely on statutory regulations (i.e. those enshrined in laws or statutes, or rules designed to fill in the details of the broad concepts mandated by legislation), others preferring self-regulation (i.e. regulations put in place by a self-regulatory system whereby industry actively participates in, and is responsible for, its own regulation). In many cases, both forms of regulation coexist. The principle underlying many regulations is that advertising should not be deceitful or misleading. Most national regulations recognize children as a special group in need of special consideration and stipulate that advertising should not be harmful or exploitative of their credulity. The marketing of food products to children in the school environment, be it in the form of direct advertising (e.g. signage), indirect advertising (e.g. sponsorship of educational materials) or product sales, is second only to television advertising in terms of the amount of controversy that it has attracted in recent years. Indeed, attempts to regulate sales of high-fat snacks and carbonated soft drinks in schools in the United States of America have become something of a cause célèbre amongst anti-obesity advocates and lawmakers. Although the practice is growing almost everywhere, many countries do not have specific regulations on in-school marketing; 33% of the countries surveyed were identified as having any form of regulation of this type and only a handful of countries place any restrictions on the sales of selected food products in schools. There are, however, signs that attitudes are changing, with national governments and the food industry taking a more proactive stance in developing new approaches to the regulation of product sales in schools. Regulation of non-traditional forms of marketing, including Internet marketing, sponsorship, product placement and sales promotions can be described as patchy with regard to children. Although regulations on sponsorship and sales promotions are fairly common, very few countries have regulations on these forms of marketing that are specific to children and/or food. Partly because of the embedded nature of product placement, regulations on this form of marketing are especially open to the vagaries of Interpretation. Children have been identified as an ideal target group for Internet-based advertisers, but as marketing on the Internet is relatively new; its regulation is still at the developmental stage in most countries. The main difficulty here lies in the fact that although many existing regulations in theory also apply to online advertising, in practice it is not always feasible to transfer the existing</p>	
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2004	Lancet. 2004 Jul 17-23;364(9430):257-62.	Association between child and adolescent television viewing and adult health: a longitudinal birth cohort study.	Hancox RJ, Milne BJ, Poulton R.	<p>Dunedin Multidisciplinary Health and Development Research Unit, Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, PO Box 913, Dunedin New Zealand. bob.hancox@dmhdru.otago.ac.nz</p> <p>BACKGROUND: Watching television in childhood and adolescence has been linked to adverse health indicators including obesity, poor fitness, smoking, and raised cholesterol. However, there have been no longitudinal studies of childhood viewing and adult health. We explored these associations in a birth cohort followed up to age 26 years. METHODS: We assessed approximately 1000 unselected individuals born in Dunedin, New Zealand, in 1972-73 at regular intervals up to age 26 years. We used regression analysis to investigate the associations between earlier television viewing and body-mass index, cardiorespiratory fitness (maximum aerobic power assessed by a submaximal cycling test), serum cholesterol, smoking status, and blood pressure at age 26 years. FINDINGS: Average weeknight viewing between ages 5 and 15 years was associated with higher body-mass indices (p=0.0013), lower cardiorespiratory fitness (p=0.0003), increased cigarette smoking (p<0.0001), and raised serum cholesterol (p=0.0037). Childhood and adolescent viewing had no significant association with blood pressure. These associations persisted after adjustment for potential confounding factors such as childhood socioeconomic status, body-mass index at age 5 years, parental body-mass index, parental smoking, and physical activity at age 15 years. In 26-year-olds, population-attributable fractions indicate that 17% of overweight, 15% of raised serum cholesterol, 17% of smoking, and 15% of poor fitness can be attributed to watching television for more than 2 h a day during childhood and adolescence. INTERPRETATION: Television viewing in childhood and adolescence is associated with overweight, poor fitness, smoking, and raised cholesterol in adulthood. Excessive viewing might have long-lasting adverse effects on health.</p>	15262103

2004	Appetite. 2004 Feb;42(1):111-3.	Television viewing is associated with an increase in meal frequency in humans.	Stroebele N, de Castro JM.	Department of Psychology, Georgia State University, MSC 2A1155, 33 Gilmer Street SE-Unit 2, Atlanta, GA 30303-3082, USA. nstroebele@student.gsu.edu	In sample of 76 undergraduate students (mostly female) in the USA, television viewing was associated with increased meal frequency and as a result with increased daily intake of energy.	15036790
