



# COUNTERING CHILDREN'S SEDENTARY LIFESTYLES

## An evaluative study of a media-risk education approach

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In the wake of growing concerns about a 'globesity' epidemic, this article explores the panic surrounding sedentary lifestyles and fast food culture, which have underscored calls for the cultural regulation of children's marketing. Avoiding the tired debate between those who see children as either manipulated or savvy consumers, this article resituates the controversy over children's consumerism in the broader context of our 'risk society'. Based on an approach that sets out to reduce media as risk factors in socialization, this article provides an overview of a media-risk education strategy, which acknowledges both the importance of media in children's leisure as well as the need to educate young consumers to make informed choices about their consumer lifestyles. The strategy provides the framework for a successful media education programme developed and tested in North Vancouver, which offers a complementary approach to marketing regulation.

### Rethinking media as risk factors

Over the last 50 years, children's media consumption has moved to the centre of an increasingly agitated and often ideological struggle over children's expanding choices and leisure time in a consumer society which focuses on competing ideas of 'what kind of being a child is' (Cook, 2004). From television's inception, mass media critics have lined up to complain that banal programming, unrestrained marketing and perpetual violence were eroding children's literacy, while turning them into desensitized couch potatoes (Cook, 2001). Psychologists especially viewed media as a problem in children's healthy development, mustering evidence which pointed to modest relationships between heavy media use and children's aggression, literacy

and weight (American Academy of Pediatrics, 2001; Anderson et al., 2001; APA, 2003). Rejecting these concerns about media effects as a moral panic, the media industry and its defenders argued that children's enthusiasm for consumer culture was a sign of their liberation from the dictatorship of taste imposed by nanny state programmers and moralizing parents (Barker and Petley, 2001). Dismissing psychologists' research evidence of media effects on children as insignificant, the video game industry particularly maintained there was no proof that media harm children (Kline, 2003).

Even if media do not cause children to become aggressive immediately after viewing, the psychologists maintain that social learning and desensitization mean that heavy viewers and players who identify with aggressive characters can learn in the long run that aggression is an acceptable way of resolving conflict, and are more likely to be antisocial later in life (Garbarino, 2001). Longitudinal studies have found that constant media use is a significant predictor of aggressive behaviour later in life even after controlling for other violence risk factors in family, peers and community (Heusmann et al., 2003; Johnson et al., 2002). With this evidence in mind, the US Surgeon General (2001) opined that the 'concepts of risk and protection' can be central in framing a 'public health' approach to media which 'involves identifying risk and protective factors, determining how they work, making the public aware of these findings and designing programs to prevent or stop [them]'. From a public health point of view a 'risk factor is anything that increases the probability that a person will suffer harm. A protective factor is something that decreases the potential harmful effect of a risk factor.' Noting that there are multiple interacting factors contributing to youth aggression, the Surgeon General maintains 'Research to date justifies sustained efforts to curb the adverse effects of media violence on youths.'

Although violence has hogged the headlines, researchers were also gaining evidence of the privileged place of television in many homes of overweight families. Medical researchers began to notice the association between excessive media consumption and children being overweight (Deitz and Gortmaker, 1985; Taras et al., 1989). In the US, the incidence of obesity is lowest in children who view less than 1 hour per day of television and highest among children who watch 4 hours or more (Andersen, 2001; Crespo et al., 2001; Gortmaker et al., 1996). Long accused of turning kids into couch potatoes – heavy television consumption became implicated in the growing panic about the causes of childhood obesity. The popularity of computers and video games appears to accentuate the sedentary patterns of children (Vandewater et al., 2004) raising the risks of obesity, because it displaces more healthy and active leisure pursuits like sport, play and work (Tremblay and Willms, 2003). There was also growing evidence of the relationship between television and food consumption (Boynton-Jarrett et al., 2003; Coon and Tucker, 2002; Wootan, 2003). Noting that heavy television viewing is associated with frequent snacking, eating in front of the television

