Does the UK promotion of food and drink to children contribute to their obesity?

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Centre for Marketing Working Paper
No. 04-901
March 2004

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Abstract

Amid the international concern with childhood obesity and the contributing factors, the UK is providing a lively debate. The UK Food Standards Agency has been seeking reliable academic advice and commissioned the Hastings Study “to examine the current research evidence on:

- the extent and nature of food promotion to children
- the effect, if any, that this promotion has on their food knowledge, preferences and behaviour.”

Contemporaneously, the UK Advertising Association, through its Food Advertising Unit, commissioned other studies that reached different conclusions.

This paper reviewed all these contributions to ascertain how much could be inferred, and with what level of reliability, as the basis for national policy making. The paper’s first conclusion is that considering the effect of branded food and drink promotions outside their socio-economic and cultural context is unreliable. Secondly, whilst there are promotional effects at the brand level but the evidence for promotional effects at the level of product category or overall diet is thin at best. Re-analysing the data provided in the Hastings Study shows that their assertions about category and diet effects do not appear to be well founded.

The dialectic process to which these studies have been subjected by the FSA, and their public reports, also gives rise to concern. Searching for the common ground, which seems considerable, would be more constructive. The Hastings Study, as qualified in this paper, provides a reliable basis for some, but not all, decisions about future national policy.

The FSA would be well advised to work with the food, drink and advertising industries to review codes of practice and what these industries can do to alleviate the child obesity problem. As Scotland appears to have demonstrated, schools have a crucial role here, not just school dinners but in physical activities and getting to and from school.

Perhaps most directly, the government should consider pro-health promotions targeted at the socio-economic and demographic groups most in need of support. This paper concludes, as the Hastings Study itself does, that the positive aspects of promotion may prove a major part of a successful programme for child obesity reduction.
Does the UK promotion of food and drink to children contribute to their obesity?

Amid the international concern with childhood obesity and the contributing factors, the UK is providing a lively debate. The UK Food Standards Agency (FSA) has been seeking reliable academic advice about this growing problem and, in particular, the effects of food promotion to children. They commissioned Hastings et al. (2003a, hereafter the “Hastings Study”) to assess the literature on a related, but not identical, topic, namely “to examine the current research evidence on:

- the extent and nature of food promotion to children
- the effect, if any, that this promotion has on their food knowledge, preferences and behaviour.” (p.1)

Contemporaneously, the UK Advertising Association, through its Food Advertising Unit (FAU), commissioned the Young (2003) report which came to rather different conclusions. The FSA put both reports to an expert panel to determine which was the more reliable and the FAU commissioned Paliwoda and Crawford (2003) to establish whether the Hastings Study was strong enough to be the basis for public policy. Hastings et al. (2003b) perhaps unsurprisingly repudiated the Paliwoda and Crawford critique.

This vigorous debate should provide valuable lessons. In a sense, we have two trains on parallel tracks going in different directions. One train cannot be seen as “right” and the other as thereby “wrong”. Their reliability is important but less important than where they take us.

The UK child obesity problem is both real and important. In 2002, 70 percent of men and 63 percent of women were overweight (Kopelman 2004). Obesity has doubled in the 2-4 year olds between 1989 and 1998 and trebled in the 6 – 15 year olds between 1990 and 2002. For the purpose of this paper, obesity is taken to be caused by an excess of calorie intake, fatty foods and sweet foods and drinks in particular, relative to calorific output, primarily exercise. Salt has no calories in itself and causes unrelated health concerns, but it also taken to impact obesity indirectly through bodily liquid retention and appetite enhancement. The role of the FSA concerns diet (intake) rather than output.

The paper is structured as follows:

- What have we learned? Establishing a reliable basis for policy-making from academic research should look first at the common ground. Finding fault is helpful only up to a point; detailed criticism of the Hastings Study has therefore been banished to the appendix, leaving the main paper to focus on establishing common ground for progress.
- Publicity given to academic contributions to date, and
- Recommendations for developing the best, or least bad, policies to address child obesity and food promotion to children.
Establishing a reliable basis

This section analyses the seven areas below:

- The importance of extracting credible evidence from the available information
- Whether children are “targeted” by branded food promoters;
- Whether food promotion has an effect on children’s knowledge, preferences and behaviours;
- The impact of advertising on food categories and total diets;
- Micro versus macro research;
- The context of advertising to children; and
- Conclusions on the “reliable basis”.

