

Serving up trouble?

Advertising food to children

RECENT years have seen an explosion of debate on the role that television adverts play in causing obesity. The advertisers and the food companies themselves, celebrities who promote various products in lucrative deals, the TV companies who air the adverts and who license the use of children's favourite characters to promote specific products... all have come under fire. The food companies rightly claim there is no 'direct evidence' linking food adverts with childhood obesity, and the British Retail Consortium has said that 'attacking food adverts misses the real cause of childhood obesity'. But is this a sleight of hand, and how can empirical psychological evidence make a useful contribution to the debate?

TV adverts or TV itself?

According to Ofcom figures, children in the UK watch on average 17 hours a week of TV, most of it on commercial TV stations. This represents considerable exposure to the advertisers' promotional messages. Adverts for food products can represent up to 40 per cent of the adverts children see on their commercial scheduled programming. Actually, in the UK it is probably as high as 50 per cent for most of the year.

These adverts appear to be mainly for snacks, breakfast cereals (predominantly the highly sugared variety), processed foods and drinks (mostly the soda or fruit-based high-sugar varieties). In addition to



As pressure grows on food advertisers, **JASON C.G.**

HALFORD looks at the evidence.

this, fast-food retailers also advertise extensively during programming scheduled for children. These foods and drinks seem to share a common characteristic: they are generally high in refined sugars and fats. The levels of fat, sugars and salt in some of these products are 'particularly alarming' (according to the UK Food Standards Agency – FSA).

The advertising industry's repost is that the problem of child obesity cannot be laid at their door: the blame lies instead with the general lack of activity of our children. Childhood obesity is associated with the number of hours of TV watched (Anderson *et al.*, 1998), and the amount of time spent viewing TV predicts subsequent weight gain in children (Kaur *et al.*, 2003; Proctor *et al.*, 2003). Conversely, intervening to reduce the amount of TV viewed by children reduces excessive weight gain, an effect not explained by any reported increase in physical activity (Robinson, 1999).

This latter finding would suggest the relationship between TV and obesity is due to an increase in energy intake, and indeed there is evidence for this. A study of teenage girls by Francis *et al.* (2003) showed that those who ate in front of the TV consumed more food. Moreover, those who ate their meals in front of the TV also tended to have a higher consumption of dietary fat. An Australian study also demonstrated that extensive TV viewing was associated with an increase in the frequency of food consumed. A strong correlation was found in particular between the frequency of unhealthy foods eaten and the amount of TV watched daily (Woodward *et al.*, 1997).

This relationship between increased caloric intake (specifically of fats) and TV viewing is probably due to distraction from normal meal-generated cues – such as fullness and satiety, an inhibition of hunger – and more general lifestyle factors, rather than just what is viewed. With sedentary 'activities' such as TV viewing and computer game use taking up a substantial amount of children's free time it is not surprising that we are facing a childhood obesity time bomb.

So we know levels of activity are worryingly low in many children. But whilst focusing on the key issue of energy expenditure is important, we should not

WEBLINKS

The Kissileff Lab home page:

www.liv.ac.uk/psychology/kissilefflab/Home.html

The Food Standards Agency report:

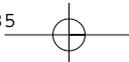
tinyurl.com/7xg4u

Campaign for a Children's Food Bill:

www.childrensfoodbill.org.uk

Choosing Health White Paper:

tinyurl.com/4uovd



forget about the energy going in. Or, in the case of advertising and product promotion, the factors that determine the nutritional value of the energy consumed. Whilst food producers correctly cite the fact that caloric intake is in historical decline, it is widely agreed that children's intake of refined sugars, fats and salt has also dramatically risen over the past 20 years.

Bringing more evidence to the table

In 2003 Professor Gerard Hastings and colleagues at the University of Strathclyde produced a groundbreaking and extensive report for the FSA, reviewing 200 studies (see weblinks). The report had two broad aims: to study the extent and nature of food promotion to children, and to determine the effect, if any, that this promotion has on their food knowledge, preferences and behaviour.