2003	Asia Pac J Clin Nutr. 2003;12 Suppl:S7.	The obesity epidemic in Australia: can public health interventions work?	Swinburn BA.	School of Health Sciences, Deakin University, Vic 2501.	<p>Background - The rapid rise in the obesity epidemic in Australia has been well documented in adults from several national surveys since 1980. The awareness of the size of this epidemic in children is low because the monitoring of obesity is non-existent, yet overweight/ obesity is undoubtedly one of the biggest health threats facing Australian children. Major public health interventions are urgently needed, and Australia has a vast experience of the successful control of other epidemics to draw upon for this latest challenge. Successful public health interventions - Several epidemics in Australia have been turned around by a concerted public health and clinical effort including cardiovascular diseases, smoking, road deaths and other injuries, HIV/AIDS, cot death and some cancers. All have had to overcome substantial barriers such as vested commercial interests, addiction, unknown causes, and strong social norms, desires, or taboos. Some have had a major clinical component (eg hypertension, cervical cancer), some have had a strong social marketing and education approach (eg cot death, HIV/AIDS), and others have had strong policy and environmental components (eg tobacco, road deaths). All have had significant, ongoing funding and political commitment and have taken as comprehensive approach as possible. The lessons for obesity are clear - if there is a similar commitment, the epidemic can be reduced. The current individual-based approaches to obesity have only a modest long-term success rate, and many potential population-based strategies have not been attempted or evaluated. This means that more comprehensive and innovative interventions are needed with a strong emphasis on evaluation so that the evidence base for effective interventions can be developed. A comprehensive program for obesity - The appropriate target groups for a comprehensive obesity program are children and high-risk adults. For the latter group, the modest weight loss (about 10%) that is achievable through lifestyle and pharmacological means has significant clinical benefits for preventing and managing diabetes and cardiovascular diseases. For children, management programs in primary care are also needed but more importantly, children's food and activity environments need to be made less 'obesogenic'. A process of developing the 'Best Investments for Childhood Obesity' has been undertaken for the Department of Health and Ageing. About 50 experts around Australia contributed to the development of a framework for a comprehensive program and gave their opinion on the likely effectiveness of each of the components. This was accompanied by a review of the current evidence of effectiveness of interventions and a modelling process to fill the gaps where empirical evidence was not available. An economic analysis assessed the 'warranted investment' for reducing obesity prevalence given the cost of overweight/obesity complications in adulthood. Four action areas were considered essential: monitoring and research; whole-of-community demonstration projects; communication and education programs; coordination and training. Key settings for potential action were schools, preschools, neighbourhoods, fast food outlets, breastfeeding, and primary care. Key sectors for action were influencing the food supply towards healthier foods and reducing the huge number of television food advertisements in Australia that target young children. The home setting and parents need to be incorporated into all areas of action. Funding and policy leadership is urgently needed from Federal and State governments to implement a</p>	15023592

					comprehensive program to combat this escalating epidemic.	
2003	European Commission	http://ec.europa.eu/dgs/health_consumer/library/surveys/sur03_en.html				
2002	Nurs Times. 2002 Aug 27-Sep 2;98(35):16.	Should food adverts on children's television be banned?	Powell C, Soltani S.			12224493
2002	Rev Saude Publica. 2002 Jun;36(3):353-5.	[Amount and quality of food advertisement on Brazilian television] [Article in Portuguese]	Almeida Sde S, Nascimento PC, Quaioti TC.	Departamento de Psicologia e Educação, Faculdade de Filosofia, Ciência e Letras, Universidade de São Paulo, Ribeirão Preto, SP, Brasil.	The main objective of the study was to analyze the amount and quality of food advertisement on Brazilian television in three different times of the day. The results showed that food products, when compared to other products, were the most frequently advertised, regardless of the time of the day in a given week analyzed. Television promotes food predominantly high in fat and/or sugar and salt. The large number of high fat and/or sugar and salt products advertised can contribute to changing food habits of children and teenagers, and increasing the incidence of obesity in the population.	12131977
2002	Proc Nutr Soc. 2002 May;61(2):259-66.	Developmental issues in attitudes to food and diet.	Hill AJ.	Academic Unit of Psychiatry & Behavioural Sciences, School of Medicine, University of Leeds, 15 Hyde Terrace, Leeds LS2 9LT, UK. a.j.hill@leeds.ac.uk	As a rule, children and most adults eat what they like and leave the rest. They like and consume foods high in fat and sugar. Parental behaviour shapes food acceptance and early exposure to fruit and vegetables or to foods high in energy, sugar and fat is related to children's liking for, and consumption of, these foods. Some parents are imposing child-feeding practices that control what and how much children eat. However, over-control can be counter-productive, teaching children to dislike the very foods we want them to consume, and generally undermining self-regulation abilities. The external environment is also important, with concerns expressed about food advertising to children and girls dieting for an ideal thin body shape. Up to one-quarter of young adolescent girls report dieting to lose weight, their motivation driven by weight and shape dissatisfaction. For some, dieting and vegetarianism are intertwined and both legitimised as healthy eating. For others, striving for nutritional autonomy, the choice of less-healthy foods is not just because of their taste, but an act of parental defiance and peer solidarity. The determinants of what children choose to eat are complex, and the balance changes as children get older. A better understanding is crucial to informing how we might modify nutritional behaviour. Adults occupy a central position in this process, suggesting that children should be neither the only focus of nutritional interventions nor expected to solve the nutritional problems with which adults around them are continuing to fail.	12133208