The extraction of credible evidence

The image of the disinterested scientist allowing the truth to emerge from objective analysis of empirical evidence is attractive but rarely accurate. Science more often progresses from emotional commitment to new ideas that are then tested in the real world and in debate with those holding contrary views. Provided the data and processes are professional and honest, being partisan should not be a cause of embarrassment.

In looking at the controversy in this area, we need to recognise and respect the opposing views. In marketing and social sciences, it is very unlikely that one side is wholly right or wholly wrong. Paliwoda and Crawford criticise the Hastings Study for lack of objectivity which Hastings et al., naturally, refute (Hastings et al. 2003b). It might be more productive to acknowledge that opinions exist and may influence, albeit subconsciously, reports of this nature. Sides are being taken but the FSA objective, presumably, is not to establish which academics are the more credible but which conclusions are reliable for what purposes. The Statue of Liberty is a reliable landmark for a ship locating New York but not much use for telling the time. Observers, neutral or otherwise, should be extracting the convincing evidence from its context and provenance and assessing whether it helps decide policy alternatives.

In other words, this deliberation should not be seen as a medieval joust where one side is declared the winner. We should not weigh one paper against another but select the well supported arguments from both sides as a foundation for action while not ignoring the less well supported possibilities.

All concerned should acknowledge the thoroughness of the Hastings Study and the mass of material which it organised into a coherent framework. Whilst the Hastings et al. response (2003b) understandably addresses the differences, we should note that much of the Paliwoda and Crawford (2003) contribution endorses and applauds the Hastings Study. This paper is in agreement with that.
The conclusions of the FSA’s academic panel cited by Hastings et al. (2003b) seem reasonable apart from the perception that the matter should be resolved by joust and the final, crucial, sentence which is reviewed later:

“...the systematic review provided by Hastings was seen to be an appropriate response to this problem, and participants agreed that his review assessed the available evidence in a consistent way and that the conclusions were both balanced and valid. In contrast, participants noted that Young1 (the author of the Advertising Association’s review) had considered fewer studies and that there were inconsistencies in the way that he had assessed the results of these studies. As such, there were concerns expressed as to whether the conclusions reached by Young could be fully justified.... it was not felt that further research was necessarily required as, on the balance of evidence, the Hastings review had provided sufficient evidence to indicate a causal link between promotional activity and children’s food knowledge, preferences and behaviours” (Food Standards Agency 2003)2 (p.1).

Whether children are “targeted” by branded food promoters

Whilst the Hastings Study mostly takes the targeting of children as a given, the issue is not in dispute. Certain branded foods, e.g. cereals, and drinks are intended to be particularly attractive to children. 23% of advertising during children programmes is for food and drink, compared with 18% overall. But even for the biggest advertisers in this sector, e.g. Kelloggs and Britvic, children’s programmes account for about 15% of total TV expenditure (Tiltman 2004).

Thus targeting does take place but the perception of its relative extent depends on one’s expectations. In other words, advertisers do adopt a segmented approach to their target markets, including children, but this does not appear to represent a dominant share of advertising.

Whether food promotion has an effect on children’s knowledge, preferences and behaviours

Clearly advertising tends to affect knowledge, preferences and behaviour of its target market since that is the reason for doing it. Not all advertising is successful but enough is successful enough for advertisers to continue. The Hastings Study rightly takes us further than that and looks closely at the research evidence about what kind of effects have been discovered. There is a considerable literature on advertising effects and how it works, see Vakratsas and Ambler (1999) for example. The Hastings Study, which was already large, was probably right not to explore that literature.

The advertising industry accepts that promoting foods to children does affect their knowledge, preferences and behaviour. Advertising affects many other things than brand sales but amongst children where experience is, by definition, less than adults, advertising must have some influence over knowledge, attitudes and behaviour. The


literature on children’s cognitive development is very considerable. The question, however, is whether it does so at the level of food categories and diets, rather than simply brands, and thereby contributes to obesity.

**The impact on food categories and total diets**
Almost all brand advertising is intended primarily to affect brand choice as can be seen from the 3,000+ case history database at warc.com. Promotion may affect brand choice without affecting category consumption, e.g. the brand of crisps rather than the snack category as a whole. The Hastings Study concludes that advertising affects consumption patterns and not simply brand choice without reference to this extensive literature, e.g. Broadbent, Ambler and Feldwick (1998). Manufacturers advertise their brands, not categories and still less diets as the Hastings Study claims.