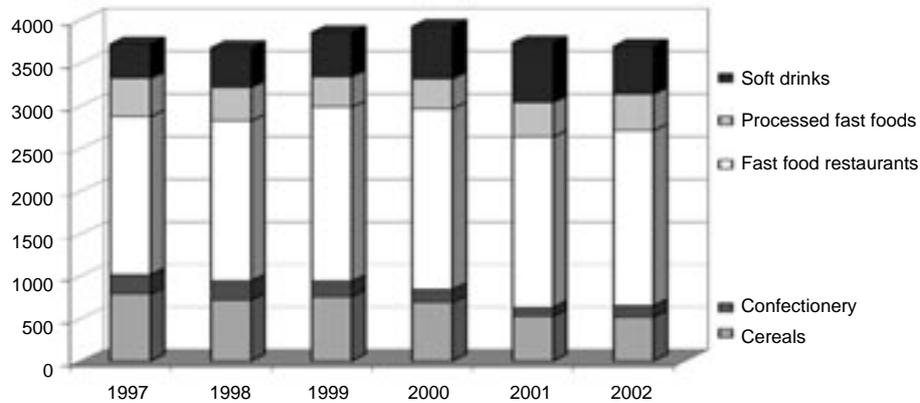
and escalating portion sizes, health professionals feared that in the absence of nutrition and physical education in schools, television had become the major source of nutritional knowledge, food preferences and body image among children (Bar-on, 2000; Wardle et al., 2001). Fast food and soft drink marketing to children began to vie on the panic agenda with media violence as risks associated with children's uncontrolled media consumption (Kaiser Foundation, 2004; Wilcox et al., 2004).

### **The new tobacco**

In 2000, the World Health Organization (WHO) issued a prognosis rather out of keeping with its usual reports on global malnutrition, AIDS and Ebola: obesity was the new global epidemic spreading fastest among the young not only throughout the developed world but also in urban centres in the developing world (*The Economist*, 2003). Research had shown that children's caloric intake had increased over the last decade by up to 14 percent, largely because of the increasing availability of energy-dense foods, super-sized portions of fast food and discretionary snacking on processed foods high in fats, sugars and carbohydrates (Jeffery and French, 1998; Johnson, 2000; Lin et al., 1999). Meanwhile, children had become more sedentary – walking to school less, doing less physical work at home, rarely participating in active leisure or physical education, instead watching television, surfing the net and playing video games (Hill et al., 2003). Together, sedentary leisure and fast food culture were emerging as potent health risks to the point where global health costs associated with increasingly affluent lifestyles overshadowed those of malnutrition (WHO, 2001).

Now with over 26 percent of the adult population and 15 percent of its children obese, the long-term policy implications of obesity seem particularly alarming in the US, where kids are fattest and fast food marketing most intense (Eberstadt, 2003). The reasoning behind the alarmism is obvious. Contrary to claims of decreasing marketing in this sector in Europe (Lyle, 2004), Figure 1 shows the US\$3.5 billion annual adspends in the USA of the 'bad five' food sectors. It is clear that most of this marketing effort is on behalf of energy-dense fast food restaurants, soft drinks, sugary cereals, confections and processed snacks – often promoted in children's television programming.

Kotz and Story (1994) found that food references occurred an average of 4.8 times per 30 minutes of programming time. Over half (60%) of all food references in programmes were for low nutrient beverages and sweets. The prime-time diet is inconsistent with dietary guidelines for healthy Americans. Advertising during children's programming continues to present a grossly unbalanced nutritional message, creating a conflict between the types of food promoted and national dietary recommendations (Kraak and Pelletier, 1998). Other studies of food advertising found a similar unhealthy



**Figure 1** Adspends by top US advertisers on the 'bad five' food sectors (in US\$ millions)

emphasis on the pleasures (fun, popularity, cool, flavour) associated with eating and drinking and little mention of the risks associated with regular consumption of the 'bad five' (Buijzen and Valkenburg, 2002; Sustain, 2001; Zuppa et al., 2003). In short, food ads on television depict super-sized portions as economic, portray eating as play and fun, promote an unhealthy diet, and rarely provide nutritional information or feature healthy alternative snacks like fruit and vegetables. This means that children and parents are exposed to a constant persuasive pressure on their food preferences relative to the paltry advertising of carrots or healthy alternatives. If there was a way of counteracting the globesity epidemic surely this is the place to start argue the critics.

### The politics of obesity

In February 2002, lawyer Samuel Hirsch filed a complaint accusing fast food giant McDonald's of making misleading nutritional claims citing 'deceptive practices in the advertising, processing and sale of foods, including Chicken McNuggets, Filet-O-Fish, Chicken Sandwich, french fries and hamburgers' (Richards, 2004). The plaintiffs in this suit were three overweight children who accused McDonald's of negligence on behalf of 'hundreds of thousands of New York state residents under the age of 18 who suffer health problems as a result of eating McDonald's food'. In his 46-page complaint, Hirsch alleged that McDonald's does not make its nutritional information 'adequately available', and said numerous claims made by the fast food chain are misleading and untrue. Reviewing McDonald's promotional material, which claims the fish in a Filet-O-Fish is '100 percent cod