1999	Aust N Z J Public Health. 1999 Dec;23(6):647-50.	Food ads on TV: a health hazard for children?	Wilson N, Quigley R, Mansoor O.	Ministry of Health, Wellington, New Zealand. nwilson@actrix.gen.nz	OBJECTIVE: To examine the nutritional quality of food in television food advertisements that is targeted at children. METHOD: We videotaped 42 hours of children's programs and analysed the food advertisements' content and nutrient composition using the New Zealand Food Composition Database. RESULTS: Of 269 food advertisements, 63% were for foods 'high in fat and/or sugar'. Children who ate only the advertised foods would eat a diet too high in fat, saturated fat, protein, free sugars and sodium. Furthermore, their diets would have suboptimal levels of fibre and suboptimal intakes of a number of important micronutrients (depending on age), including magnesium, selenium and vitamin E. The food products advertised on this channel rarely included nutritious low-cost foods that are necessary for food security in low-income groups. There were also no food advertisements that included any of the healthy foods consumed by Maori and Pacific peoples. CONCLUSIONS: Food advertisements targeted at children generally reflect the dietary pattern associated with an increased risk of obesity and dental caries in childhood; and cardiovascular disease, diabetes and cancers in adulthood.	10641359
1999	Aust N Z J Public Health. 1999 Feb;23(1):49-55.	The extent and nature of televised food advertising to New Zealand children and adolescents.	Hammond KM, Wyllie A, Casswell S.	Alcohol & Public Health Research Unit, University of Auckland, New Zealand.	OBJECTIVE: There has been international concern over the balance of television advertising for healthy and less-healthy foods to which children and adolescents are exposed. This study examined the extent to which 9-17 year old New Zealanders were exposed to advertising for different food groups over a year and compared New Zealand rates of advertising with a 13-country study. METHOD: 'People meter' data collected over three months--May and September 1995 and February 1996--and food advertising from a sample week of television during hours when children were likely to be watching were also examined. Comparison was made with a similar 1989 South Australian study and an international study covering 13 countries. RESULTS: Both the exposure estimated for a year and the opportunities for exposure during the sample week were highest for sweet snacks, drinks, fast food/takeaways and breakfast cereals. There were very low levels for fruit, vegetables, and meat/fish/eggs. Water was not advertised in any sample month. Comparisons with the 13-country study showed New Zealand had the third-highest rate of food advertising, the highest rate of confectionery and drinks advertising, and the second-highest rate of restaurant advertising which included fast food restaurants. CONCLUSION: Current patterns of food advertising pose a conflict of interest between public health and commercial interests. Regulation of food advertising may be needed to address this in order to improve future health.	10083689
1998	Int J Obes Relat Metab Disord. 1998 Mar;22(3):206-14.	Food advertising on British children's television: a content analysis and experimental study with nine-year olds.	Lewis MK, Hill AJ.	Division of Psychiatry and Behavioural Sciences, University of Leeds, UK.	OBJECTIVES: The nature and significance of food advertising during children's television was examined in two studies: a content analysis of advertising (Study 1) and an investigation of the impact of food adverts on the self-perception of overweight children (Study 2). PARTICIPANTS: Study 1 monitored 91 h of children's broadcasting on four terrestrial and satellite stations in the UK. In Study 2, 103 children aged 9.75 y viewed two videotaped cartoons containing either food or non-food product advertisements. MEASURES: Study 1 used a detailed record of advertisement style and content. Study 2 included a self-report measure of current state, and measures of self-esteem, dietary restraint, body weight and height. RESULTS: Half of the 828 adverts were for food products, 60% of which were for breakfast cereals and confectionery/ snacks. Food advertisements used significantly more animation, stories, humour and the promotion of fun/happiness/mood alteration. In Study 2, significant interactions between advertisement type and overweight were observed on ratings of perceived health and appetite for sweets. CONCLUSION: While small changes are apparent, advertisements during children's television are still dominated by those for foods of questionable nutritional value, in a	9539187

					manner designed to engage attention and emotional response. That overweight children appeared more influenced by their personal enhancement message, suggests the value of further work identifying who is most influenced and by what features of advertising.	