They are, however, right to acknowledge that diets are portrayed on television and other media in the editorial as well as commercial elements. The Hastings Study, before calling for action, concluded

“This first UK systematic review of the research literature shows that:

1. There is a lot of food advertising to children.
2. The advertised diet is less healthy than the recommended one.
3. Children enjoy and engage with food promotion.
4. Food promotion is having an effect, particularly on children’s preferences, purchase behaviour and consumption.
5. This effect is independent of other factors and operates at both a brand and category level.

This does not amount to proof of an effect, but in our view does provide sufficient evidence to conclude that an effect exists.” (p.3)

First we need to note here that the “advertised diet” is a myth. Hastings et al. presumably mean the collection of brands that advertise [on TV] but no one, not even a child, would imagine one should only eat and drink the brands advertised.

The Hastings Study provides useful comment on this matter of diet and surrounding programme material:

“A potential source of balance to this allegedly unhealthy dietary message promoted by television was identified by a medium scoring UK study (Dickinson 1997/2000). This study examined nutritional information contained in television programmes that children might equally be exposed to – the ‘programme diet’. This study found that in contrast to the advertised diet, the programme diet did not appear to be promoting unhealthy eating. Although in this study fruit and vegetables (as defined by the UK national food guide) were the least advertised food category (1.6%), they were the most portrayed food category in the programmes that surrounded these advertisements (32.8%).

Furthermore, the study found as many references to food were broadcast within television shows (52.4%) as during commercial breaks. While confirming all the concerns about the imbalance portrayed by advertisers, the author concluded that young people receive a more complex set of dietary information from television than
the studies looking only at advertisements acknowledge. (It should be noted that this UK study is unique in that it included data from the non-commercial carrying BBC television channels.)” (p.86).

Branded foods and drinks are not unhealthy in themselves and the Hastings Study wisely avoids the pejorative and inaccurate term “junk foods”. As the FSA routinely observes, balancing the diet as a whole is what matters. Coca Cola contains about the same amount of sugar per litre as fruit juice. The sugar in fruits, notably apples, has increased by about 50% over the last 30 years and the British Dental Association has reversed its health advice on apples (Leake 2004)\(^3\). In terms of obesity and calorific intake, switching from branded soft drinks to fruit juices would have no effect.

We should similarly be careful not to denigrate sugar coated cereals relative to their plain starch cousins since, in the latter case, children reach for the sugar basin. We are ultimately concerned with calorie intake, not the calories that come out of the packet.

Thus the issue is not whether promoting food to children has some effect but the extent to which it unbalances diets and thereby adds to children’s calorific intake. Although the FSA may not be concerned with output, the Hastings Study rightly considers the possibly confounding effects of the extent of television viewing.

All sides would wish to disentangle this problem since watching more TV ads clearly involves spending more time watching TV (and less time on other activities). One would have expected the balance of BBC and commercial channel viewing to have been used to isolate the ads from total viewing time, but the Hastings Study shows this not to have been done, perhaps surprisingly as they acknowledge.

The issue of whether food and drink promotion effects knock on from brands to categories and then to diets is central to this whole debate. Hastings et al. (2003a) rightly assemble the micro (see below) literature but they exclude the macro and theoretical literature on category effects.

Categories are a missing link in the Hastings Study: “no studies addressed this question directly” (p.172). Of the 13 studies in this section (Q4, pp.172-), five were for brands and therefore did not address the question even indirectly. The other eight defined “categories” by salt, sugar or fat content and not in the conventional sense of all crisps or all snack foods. The Hastings Study detailed report, which is admirably clear, shows that, in these experiments, children were preferring one product over another as distinct from one category (in the Hastings or the conventional sense) over another. They tended to prefer the product (brand) that had just been advertised but that takes us back to the earlier common ground and says nothing about categories, still less diets.

\(^3\) Robert Alexander McCance and Elsie M. Widdowson (*The Composition of Foods*, 6th ed., compiled by the Food Standards Agency, London: Royal Society of Chemistry, 2001) found that unsweetened orange juice had 36 calories per 100ml compared with 39 for Coca Cola.
To reach the conclusion that ads increase category consumption and total calorific diets, these would need to be the dependent variables, not brands. It would seem that the category and diet effects asserted in the Hastings Study conclusions are not well founded.