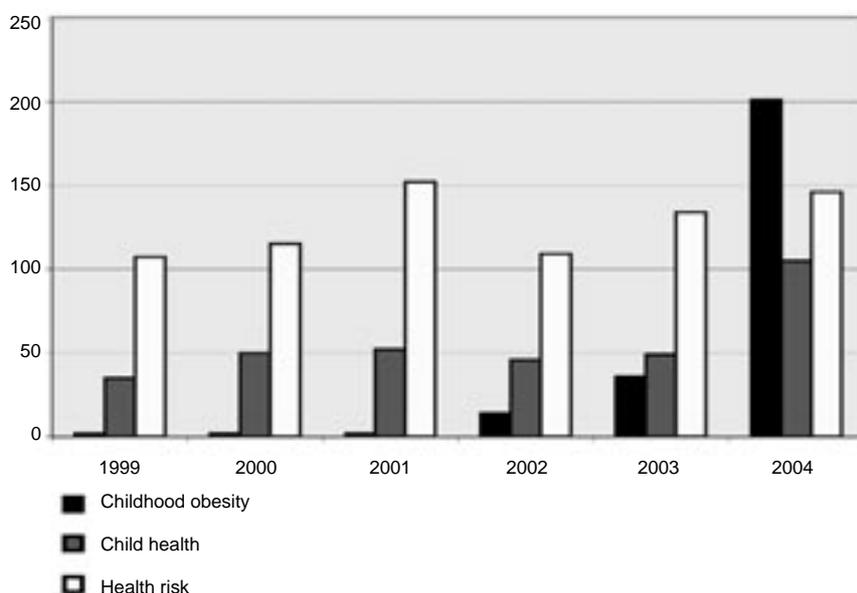
with a pinch of salt to taste after cooking', Hirsch alleged that the information was misleading. He also criticized an advertisement in which McDonald's represented its beef as nutritious and leaner than beef purchased in a supermarket when the levels of saturated fat and cholesterol would not make the beef more nutritious.

McDonald's responded in court calling the lawsuit 'senseless' and accused the plaintiffs of wrongly 'focusing on only one food organization', which 'serves quality food and ingredients from quality suppliers and continues to be a leader in providing customers with nutritional information about our food'. McDonald's lawyers contended that it would be impossible to establish whether eating at McDonald's was a major cause of the plaintiffs' ailments because genetics, medical conditions and sedentary lifestyles could also be factors. Moreover, they maintained, 'every responsible person understands what is in products such as hamburgers and fries, as well as the consequence to one's waistline, and potentially to one's health, of excessively eating those foods over a prolonged period of time'. To this point, Hirsch argued that the legal principle – *caveat emptor*, let the 'buyer beware' – was not without limits in the consumer marketplace, for a countervailing principle governing the sales transactions of risky products was the need for informed consent.

The judge was not sympathetic to Hirsch's argument about the inability of child consumers to give informed consent because of misleading and/or deceptive marketing on the part of McDonald's. The sellers of food are not required to communicate the risks in their advertising. Their responsibilities for these young plaintiffs' food choices did not extend beyond providing accurate information about the nutritional properties of their products upon request. Since most parents should know about the consequences of a regular diet of fast food, and take responsibility for their children's health, McDonald's could not be held responsible for the long-term consequences of family dietary choices. The only thing the courts failed to explain was who then is responsible for educating children about the health risks associated with their own choices as food consumers?

### **Canaries in the coal mine**

It is easy to see why the obesity panic resulted in mounting global opposition to the 'fat food' industries and their marketing (Critser, 2003; Kincheloe, 2002). In a study of *The Guardian*, I found that the UK press followed the obesity epidemic story with intensifying alarm, turning children into the warning signs of globesity, declaring that 'concern is also mounting over the content of children's diet, and the role of fizzy drink companies and food manufacturers in promoting high-fat, high-salt and high-sugar foods' and that 'a junk food and couch-potato lifestyle is speeding children's bodies into a disease of middle age' (Kline, 2004). By early 2004, obesity had



**Figure 2** Child health and obesity stories relative to overall health risk (*The Guardian*, 1999–2004)

become the key child-health story in Britain (see Figure 2).

As in all risk panics, the question turned from panic to politics. The public wanted to know what could be done to reverse these trends when ‘the government is powerless to change the behaviour of food manufacturers or consumers’, claimed *The Guardian* (cited in Kline, 2004). Since the state picks up the bill for the mounting health toll through taxes, argued the journalists, perhaps it should ‘behave more like a nanny’. Increasingly under pressure, the government announced that the ‘food standards agency is to commission research into whether advertising of foods high in fat, sugar and salt to children is undermining healthy eating programmes and contributing to the rapid rise in obesity’. Naturally, the food advertising industry was incredulous, asking: ‘Why are they targeting advertising and promotional activity when most decent quality research suggests that at most it is a minor influence on dietary choice?’ (cited in Kline, 2004).