1995	Z Ernahrungswiss. 1995 Dec;34(4):253-60.	[Survey of the present-day supply of fortified food products in Germany] [Article in German]	Kersting M, Hansen C, Schöch G.	Forschungsinstitut für Kinderernährung, Dortmund.	A survey and critical evaluation of the present-day supply of fortified common food products on the German market is presented concerning products, nutrients and amounts for fortification. The data were collected from the original food labels by personal information's from the manufacturers (40 asked, 68% answered) and by a local market survey in Dortmund (spring 1994). A total of 288 fortified food products (78 manufacturers) were found out of 6 different food products (78 manufacturers) were found out of 6 different food categories (manufacturers/products): beverages (26/95), sweets (24/57), cereals (5/53), milk products (7/35), powdered instant beverages (10/31), ready-to-eat meals (6/17). Sugar was added to 56% of the fortified products. A total of 10 vitamins (E, B1, B2, B6, B12, C, niacin, folate, biotin, pantothenic acid) and 7 minerals (Na, K, Cl, Ca, P, Mg, Fe) were used for fortification. The number of nutrients used for fortification in single products ranged from 1 (94 products) to 16 (3 products). The amounts used for fortification per average portion varied considerably among the different products and the different nutrients in the food categories. In a considerable number of cases, amounts for fortification of more than 100% (maximum 660%) of the recommended daily dose of a nutrient (EC-directive for nutrition labelling) have been observed. Relatively to the contribution of a portion to meet the energy requirement, the fortification of cereals and milk-products (about 30%) as well as of sweets (about 10%) could be rated as acceptable whereas the fortification of beverages (about 50-100%) was overdone. The present-day supply of fortified food is extremely heterogenous from the qualitative and quantitative point of view. Therefore, it is rather difficult for the consumer to reach an overall nutrient intake that is in accordance with the recommendations. The specific requirements of children, who are a preferred group for food advertising, are not at all considered adequately.	8585240
1995	Arch Pediatr Adolesc Med. 1995 Jun;149(6):649-52.	Advertised foods on children's television.	Taras HL, Gage M.	Department of Pediatrics, University of California, San Diego, La Jolla, USA.	OBJECTIVE: To assess the quantity and nutritional value of foods advertised on children's television following new regulations and an expanded number of networks. RESEARCH DESIGN: Children's television hours were surveyed (with use of a method modelled on previously published studies, for purposes of comparison). SETTING: Seven local network affiliates; all but one are broadcast nationally. RESULTS: Children viewed an average of 21.3 commercials per hour, each lasting an average of 28.6 seconds. Food advertisements accounted for 47.8% of these commercials. Ninety-one percent of advertised foods are high in fat, sugar, and/or salt. Compared with data collected before new regulations and networks, children now watch more numerous but shorter commercials. Cereals and sweet snacks are advertised proportionately less. Processed foods, canned and prepared foods, and dairy products are more frequently advertised. The proportion of foods high in fat, salt, and sugar has not changed. CONCLUSIONS: Commercials advertising unhealthy foods account for a large portion of children's televised viewing time. Current regulations and the incursion of cable networks into the children's television market have not meaningfully impacted the nature or number of food advertisements.	7767420

1994	J Am Diet Assoc. 1994 Nov;94(11):129-300.	Food advertisements during children's Saturday morning television programming: are they consistent with dietary recommendations ?	Kotz K, Story M.	Division of Epidemiology, School of Public Health, University of Minnesota, Minneapolis.	Children in the United States spend more time watching television than they do in any other activity except sleep. Given the number of food commercials to which children are exposed, we thought it would be of interest to examine current food advertising during children's television programs and to assess whether the products advertised are consistent with dietary recommendations for good health. The 52.5 hours of children's Saturday morning television we viewed from five major networks contained 997 commercials selling a product and 68 public service announcements. Of the 564 food advertisements (56.5% of all advertisements), 43.6% advertised foods classified in the fats, oils, and sweet food group. The most frequently advertised product was high-sugar cereals. We found that commercials broadcast during children's Saturday morning programming promote foods predominantly high in fat and/or sugar, many of which have relatively low nutritional value. As such, the diet presented on Saturday morning television is the antithesis of what is recommended for healthful eating for children. We conclude that the issue of television food advertising to young children be revisited on a national level.	7963175