**Micro versus macro research**

The great majority of the research reported by both the Hastings Study and Young (2003) are small in scale, many of them experimental, i.e. micro. There is no problem with that but we also need to consider the evidence at the population level, i.e. macro. With over 50% of the UK population overweight (Kopelman 2004), we should be able to detect influences, or at least correlations, at the big picture level if only to counter concerns that micro-observations may not be representative.

UK ad spending on the food and drink categories has been falling in real terms over the past five years and is now approximately at 1982 levels. As a percent of all TV advertising the category dropped from 34% in 1982 progressively to 18% in 2002.\(^4\) If calorific intakes are also declining, as seems to be the case\(^5\), then there may be some correlation between the two but not, overall, with obesity which is sharply rising.

Of course, it is possible that opposing trends (anorexic and obese) may be happening at the same time but that should be open to segmental analysis as is discussed below.

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\(^4\) Data from *Advertising Statistics Yearbook*, 2004, Henley on Thames: WARC.

\(^5\) The National Diet & Nutrition Survey (NDNS) conducted in 1999, looked at the 4 to 18 year old age group, and found that: calorific intakes have been declining since the last survey carried out in the 1983 - for example, average daily energy intake went from 10.40 MJ in 14-15 year-old boys to 9.13 and for girls of the same age group it declined from 7.85 MJ to 6.90.

The mean energy intake was significantly lower (by around 10%) than estimated average requirements (EARs) for all the age and sex groups studied (and slightly lower than that found by an equivalent study in 1983). For example, 4-6 year old boys and girls received 89% and 91% of their EAR respectively, whilst the equivalent figure for 7-10 year olds were 91% and 92% respectively.

The National Family Food Survey 2000 also indicates a fall in the calorific intake for all age groups (including out of home consumption) - it shows that energy intakes, as a percent of estimated average requirements have remained more or less stable between 1985 and 2000 - in the range of 92% of estimated average requirements in 1995 to 98% in 1996 (in 2000 it was 94%). It also points to a decline in energy intake from 1872 kcal in 1990 to 1750 kcal in 2000 from foods eaten within the home. The same survey also indicates that the energy derived from foods eaten outside the home fell from 255 Kcal in 1996 to 230 in 2000 and that this roughly accounts for 12% of total energy intakes.

The results of the National Diet and Nutrition Survey and the Family Food Survey do take into consideration food eaten outside the home but are questioned because they are based on self-reporting of what is consumed and this may not always be an accurate reflection of what is actually eaten. However, the Family Food Survey in 2000 does say that under-reporting of foods eaten outside the home decreased.
The context of advertising to children
The question of context was illustrated by an exchange between Andrew Brown of the Advertising Association and Dr Susan Jebb of the Medical Research Council during the debate on 27 January 2004. Brown pointed out that certain breakfast cereals and their promotion were much the same as 40 years ago so why were they suddenly a problem. Jebb responded that lifestyles, i.e. the context, had changed, and the products and their promotion should also have changed so that the calories, in effect, caused less obesity. It is not strictly logical to blame either the foods [promotion] or the context: it is the interaction that matters and therefore one should not be considered without the other.

This issue also appears in the Hastings Study. Figure 8 (p.80), shows that television food advertising has declined in real terms since 1994, and in both real and current terms since 1998. Their text ignores this decline. Indeed their conclusion is simply “There is a lot of food advertising to children” which is neither precise nor indicative of trends. Since, as noted above, there is no reason to expect an increase in the share of children’s advertising so if the total is reducing, then children’s TV advertising is also reducing.

On the other hand, they claim (p.81) that television advertising is moving towards brands and away from generics. This barely supported assertion is puzzling since commercial advertising has always been for “brands”. They may be referring to a trend from branded ingredients, e.g. flour, to ready to eat foods and fast food outlets. This may be true but their evidence is solely Hawkes (2002) whose research was in emerging markets, where obesity is not serious problem, and not in developed markets such as the UK.