The battle in this complex lifestyle issue began to form along the long, familiar lines: on one side were the food marketers and on the other, the nutrition advocates and parenting groups calling down the ‘big food’ industries that promoted energy-dense dietary practices to children behind parents’ backs. Pointing to the intense marketing of sugary, energy-dense and salty food products on television, especially within children’s programming, the advocates called for regulation of advertising and an end to the commercialization of the schools (Sustain, 2001). They claim that due to their devel-

opmental inadequacy, all children – but especially those under the age of 7 – are vulnerable to the influence of incessant food promotion. Children’s lack of knowledge and experience also puts pressure on parents caught in the grip of marketing’s increasing ‘pester power’. Surely, argued the critics, the state has a responsibility to protect young consumers from undue pressures of the marketplace by regulating children’s fast food marketing on television.

The Food Standards Agency’s release of the Hastings Report (Hastings et al., 2003) bolstered the growing belief that marketing of children’s food products influenced consumption and preferences. In the press, the report’s qualified scientific findings were generally reduced to its main bullet points. But its central claims seemed intuitively true to parents looking for solutions to the ‘new tobacco’: (1) there is a lot of food advertising directed at children; (2) the advertised diet is less healthy than the recommended one; and (3) food promotion is having an effect, particularly on children’s preferences, purchase behaviour and consumption at a brand and category level. Family advocates seized on these findings, adding that the overwhelming barrage of advertising incites conflict in the family over food, making parents’ jobs more difficult. To protect children it was necessary to create an outright ban on television marketing directed at children under 5 because they were particularly immature consumers (NFPI, 2004). Sustain (2004) chastized the government further by arguing ‘having acknowledged children’s natural credulity’, the current advertising code ‘does not recognize any potential for the cumulative effect of advertising on children and thus fails to protect children from the current state of imbalanced [*sic*] food advertising on television’.

The food industry responded by arguing that they are selling a legal product and following the current regulatory standards for children’s advertising. Were not government cutbacks to fitness classes and family-wide sedentary lifestyles, not fast food advertising, the prime cause of the obesity epidemic (Pringle, 2004)? Was it not up to parents to make more responsible choices (even under pressure) for their children – or teach them to do so? Opposing calls to ban their marketing on television, the food industry remained dubious about the scientific evidence linking fast food advertising to rising obesity rates (Pringle, 2004). The industry’s claim is that there is too little evidence of a link between advertising and child obesity (Young, 2003a) to violate their rights to commercial speech. Moreover, since children watch quite a diverse range of television programmes, a ban on children’s advertising would have little impact on their exposure to food advertising (Young, 2003b).

In a series of public statements, the industry’s position was articulated: if the affluent world had an obesity problem, it was not the food industry but sedentary families and failing schools that were to blame, not advertising. The evidence they cited indicated that young people were media savvy and not influenced by advertising nearly as much as the ‘food nannies’ insisted.

An occasional hamburger or chocolate bar would certainly not make a child fat. Indeed, they could be part of a balanced diet. In the absence of schools' nutrition education programmes, the advertising industry was willing to play its part. Their familiarity with communicating directly with children would guide them in playing a positive role, promoting healthier lifestyles through their 'Smart Talk' media literacy programme (Preston, 2003).

As in the US, the British government refused to recognize the ambiguous position of child consumers in the risk society. Although there was strong public support among health and parental groups for the protection of children, it did not consider the impact of food advertising on children's preferences or diet was adequately demonstrated. Culture Secretary, Tessa Jowell, is cited as stating 'There are no simple answers. I remain to be convinced that a ban on advertising would have any significant impact.' Rather than regulate or tax, she would prefer to work with the food industry to promote healthier eating. 'The fact is that 70% of the cost of children's programmes comes from advertising and of that about 40% comes from food ads. We want the industry, with the enormous resources it invests in advertising on television, to join with government in promoting healthy eating', she concluded (Deans, 2004).

Noting the growing scepticism about corporate responsibility campaigns and overwhelming parental opinion against advertising of food to children, critic Nick Cohen (2004) satirized the government's refusal to regulate the children market as a 'capitulation before the capitalist ideology that any constraint on the market is pernicious'. Drawing parallels to tobacco (where voluntary bans on advertising have contributed to a reduction in smoking), he points out that not only does the industry deny the influence of their marketing on kids but 'the need for health warnings, let alone advertising bans, is denied with an incredulous fervour'. Mocking the idea that food advertisers can now help make kids fit (if it didn't make them fat), he points out it would take 'the average child 45 minutes to run off a bag of crisps; . . . [a child] who had a burger and fries needed to run a marathon'. For this reason, he predicts the struggle over food marketing will continue to plague the public health agenda: 'As children get fatter and more stupid, what neither side of the non-debate can admit is that propaganda works and that the young need to be protected from advertising for the same reason they need to be protected from sex – they are not old enough to handle it yet.' As in the US, the state refused to take responsibility for ensuring that children could be informed consumers when marketers were able to promote their brands without mention of lifestyle risks.