1993	Indian Med Trib. 1993 Nov 15;1(9):2.	Uproar over Milk Substitutes Act.	[No authors listed]		PIP: Health policy activists lobbied 7 years for the Infant Milk Substitutes, Feeding Bottles and Infant Food Bill. Proponents of the bill say that it basically curtails unethical marketing practices, not the sales of baby foods, and argue that it was conceived to reduce the trend of mothers over-diluting commercial milk in order to reduce household expenses as well as stem the potential erosion of knowledge on locally available weaning foods. Even though the bill will become an Act only after its rules and regulations have been finalized, the government has already banned baby food advertisements on television and in other electronic media under its control. Women's groups now argue that the bill tends to focus almost exclusively upon the welfare of children and compromises the position of women who can not lactate adequately. Moreover, they hold that the bill may be used to compel wives to stay out of the formal workforce so that they may feed their babies. The intention of the bill may be meaningless without complementary legislation addressing the problems of working mothers. Specifically, amendments to the Maternity Benefits Act of 1961 would extend maternity leave to 4 months after delivery and lengthen the duration of nursing breaks. It is, however, feared that these changes may reduce employment prospects for women.	12179211
1990	Am J Public Health. 1990 Jun;80(6):738-40.	The prime time diet: a content analysis of eating behavior and food messages in television program content and commercials.	Story M, Faulkner P.	Division of Human Development and Nutrition, University of Minnesota School of Public Health, Minneapolis.	The purpose of this study was to identify and analyze messages related to food and eating behavior as presented on prime time television (8:00-11:00 pm) both in programming and commercials. Food references occurred an average of 4.8 times per 30 minutes of programming time. Over half (60 percent) of all food references in programs were for low nutrient beverages and sweets. The prime time diet is inconsistent with dietary guidelines for healthy Americans.	2343968
1986	Hygie. 1986 Dec;5(4):30-5.	Children's response to television food advertisements in Bahrain.	Musaiger AO, Alsherbini AF, Elsayed NA, Amine EK, Darwish OA.			3804343

1982	Int J Health Serv. 1982;12(1):53-75.	The influence of infant food advertising on infant feeding practices in St. Vincent.	Greiner T, Latham MC.		A survey designed to examine the extent to which infant food advertising could be shown measurably to influence infant feeding practices was carried out in St. Vincent in the eastern Caribbean. A questionnaire was administered to mothers of about 200 children one to two years old, nearly a complete sample in each of two towns. Infant food advertising was found to be uncommon. The typical infant feeding pattern, largely a combination of both breast feeding and bottle feeding, had existed for decades. Despite the fact that this was not a very appropriate setting for such a study and that there were a number of methodological constraints, the results of two multiple regression analyses suggested that the more a mother was influenced by infant food advertising, the sooner she began to bottle feed and the sooner she stopped breastfeeding. The cessation of all promotion of commercial infant foods, to the public as well as to health professionals, is called for.	7076379
	Obesity; Intervention and Prevention	Observations of Marketing on Food Packaging Targeted to Youth in Retail Food Stores	Diana S. Grigsby-Toussaint, Imelda K. Moise and Sarah D. Geiger	Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA.	There is growing evidence that exposure to food marketing influences dietary preferences among youth. Few studies exploring this association, however, have focused on the retail food store environment where families negotiate the influence of food and beverage marketing on purchasing practices. Consequently, we sought to examine: (i) the extent to which foods marketed on the internet and television to youth are also available and marketed in retail food stores, and (ii) whether differences exist in the marketing practices across store types and by neighborhood racial composition. In 2008, a cross-sectional survey of 118 food stores was conducted in four Midwestern cities in the United States. Results showed that 82% of stores assessed carried items commonly marketed to youth via television or the internet. The items most likely to have some type of marketing technique were noncarbonated drinks (97.7%), fruit and cereal bars (76.9%), and soda (62.2%). Grocery stores were significantly more likely than convenience stores to have marketing for breads and pastries (34.6% vs. 17.9%), breakfast cereals (52.0% vs. 22.9%), cookies and crackers (54.2% vs. 25.3%), dairy (70.8% vs. 42.7%), and ice cream (23.8% vs. 9.8%). Stores located in black neighborhoods were significantly more likely to have marketing, in comparison to white neighborhoods, for breads and pastries (35.7% vs. 17.1%), breakfast cereals (44.4% vs. 25.0%), and cookies and crackers (48.1% vs. 26.3%). Our results highlight the importance of examining food marketing techniques in the retail food store environment, where visual cues from television and the internet may be reinforced.	21566563