Looking at the food advertising and context interaction raises other cultural shifts over the past 40 years:

- The increase in the proportion of mothers who work and therefore look to television as a way to entertain children while they deal with housework. Likewise they are more able to pay for branded treats and ready to accede to children’s demands.
- Changing parental attitudes and behaviours, e.g. family snacking. Most observers, as noted by the Hastings Study, consider parental influence to be far more important than manufacturer promotion not least because parents are the financial gatekeepers. It is not obvious why this aspect is receiving so much less attention than advertising.
- The privatisation of school meals with a consequence increase in calorific content. This problem seems to have been addressed in Scotland.\footnote{Points raised at the FSA debate on 27 January 2004.}
- Modern children simply watch more TV, or play video games, than previous generations. This sedentary occupation at the least reduces the time available for more physical activities. The Hastings Study draws attention to this link with obesity (Dietz and Gortmaker 1985 in particular).
- Decline in physical activities in schools. This is not just a matter of playing
fields but the reluctance of teachers to take on this role especially when challenged by health and safety issues.

- Health and safety issues also affect getting to and from school which are less likely to involve walking or bicycling.

Hastings (2003), interestingly, puts the blame for unhealthy diets on out of town shopping which is inaccessible by the less well off sections of society: “In the last three decades there has been an exponential growth in out-of-town supermarkets, where cheap and varied food is readily available (Raven, Lang, & Dumonteil, 1995). However, 95% of shoppers drive to these outlets, and 30% of the United Kingdom’s poorest groups do not own a car. The result has been the creation of ‘food deserts’ where people simply cannot get access to a healthy diet. Similar trends are evident in the U.S.: In poor neighborhoods in New Orleans it is hard to avoid corner stores selling doughnuts, potato chips, or fried chicken, while genuine grocery stores are lacking. (The Washington Monthly, 2001).” (p.16).

In the light of this article written, one presumes, before the Hastings Study reported, more attention might have been given to the extent to which socio-economic or demographic factors moderate any advertising obesity relationship. The Hastings Study could, of course, only review what has been published and therefore this comment does not imply any criticism. Nevertheless it is odd that the few studies that recognized socio-economic factors, e.g. Atkin (1975) and Dietz and Gortmaker (1985), only did so in order to control for them, i.e. eliminate their effects.

Conclusions on the “reliable basis”
The first conclusion is that considering the effect of branded food and drink promotions outside their socio-economic and cultural context is unreliable. The charge by Paliwoda and Crawford (2003) and the response by Hastings et al. (2003b) may have been skirting this point but if so, they missed it. The Hastings Study was right to cast their net wide and include relevant research from all parts of the world. At the same time, each research finding needs to be understood in its context and does not necessarily transfer to another context. The effects of eating cereals in Peru will not necessarily be the effects in Wolverhampton and the effects in 1954 will not necessarily be the same in 2004.

The above review indicates common ground that children are targeted with high calorie foods and drinks and this category is upweighted but not to a great extent. Replacing branded items with foods and drinks perceived as healthy, e.g. apples and fruit juice, will not necessarily reduce calorific intake.

Similarly there are promotional effects at the brand, as distinct from product category, level but the evidence for promotional effects at the level of overall diet is thin at best. The Hastings Study itself says, just before detailing future research and conclusions, “Furthermore, 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.” (p.20). Now that is a “could” rather than a “has been” but it does, fairly, suggest that food and drink promotion in themselves are not harmful. As noted above, the Hastings Study assertions about category and diet effects do not appear to be well founded.
On the other hand, given the positive effects on promotional targets (brands), the Hastings Study would seem to be correct in drawing attention to the potential for using advertising to correct any dietary imbalance. Children do not want to be fat and their parents do not want them to be fat. Anti-smoking campaigns have shown how powerful health messages can be especially when directed to those who have good reason to be convinced. Even though Kopelman (2004) does not support pro-health advertising, it would seem to be a major candidate for consideration.

Promotional effects, in any case, need to be considered in context, as noted above, and also in the light of what is known generally about advertising effects and how it works, none of which was considered in the Hastings Study. But that does not preclude the FSA from considering these matters in a commonsensical way when reaching decisions.

**FSA treatment of academic contributions**

Paliwoda and Crawford (2003) comment on the way the FSA has publicised the Hastings Study (p.13) and Hastings et al. (2003) understandably responded that they were not responsible for how others discuss their work.

Few interested parties will read the Hastings Study in its entirety, or even partially, still less the other contributions. The FSA is not just a government department but one based on science and probity whose pronouncements need to cautious in all areas if they are to be given credence when reporting on immediate life threatening food safety issues.