### **Beyond the battle of the bulge: towards a lifestyle risk reduction strategy**

Recognizing the pivotal role that television and video games play in children's lives, as well as the evidence of risks associated with heavy media consumption, Dr Thomas Robinson (1999, 2000, 2001), at the Medical Center of Stanford University, remarked how little health education effort had been expended by health professionals on reducing the known risks associated with media use – compared with drugs, alcohol and smoking risks. Understanding the relationship between risk assessment and health protection, Robinson reasoned that if heavy media consumption has been shown to increase the risks of obesity and antisocial behaviour in some children, then interventions that reduced media consumption should lessen those risks.

His team developed an in-school media education programme for young children in grades 3 and 4, which not only communicated about these health risks but challenged children to limit their total media use (films, television and video games) over 1 month. Over 18 weeks, this health education programme promoted media use time budgeting and selective viewing. Early lessons included self-monitoring and self-reporting of television, videotape and video game use to motivate children to want to reduce the time they spent in these activities. Newsletters designed to motivate parents to help their children stay within their time budgets were distributed to parents suggesting strategies for limiting television, videotape and video game use for the entire family.

His research compared students in experimental and control schools, finding that at the end of this 8-month study, children who received the media education programme had reduced their television viewing by about one-third. The experimental school experienced a 25 percent reduction in aggressive behaviours and half as many verbally aggressive behaviours such as teasing, threatening, or taunting their peers on the playground when compared with students at the control school. Both boys and girls benefited from the intervention curriculum, and the most aggressive students, according to the study, experienced the greatest drop in combativeness (Robinson, 2001). Students in the treatment school also showed reduced risk of obesity (measured by BMI and skin-fold) when compared with those in the control, even though there was no evidence of more active leisure. In short, this study demonstrated that targeting media use in the primary classroom provided a viable way of intervening in the cluster of interrelated developmental media-risk factors associated with a sedentary lifestyle and fast food culture.

### **Beyond the Canute complex: towards a media-risk reduction strategy**

Robinson's promising research indicates that targeting media consumption through the schools may be a highly effective strategy for reducing the interacting sedentary lifestyle risks associated with increasing bullying and inactivity among children. However, Robinson's pilot study did not account for the mitigating circumstances involved in sedentary lifestyles and fast food culture such as family, peers and community supports, which can act as 'protective factors' in risk reduction. But research shows that children's leisure choices are embedded in a complex set of contradictory social pressures, relations and circumstances (Kline and Stewart, 2001). In this context, parents who modelled active leisure and promoted healthy eating can modulate or control the risks associated with media. Building on Robinson's success, I undertook a similar study in North Vancouver, Canada, during 2003, developing this media-risk reduction strategy as a community-based programme that could be delivered through schools and involved parents in the lifestyle changes of their children.

A media education strategy also underwrote this attempt to communicate the lifestyle risks associated with heavy media consumption to primary school children. This strategy realized that most children from a very young age are actively engaged in using and learning from various media in schools and at home. Even if some children are put at greater risk of aggression and inactivity, it makes no sense to deny them the pleasure of watching television, computer messaging, or playing games on their computers. Our research, however, also showed that these activities were not always the most preferred leisure choices available to children. The survey found that there are many circumstances in young people's lives that made media consumption the ready solution to boredom and loneliness – particularly the finding that television and video games are preferred solitary activities only when social activities like friends and play are not readily at hand. Watching and playing were what children chose to do when they had 'time to kill' and had little supervision (Kline and Botterill, 2001).

