

Food advertising and childhood obesity

‘A wise man proportions his belief to the evidence’
David Hume¹

Over the past year political momentum has grown for strong action to tackle childhood obesity and there is an emerging consensus that regulation of food advertising to children is both necessary and achievable. A key factor in this debate has been the publication of the Food Standards Agency’s (FSA) review of research into the link between food promotion and eating behaviour in children, undertaken by Professor Gerard Hastings and colleagues at the University of Strathclyde.² Though the findings are heavily qualified, the authors conclude that advertising to children does have an adverse effect on food preferences, purchasing behaviour and consumption.

Comment in the media was less ambivalent: the report was taken as clear evidence that the large food corporations are out of control and that tough action is required to curb their excesses. *The Lancet* concurred, with an editorial attacking sports celebrities and food manufacturers for their cynical promotion of junk food and demanding legislation to force the junk-food industry to ‘clean up its act’.³ Some of the big brand companies, including Coca-Cola and Heinz, responded with a declaration that they would stop advertising their products to children; and the Culture Secretary Tessa Jowell asked the new television regulator, Ofcom, to review its advertising code for children.

Since the Hastings Review may be used as the justification for policy change or even legislation, its methodology and findings deserve close scrutiny. This is not the place for detailed critical analysis, but a few examples will illustrate the scope for different conclusions. Firstly, there was a fundamental discrepancy between the FSA’s terms of reference and what was contained in the final report. The FSA’s interest was in food promotion to children, whilst what was researched was TV advertising of food to children. Food promotion and TV advertising of food are not synonymous. Also, in the press releases and elsewhere, a good deal was made of the large scale of the Hastings Review—a systematic examination of almost 30 000 articles. In fact, only 120 articles (less than 0.5%) were selected as being relevant to the review and most of

those on which the critical areas of the study were based were North American in origin and 20–30 years old.

More importantly, two of the most cited studies in the Hastings Review do not in fact support the view that food promotion or TV advertising are important in determining the food consumption behaviour of children. The first of these, described in the review as ‘the strongest study’ and referenced some forty-eight times, involved a sample of 262 children selected from white families in Ohio, mainly of high socioeconomic status, and conducted more than 25 years ago.⁴ Despite these limitations, much was made of the fact that this study revealed a statistically significant relation between a child’s exposure to advertising and the number of snacks eaten. However, whilst food-commercial exposure did reduce children’s nutrient efficiency, it explained only 2% of the variance and had no direct effect on calorific intake. In fact, the influence of parental behaviour was fifteen times greater than that of television advertising, and subsequent studies have confirmed that this is the dominant influence on children’s eating habits.⁵ The second study,⁶ cited thirty-two times, looked at the influence of advertising relative to other factors and once again the influence of food advertising was small. Hastings and his colleagues apparently accept this finding: ‘there is little evidence to show whether the influence of food promotion on children’s food behaviour and diet is greater or lesser than other factors.’

Taken together, these and other observations effectively undermine the main conclusions of the Hastings Review. Despite media claims to the contrary, there is no good evidence that advertising has a substantial influence on children’s food consumption and, consequently, no reason to believe that a complete ban on advertising would have any useful impact on childhood obesity rates. Again, Hastings *et al.* appear to concur with this judgment: ‘there is no *prima facie* reason to assume that promotion will undermine children’s dietary health; it can influence it, but this influence could just as easily be positive as negative.’

This conclusion is supported by experience from Quebec where, although food advertising to children has been banned since 1980, childhood obesity rates are no different from those in other Canadian provinces.⁷ A similar advertising ban has existed in Sweden for over a decade, but again this has not translated into reduced obesity rates.⁸

Leaving aside the role of food advertising, there are data to suggest that consumption of energy-dense foods may not be the primary factor in determining childhood obesity.

Epidemiological studies do not show a consistent association between dietary fat and adiposity in children and young adults.⁹ Furthermore, the current obesity epidemic appears to be taking place against a background of *declining* energy intake in children, especially younger children.¹⁰ Clearly, if children over-consume energy-dense foods they will become fat, but there are reasons for regarding the current epidemic of childhood obesity as primarily a matter of energy expenditure rather than energy intake. Anthropological studies indicate that we are more sedentary today than at any time in our evolutionary history. Physical activity energy expenditures for our ancestors were in the range of 90 kcal/kg per week, equivalent to walking some 8 miles a day in addition to current physical activities.¹¹ Whilst this may seem extreme to us today, it is the sedentary existence characterizing modern life that represents the true extreme, not the physical activity patterns that were the norm for most human beings, including children, until even a few generations ago.¹¹ Moreover, the daily energy intake of our ancestors seems to have been around 3500 kcal, rather more than today's average—further evidence that the decisive contribution to today's obesity epidemic has been a reduction in physical activity.

Today, children expend about 600 kcal/day less than their counterparts 50 years ago, and contemporary British children, even in the preschool years, spend much of their time seated.¹² Television-watching and computer games contribute, and there has been a large increase in car journeys on behalf of children.¹³

This decline in physical activity in children (and adults) has been exacerbated by the failure of successive governments to provide an environment in which physical activity can be incorporated into *everyday* life. If parents have concerns about their children's safety, either because of traffic or because of possible abuse by strangers, they will probably opt for the car and not the pavement—and who can blame them? The role of schools in promoting an active lifestyle needs more emphasis and funding. Many schools have insufficient resources to purchase basic items of sports equipment yet the Government seems poised to spend £2.4 billion in trying to secure the Olympic Games for 2012. Moreover, the emphasis on competition and sporting performance in schools alienates those children who are less physically gifted and diminishes the importance of regular physical activity in relation to health. The National Curriculum should include a lifestyle module in which children learn about the health benefits of physical activity for life, not simply competitive sport during their school years. Health policy makers and those who control the public purse should also bear in mind that active children are more likely to become physically active adults with lower rates of heart disease, diabetes and cancer.^{14,15} Even

those who are obese but physically fit can expect better long-term health outcomes than their sedentary, lean but unfit counterparts.¹⁶

For every complex problem there is a simple solution—and it is always wrong. The claim that food advertising is a major contributor to children's food choices and the rising tide of childhood obesity has obvious appeal, but as an argument it does not stand up to scrutiny.

Note—I have no conflicts to declare.

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