Publicising a speech to the Westminster Obesity 2003 National Forum, the FSA release stated “what has changed in the last 20 years? Certainly not genetics. Possibly energy intake? And probably energy output. Eating habits have changed, and people are now eating more energy dense food – which probably work against the grain of the body’s natural body mass regulatory mechanism.”

The available research noted above is open to challenge but the data is collected consistently and therefore the trends, at least in the absence of any conflicting data should be taken as reliable. These show that calorie intakes are slightly declining. If this is the case and genetics and metabolisms are unlikely to be factors, at least in the short term, then it seems that reduced calorie outputs have more responsibility for obesity than inputs, whether branded foods or otherwise. Kopelman (2004) blames “wrong foods” but also the decline in physical activity. Since fizzy pop, as noted above, may not have significantly more calories than fruit juice, sweeping assertions based on whether foods are branded, rather than on their calorific content, should be avoided.

Turning to the Hastings Study, the FSA summary of the conclusions differs from the originals cited above, i.e. “Looking at those one hundred studies, the review concluded that, not only is most of the promotion and advertising for foods that are high in salt, sugar and fat – as groups like the Food Commission have been telling us that for years – but it confirmed that the way the food is promoted and advertised
doesn’t relate to its dietary consequences but focuses more on images of lifestyle, fun and associations with icons and celebrities.”

It hardly surprising that brand manufacturers use attractive images, rather than dreary recitals of dietary consequences, in their advertising. That has little to do with any link between advertising and obesity. The claim that most food advertising is for foods high in salt, sugar and fat is not substantiated (quantified) in the Hastings Study. Some of the largest advertisers, for example, are the food supermarkets who advertise fresh foods in particular.

Some might have concerns with the representation on the independent expert panel assembled to review the Hastings Study and Young (2003). The UK has about 600 mainstream marketing academics and advertising effects are an important topic for this discipline. None was chosen. Dr Marvin Goldberg is undoubtedly a top US social marketing academic but his freedom to evaluate the counter-arguments may have been constrained by the Hasting Study’s extensive reliance on his work and its over 160 favourable citations (Paliwoda and Crawford 2003). Nor would he have been as well placed as his British colleagues to evaluate the contextual interaction.

To extract these very few points from the FSA publicity is perhaps unfair and partial in itself but the intention is simply to underline the obvious need, highlighted by the Gilligan affair, for government bodies such as the FSA to treat intelligence, i.e. academic research, with scrupulous regard to the findings and not embellish those findings.

**Recommendations for policy development**

It is possible, that the problem of children’s obesity will disappear of its own volition. Nature takes time to adjust to changed life styles and environments. The Malthusian fear of population growth may have been justified at the time but the opposite alarm now exists in developed countries such as Italy and the UK seeks immigration to balance an aging population.

Two hundred years may be too long to wait and the level of current public concern by itself merits government intervention. The FSA needs to recommend what that should be. We should, however, recall that the national outcry over children’s anorexia, which was blamed on the portrayal of models in the media and remains a problem, has declined.

The range of options announced by the FSA in November 2003 were as follows:

- “Research
- Build on existing codes of practice through responsible promotion of food to children and parents
- Guidance to broadcasters, editors
- Addressing the balance
- Guidance to schools and other educational establishments
• **Guidance to other institutions that are under the control of Government or publicly funded**

• **Advice to Ministers, including to increase controls on promoting foods to children**

These were developed further in the FSA press release but they provide a framework for these comments roughly in order:

1. The Hastings Study, as qualified above, provides a reliable basis for some decisions but not all decisions. It would be sensible to proceed where there is common ground but commission further research to establish, across countries and time, what the primary causes of child obesity are and the likely consequences of further government intervention. Banning the cause of a condition does not necessary reverse the condition and therefore evidence from obesity reducing initiatives may be more important than identifying the causes. Research is also needed in the area of promotional and context interaction and segmental analysis to identify the socio-economic and demographic groups most in need of support. Finally we need clarification as to whether, so far as obesity is concerned, calories are calories or whether some calories are more obesity generating than others.

2. It would be sensible to work with the food, drink and advertising industries to review codes of practice and what these industries can do to alleviate the child obesity problem. This is not just promotion but labelling and the products themselves. It could well be, for example, that manufacturers should be encouraged to launch new food and drink brands to appeal to children and take the place of high calorie brands. Precedents for this exist with diet foods and drinks, like Diet Coke, and adult soft drinks such as Aqua Libra, Purdeys and Red Bull that were launched to replace the social need for alcoholic drinks. The requirements of working mothers should be especially considered.