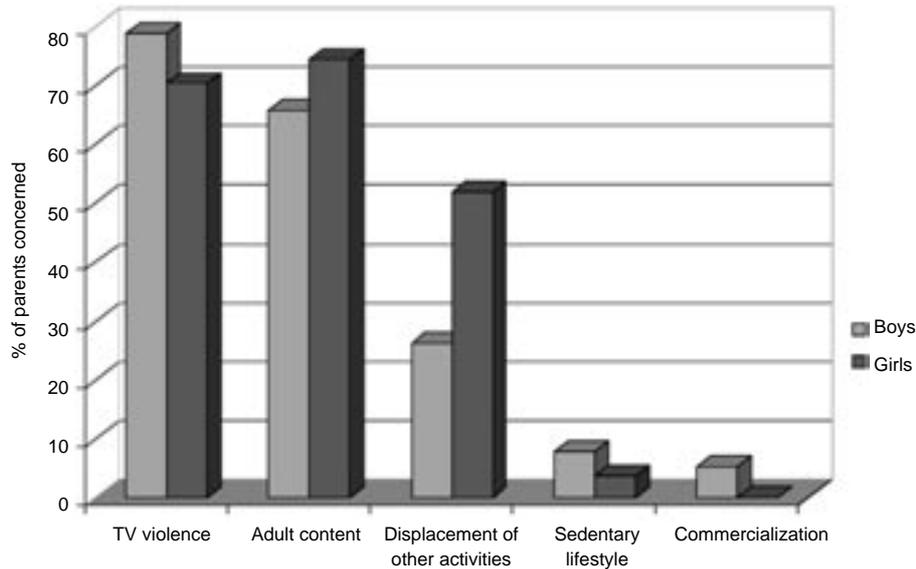
A social marketing approach informed this attempt to familiarize children with the risks associated with heavy media consumption. Although there are opposing views on what the goals of media education should be (Buckingham, 2003), the strategy formulated here conceived of media education as a kind of 'lifestyle prophylactic'. Based on experience with tobacco social marketing efforts, we also suspected that if adults condemn children's popular culture and pleasures, they will be seen as prohibiting something that is fun. Although children may have developed patterns of dependence on media, the decision to alter lifestyles must be voluntary. To change peer interactions, therefore, we needed to not only make the risks known but also to make the alternatives if not 'cool', then at least acceptable choices

within peer relations. The project therefore set out to challenge children to change their leisure without asking them to give up activities that they truly value.

To test out this strategy we enlisted the help of four elementary schools in North Vancouver involving eight classes ranging from grade 2 to grade 6. The curriculum was designed to encourage children to reflect on their media use, to express their preferences without judgement, to explore their own values and alternative leisure – in short, to challenge the students to think about and then decide for themselves if they wanted to change their media consumption habits. Each lesson combined critical media education and approved curriculum goals, which includes research, art, writing, mathematics, social skills and creative problem-solving. These assignments were given in-class or as homework. The pilot project spanned a 7-week period culminating in a final experimental question: ‘What would you do if you turned off TV, video games and PCs for a whole week?’

This community-based media-risk reduction strategy targeted elementary children because they are still forming their sedentary lifestyle practices and because parental concern and involvement in media use or its alternatives is at its highest. Since the goal of this study was to make children and parents both more aware of media-risk factors and more willing to reduce their consumption, the curriculum consisted of lessons which provoked these students to reflect on the role that media play in their lives and to explore what they would do if they did not rely on media to entertain them so much. The curriculum employed both critical analysis and creative participation to promote understanding of the role that media play in children’s lives and the reasons why heavy consumption can be problematic for some. The exercises started by getting students to monitor their media use for a week. It then focused on the concerns that children had about media including discussion of peer conflict and inactivity. These sessions were followed by a week-long preparation for the ‘tune out the screen challenge’ in which students were asked to think of ways they could create pleasurable alternatives to media. The evaluation of this strategy tracked the reaction of 178 students, 91 male and 87 female.

From prior research, it was clear that children developed their media consumption habits within a family power dynamic, in which parents model and negotiate limits to media consumption as part of the family solution for a busy life. For example, the conflict over what to watch is resolved by giving children access to a television of their own, often in their bedroom. This study showed that 25 percent of the students had their own television and similar numbers had computers. Moreover, those that had them in their bedrooms tended to use them more probably because parents are too busy to supervise them. Many parents do not know what or how long their children are watching and playing, and children revealed they had already developed strategies for avoiding and deceiving parents about their media use.



**Figure 3** Parental concerns

The majority of these students' parents have concerns about their children's excessive media use (see Figure 3). But parents admitted that they rarely communicate why playing or watching is unacceptable and fewer than 40 percent of children say their parents establish rules concerning the time they can spend watching television or playing video games. They also reported fewer rules and regulations for game content, with 93 percent of boys and 88 percent of girls reporting they had *no* rules relating to the content of their video game play. Moreover, knowing the rules does not mean always obeying them: 48 percent of boys and 25 percent of girls admitted that they sometimes 'cheat' and watch television when they are not permitted to do so – a practice that for the boys increases with age. The percentage of children who disobeyed the rules regarding video game play was lower than television, with 36 percent of the boys and only 11 percent of the girls using the video game console when they were not allowed to do so. To change these family patterns, therefore, we felt it necessary to ensure that both peers and families understood and supported any changes undertaken by the children. Parental participation was an important element of this risk reduction strategy, so information packages, pamphlets, surveys and newsletters were sent home throughout the programme.