On the first point, the report said: 'The advertised diet contrasts sharply with that recommended by public health advisors, and themes of fun and fantasy or taste, rather than health and nutrition, are used to promote it to children. Meanwhile, the recommended diet gets little promotional support.' The report noted that food advertising to children in the UK was dominated by the 'Big Five': pre-sugared breakfast cereals, soft-drinks, confectionery, savoury snacks and fast-food outlets. Hastings and co. put it bluntly:

children in the UK are exposed to extensive food advertising, and the diet advertised to these children is considerably less healthy than the diet healthcare experts would recommend.

With regard to the second point, the report concluded that food promotion *did* have an effect on what foods children choose. This modification of behaviour worked not only at the brand level (changing the preference say between two equivalent products, such as brands of potato crisps), but more importantly at category level (children were likely to eat more potato crisps).

Evidence to support these conclusions is not hard to find. Some interesting studies include Brody *et al.* (1981), who exposed

'all of the children...ate significantly more after exposure to the food adverts'

young children to food advertisements and then accompanied the child and their parent grocery shopping. Exposure to the food adverts increased the child's attempts to influence the choice of purchases, particularly towards those food items that had been in the adverts. Similarly, Borzekowski and Robinson (2001) demonstrated that exposure to a 30-second food advert, embedded within a

programme significantly altered food preferences in young children.

In our own study (Halford *et al.*, 2004), the responses of 42 children (aged 9 to 11 years) to food adverts were measured. On one occasion the children were exposed to food adverts, on the other they were exposed to adverts for non-food items. As expected, the obese and overweight children selectively remembered a greater number of the food-related adverts. However, *all* of the children (normal weight, overweight and obese) ate significantly more after exposure to the food adverts. Exposure to the TV food adverts also exaggerated the existing preferences of the children for foods high in fat or sugar. After the food adverts the children increased their intake of most foods with the exception of the savoury low-fat snack. In the obese children this was a significant reduction in the intake of the 'healthy' snack from what was an already low level of consumption.

As far as we are aware, this study was the first to demonstrate that exposure to advertisements increases actual food intake in children. It supports the notion that, in children, TV viewing may not just be a sedentary adiposity promoting behaviour. Exposure to food adverts can impact on eating behaviour, stimulating intake and exaggerating unhealthy food choice. In February and March of 2004 we went back into Liverpool schools. Analysis of our data confirms we replicated our previous finding in a large sample of children aged 6 to 11 years.

What next?

The food industry says they are merely providing the type and range of products we want. Of course they are right. The food industry is not a Machiavellian cartel deliberately set on a mission to ruin global health. Food companies do not contrive to produce addictive and unhealthy products. It makes no commercial sense in the long run to ruin the health of an individual whose custom and brand loyalty you have fought hard for.

But therein lies the problem: to win over a potential consumer, products must first be appealing to tempt the buyer and then sufficiently gratifying to encourage a repeat purchase. So they give us what we want, what we find most palatable, the tastes and ingestive experiences we find most pleasing. As adults, providing we have access to clear and reliable



Obesity

information, we have the ability to make an informed choice with regard to what we consume. We can make a balanced decision between the relative merits of the pleasure we will derive from consuming a food and the impact of including this food in our diet on our health. However, children are less capable of making such an informed decision.

In the UK the call for a ban on food advertising during children's TV has focused minds. The continued efforts of Debra Shipley (MP for Stourbridge) kept the issue in the political arena, despite the failure of her 2003 private member's bill to ban such adverts. At the start of 2004 representatives of the food industry were grilled by the House of Commons Health Committee. The final report of the committee, published in May 2004, was damning. In the report the committee said that 'the food industry's relentless targeting of children through intense advertising and promotion campaigns, some of which explicitly aim to circumvent parental control by exploiting "pester power"' was a major cause of the UK's childhood

ULRIKKE PREUSS/PHOTOFUSION

obesity problem. Even then it still seemed unlikely that any ban would be considered, with the government apparently reluctant to intervene.