3. Few would quarrel with the general need for the FSA to provide guidance of balanced diets and how they can be promoted.

4. As Scotland appears to have demonstrated, schools have a crucial role here, not just school dinners but in physical activities and getting to and from school.

5. Perhaps most directly, the government should consider pro-health promotions targeted at the socio-economic and demographic groups most in need of support. Children do not wish to be fat and nor do their parents wish them to be.

This paper concludes, as the Hastings Study itself does, that the positive aspects of promotion may prove a major part of a successful programme for child obesity reduction.
Appendix

Concerns with the Hastings Study

The Hastings Study is a massive literature review and, like any such work, limited by the research available for review. It does not, and can not, answer all the questions that the FSA would like to be determined. Paliwoda and Crawford (2003) have raised issues of research design and objectivity which do not need repetition here. Some of them have been addressed by the Hastings et al. (2003b) response. Other concerns are as follows:

1. The opening narrative review on marketing is relevant and although it might not convince every marketing academic that it is an impartial representation of the state of knowledge, that task is probably impossible.

2. The justification for the second narrative review, “The Promotion of Alcohol and Tobacco to Young People”, seems a little thin. In the first place manufacturers of tobacco and alcohol brands would deny that they do promote these brands to young people. Depending on what one means by “young” it is illegal to do so and the ASA vigorously polices its code. What actually happens is that the general promotion of these products is seen by young people, since they live in the same marketplace, but the distinction is important.

3. The evidence on the link between total tobacco consumption and advertising is more equivocal than the Hastings Study suggests see, for example, Duffy (1996) and Lancaster and Lancaster (2003). As the Hastings Study notes, banning ads does not in general reduce consumption which itself raises doubts about the strength of any link, see also Stewart (1993).

4. So far as alcohol is concerned, the Hastings Study omits the major work in the area, namely Fisher (1993) whose book exhaustively covers the literature. After over 150 citations and careful analysis of this comprehensive material, Fisher's "final scorecard" reads, in part, "advertising appears to have a very weak positive influence on consumption and no impact on experimentation with alcohol or abuse". Others have concluded that promotion affects brands and categories when they are narrowly defined but not alcohol as a whole (Ambler 1996). Calfee and Scheraga (1994) were surprised to find, in France, "a strong inverse relationship between advertising and sales" with little or no theoretical reason to expect it. In fact the historical French alcohol consumption exactly mirrors the replacement pattern: consumption of large amounts of vin de table shifted to smaller quantities of advertised beer and wine brands.

5. It seems possible that the real purpose of these tobacco and alcohol reviews was to frame the subsequent food promotional review in a negative manner.

6. Moving to the main study, there are concerns about whether conclusions are correctly drawn, for example: “Effects were sometimes inconsistent and were not found in all the studies, but were found in sufficient studies to suggest that food promotion can, in some contexts, influence children's food consumption.” (p.148). Of the 11 studies reported immediately above, only two experimental
studies (both by Gorn and the omnipresent Goldberg – see Paliwoda and Crawford critique) provided that evidence and 9 did not. One found contrary evidence and three dealt with snacking during TV viewing (a likely time to snack) without any reference to advertising.

7. As noted in the main paper, the argument for advertising affecting category volumes and then total diets is tenuous. The literature on this subject is excluded, e.g. Kyle (1982), and in the case of chocolate confectionery in major European markets, including the UK, there appears to be no link between advertising and sales volumes (Eagle and Ambler 2002). Now it is certainly possible that advertising increases sales to young families and that is offset by declining sales to the elderly but that case needs to be made.

8. Although the Hastings Study casts its net very widely, their conclusions rest, as Paliwoda and Crawford (2003) point out, on a very few, perhaps only four, researchers who are cited multiple times and whose work is not entirely consistent.

9. Finally, the Hastings (2003b) response, which seemed to confuse Paliwoda and Crawford with the Advertising Association, states “the ultimate test of a literature search is whether or not it misses any key papers. It is interesting to note that the Advertising Association do not produce any, either in their own review (Young 2003) or this critique of our review; nor have any emerged since the report was released, despite the unprecedented publicity it has received.” (p.4). Comparing the references attached to this paper reveals many additions and this paper has not involved any literature search.
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