## Evaluation

The impact of this intervention was measured by comparing the media consumption practices and leisure activities before and after ‘tune out week’. The follow-up also included intensive interviews with parents and children on their experiences of changing their sedentary lifestyles. We found that the ‘tune out challenge’ was accepted enthusiastically by both parents and children as an alternative that was workable within the family. Evidence gathered in the form of contracts for the ‘tune out the screen challenge’ revealed that the contract process was important for the success of the challenge: 64 percent of the children chose to go ‘cold turkey’, 29 percent adopted a ‘controlled use’ approach, and fewer than 7 percent ‘opted out’ of the challenge. Analysis showed that the ‘controlled use’ strategy was far more popular among the younger students whereas the ‘cold turkey’ strategy was chosen by 82 percent of the older ones who seemed to take up the ‘challenge’ more enthusiastically. It was noted that those refusing to take the ‘tune out challenge’ were disproportionately boys (83%) and also were far more likely to be from grade 2 and 3. Of those who adopted a ‘controlled use’ approach, 56 percent chose to allot themselves a time limit (average 1 hour), while 44 percent chose to only watch their favourite programmes.

Of the 121 students who kept a record of tune out week activities, 60 percent reported getting through the whole week without using screen entertainment (television, VCR, computer games, video games). Girls were slightly more enthusiastic (62% vs 54% for boys), and older boys (grades 4–6) were far more successful than younger ones (63% vs 41%). The opposite was true for younger girls with 65 percent (grades 2–3) remaining ‘media free’ compared with 59 percent of older girls. The ‘cold turkey’ group consumed media on average only 5 minutes a day during tune out week, gaining 109 minutes of leisure time, and participating in 4.3 activities whereas the ‘opt out’ group consumed 27 minutes and gained 97 minutes, and participated in 3 alternate leisure activities. The ‘controlled use’ group used media for 22 minutes per day and gained 90 minutes of leisure time. Younger students gained 64 minutes compared with the older students who gained 153 minutes. The ‘opted out’ younger boys again consumed the most media during tune out week (38 minutes). The following quotes give a sense of the students’ experiences during tune out week:

It was hard without any media, but I still had some fun. First I took out the batteries in my TV, then I unplugged my computer. Then I played scrabble and checkers with my grandpa. Then I played hockey, outside. I didn’t watch or do any media today. (Grade 5/6 boy)

Today was easy for me to not use any media because the weather was warm and sunny. I played hockey with my dad after school. Then we went out for dinner and played monopoly when I got home. Before I knew it, it was time for bed. (Grade 5/6 boy)

### **Displacement effects**

The 'displacement effect' was estimated by subtracting the amount of time spent using media in tune out week from that recorded before the programme. The net effect was that students gained 100 minutes a day of leisure time from reducing their dependency on screen entertainment during tune out week. All children reduced their media time after the programme with those who went 'cold turkey' gaining 35 minutes more than those who did not. The intervention was more successful with the grades 4–6 who gained 117 minutes compared with 79 minutes for the grades 2–3 students. Younger students who tuned out gained on average 90 minutes, while those who did not gained only 66 minutes. Older students who tuned out gained 133 minutes compared with 92 minutes for those who continued to use media.

So what did those who participated in the tune out week challenge do with the discretionary time they gained? The analysis of 65 tuned out week diaries indicates that sport and outdoor play were the most frequent replacement activities accounting for 34 percent of their responses. Indoor play and hobbies (19%), eating (15%), homework (14%) and media (8%) accounted for more than half their recorded time. Reading (6%) and just resting/'vegging out' (2%) account for the rest of their discretionary time. Sleeping, travel and self-maintenance time were excluded from this analysis. It was noted that active leisure is much more common in the after-school hours than in the evening. Their week-long activity diaries showed that the 80 percent reduction in screen use was compensated for by more time spent reading and in active play than passive leisure. It was also observed by researchers and teachers that homework was done and few incidences of bullying or aggression occurred.

### **Conclusion**

Although adults watch more television, and are at greater risk of being overweight, children seem to have become the 'canaries in the coalmine' of the obesity panic. The reason is that they are regarded as more vulnerable to the effects of television advertising (Kline, 2004). Yet the public controversy between food marketers and health advocates has only exposed the ambiguous position of children within the mediated marketplace – regarded as savvy media consumers, no one is taking responsibility for educating children about the risks associated with their affluent lifestyles.

Over the last 30 years, marketing and academic researchers have gathered a body of empirical evidence assessing children's consumer competence. As consumer researchers often note, children as young as 3 can be avid consumers and devoted media watchers (del Vecchio, 1997; Sutherland and Thompson, 2001). By age 5, many begin to show interest in and are able to discriminate between brands they like. Their knowledge of and prefer-

ences for brands become the basis of their negotiations with their parents over provisioning and their peers over cultural capital and social status. These preferences also lay the foundation for their discretionary purchases as they become shoppers in their own right. Their brand awareness can breed loyalty which can last a lifetime (Thomson and Woodham, 1997). By age 8, they not only exhibit knowledge of many children's goods, but also media, cars and foods. Most agree that by the age of 12 most young people can manage their increasingly large allowances, save for a major purchase, enter a shop, chose their favourite products (or influence their parents to buy it) and count their change (McNeal, 1999).