However, more recently, the government addressed the issue of food advertising in the White Paper *Choosing Health*. Headlines such as 'Ban on TV junk food ads' reflected a shift in opinion in government circles. 'We believe there is a strong evidence-based case for action to restrict advertising and promotion to children of food and drink that are high in fat, salt and sugar' a government spokesperson said (*Sunday Times*, 25 November 2004).

Coincidentally, the amount of food advertising during children's TV has apparently declined in the last year according to some market analysts. A Nielsen Media survey (reported in *Business Respect*, 12 November 2004) suggested the number of ads shown during children's TV in the UK had dropped from 45,000 in 2003 to 34,700 in 2004 (a 20 per cent decrease).

Regrettably, it is unlikely this will have much impact on current obesity rates but it is the first step in tackling the obesogenic environment British children are exposed to. If obesity is to be tackled, major changes in the home life of many of our children need to take place (lifestyle as well as nutritional). TV adverts do influence children's behaviour and, critically, their intake. Moreover, as these adverts predominantly feature products

high in salt, sugar and fat, they will continue to reinforce poor nutrition. If the issue of these advertisements is not addressed the efforts of parents, health educators and governments to change children's diets will regrettably be compromised. It is uncertain what form any legislation to tackle the problem will take, and campaigning for a specific Children's Food Bill continues (see weblinks).

■ *Dr Jason C.G. Halford is at the Kissileff Laboratory for the Study of Human Ingestive Behaviour, University of Liverpool. E-mail: j.c.g.halford@liv.ac.uk.*

References

- Anderson, R.E., Crespo, C.J., Bartlett, S.J., Cheskin, L.J. & Pratt, M. (1998). Relationship of physical activity and television watching with body weight and level of fitness among children. *Journal of the American Medical Association*, 179, 938–942.
- Borzekowski, D.L.G. & Robinson, T.N. (2001). The 30-second effect: An experiment revealing the impact of television commercials on food preferences of preschoolers. *Journal of the American Diabetes Association*, 101(1), 42–46.
- Brody, G.H., Stoneman, Z., Lane, T.S. & Sanders, A.K. (1981). Television food commercials aimed and children, family grocery shopping, and mother-child interactions. *Family Relations*, 30, 435–439.
- Francis, L.A., Lee, Y. & Birch, L.L. (2003). Parental weight status and girls' television viewing, snacking, and body mass indexes. *Obesity Research*, 11(1), 143–151.
- Halford, J.C.G., Gillespie, J., Brown, V., Pontin, E.E. & Dovey, T.M. (2004). Effect of television advertisements for foods on food consumption in children. *Appetite*, 42, 221–225.
- Kaur, H., Choi, W.S., Mayo, M. & Harris, K.J. (2003). Duration of television watching is associated with increased body mass index. *Journal of Paediatrics*, 143, 506–511.
- Proctor, M.H., Moore, L.L., Cupples, L.A., Bradlee, Hood, M.Y., & Ellison, R.C. (2003). Television viewing and change in body fat from preschool to early adolescence: The Framingham Children's Study. *International Journal of Obesity*, 27, 287–833.
- Robinson, T.N. (1999). Reducing children's television viewing to prevent obesity. *Journal of the American Medical Association*, 282, 1561–1567.
- Woodward, D.R., Cummings, F.J., Ball, P.J., Williams, H.M., Hornsby, H. & Boon, J.A. (1997). Does television affect teenagers' food choices? *Journal of Human Nutrition and Dietetics*, 10, 229–235.

DISCUSS AND DEBATE

What, if any, impact would the banning of 'junk food' TV adverts have on children's food choices?

If we better understood how advertisers promote such foods to children, could we successfully employ these techniques to promote healthy consumption?

To what extent is parental control of food choice a factor, and are they the more appropriate target for intervention?

What exactly constitutes 'direct evidence' in this field?

Have your say on these or other issues this article raises. Write to our Letters page, on psychologist@bps.org.uk or at the Leicester address – 500 words or less, please.