In this respect, marketers note that advertising already plays an educational role, helping to acquaint children with the brands available in the marketplace. Marketers often use anecdotal cases to argue that young people are sophisticated 'readers' of promotional messages, insisting that young people are enthusiastic about having more say in family lifestyle choices, gaining more power in provisioning of food, clothes, toys and entertainment (Buckingham, 2003). Children are not being manipulated, they claim, because they have the capacity to discern the marketing strategies, to make decisions for themselves and to 'resist' direct-to-child advertising campaigns on television. But with little solid evidence to prove it.

Academic researchers generally find that child consumers are interested in advertising (and catalogues) and actively chose to watch them, not only because they are fun, but because ads provide them with one of the few sources of information about products they aspire to, or buy (snacks, treats, cereals, movies, clothes, toys and games). Because they watch a lot of television, they can identify an advertisement as a distinct genre, are more or less aware of its selling intent, and are competently deciphering the selling points and persuasion techniques (MacDonald, 1999). Roedder-John's (1999) and Brian Young's (Young et al., 1996) recent reviews of this literature both conclude that certainly by age 12, children have the acquired the cognitive skills and information-processing abilities thought essential for functioning as competent consumer decision-makers in conditions of mass mediated consumption: children understand the role of television advertising and seem able to formulate their preferences for particular goods based on it.

It appears self-evident that children have acquired a degree of financial power and brand knowledge. To say that children have greater scope to define themselves and their lifestyles in the market, relative to their ancestors, is not to proclaim them untouched by marketing's social influences, however, when 33 percent can name a persuasive ad that made them buy or ask parents to buy – in particular, 'food ads make me hungry'. Although no longer characterized by 'innocent credulity', as Duff confesses, children are 'clearly influenced, absorbing detail to use in persuading their parents to buy' (Duff, 2004: 49). This probably is because children's marketing is not always directed to choice but brand attitudes, which can still have an effect

on liking for a product (Borzekowski and Robinson, 2001; Hitchings and Moynihan, 1998). And to say that children understand the fundamental role of advertising in the marketplace and recognize its intent to persuade them, does not ensure that children have become competent economic subjects. So while it can be confidently said young children are 'media savvy', it is still legitimate to ask if they can make thoughtful comparative choices requisite of rational consumers. It all depends on the criteria for judging competence (Valkenburg and Cantor, 2002). Although they can judge whether they like an ad, the evidence we have is limited about when children become cognitively able to compare different products on multiple attributes (MacDonald, 1999). Whereas children as young as 5 can recall advertising messages, and recognize techniques such as overstatement in ads directed at them, when researchers investigate the processes of interpretation, it is found that not even adolescents fully comprehend the complexly layered irony of many ads (O'Donahue and Tynan, 1998). Moreover, because children can rarely explain how advertising costs effect the pricing of products, or demonstrate information search strategies necessary for comparative shopping, how economically competent can these young consumers be (Lunt and Furnham, 1997)? With current synergistic cross-marketing, product placements and programme length commercials, it is hardly surprising that some children are confused by the lines between programming and advertising content. And when it comes to the internet, it is far from clear that the majority of children can avoid the pop-ups and pornography, distinguish the commercial intent of sites such as Neopets, avoid cyber-lurkers or understand how the information they input is being used by marketers (Montgomery, 1998).

It is generally agreed that as consumers-in-training, children need to be educated because however media literate, they are little informed of the long-term risks associated with their consumer choices. It is not because they are manipulated but because they are inadequately informed of the risks that the state needs to reconsider its approach to educating young consumers to be risk literate in the mediated marketplace. Not only should health promotion inform children about the risks associated with their daily consumer choices, but it should also help children become more aware of the role that marketing plays in their lives, and the alternative ways they can have fun in a media-saturated world. Marketers, in turn, need to become more aware of the lifestyle risks to children, and find creative ways of ensuring that even young people understand fully the benefits of active lifestyles as well as the risks they encounter in the global marketplace.

Due to its success in reducing the incidence of smoking and the wearing of seat belts, this pilot study suggests that public commitment to media-risk communication can and should be a major policy commitment ensuring that all children grow up knowing the long-term health risks in our risk society – whether it is media use, smoking, drug taking or dietary choices. As

with tobacco, this means understanding the broader promotional context of unhealthy lifestyles where billions of dollars are spent promoting energy-dense foods to children, yet very little is spent with equal vigour to communicate the risks associated with their long-term consumption. Moreover, this means privileging consumer and media education as a vital part of citizenship training in schools.

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