

The logo for 'AD BRAKE' features the word 'AD' in a smaller font size followed by 'BRAKE' in a larger, bold, blue sans-serif font. To the left of the 'A' in 'AD' is a small cluster of colorful dots in shades of blue, pink, and grey.

# AD BRAKE

## PRIMARY SCHOOL CHILDREN'S PERCEPTIONS OF UNHEALTHY FOOD ADVERTISING ON TV

## REFERENCE

This report should be referred to as follows:

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The authors are solely responsible for the content of the report.

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This research was funded by the Policy Research Centre for Cancer Prevention, Cancer Research UK. For more information please contact [PRCP-team@cancer.org.uk](mailto:PRCP-team@cancer.org.uk)



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# FOREWORD

Addressing chronic diseases like cancer is one of the biggest challenges of our age. A key element of this is prevention - working to ensure that we minimise exposure to risk factors that can contribute to the development of cancer. Most people know that smoking is a leading preventable risk factor but there is far less awareness about the links between cancer and obesity. Yet obesity ranks as the second largest preventable cause of cancer after tobacco use. In my role as Cancer Research UK's Cancer Prevention Champion, I'd like to see more action to prevent excessive weight gain before it starts. This includes in children, as people who gain too much weight in early life are far more likely to be obese adults.

A common view is that weight gain is largely driven by personal choice and if people just had more self control, they wouldn't become overweight or obese. The decisions we make for ourselves are important, but things in our environment also affect our choices. This is particularly the case for children who can't always control what they are exposed to, or be as critical about what they see and hear, as adults may be. This report examines one of the key aspects of children's environments that influences behaviour – advertising and promotion.

As the report shows, children in the UK are exposed to the marketing of unhealthy foods high in fat, salt and sugar on a regular basis. They see these on television, online and in the cinema. These adverts are appealing and memorable to children. The participants in the study had good recall of particular adverts and also outlined how viewing these ads can prompt them to want to eat unhealthy foods, and as well as asking for them at

home and in shops and supermarkets. Seeing and recalling adverts was linked to hunger, desire to buy these foods and requests for adults to buy them.

This research shows that current regulations on advertising of these foods are not protecting children. More needs to be done to break the link between this type of exposure and consumption of unhealthy foods, which can contribute to children becoming overweight or obese and thereby increase their risk of developing future cancers if they remain overweight. This study and other evidence supports the case for a pre-watershed ban of unhealthy food television advertising in the UK. This is why Cancer Research UK is calling for this policy change. We need to do all we can to prevent cancer, and by starting early in life we have the best chances of success in the longer term.

This report was commissioned by the Policy Research Centre for Cancer Prevention. The Centre is part of Cancer Research UK's commitment to produce high quality research, building the evidence base to inform policy development on topics relevant to cancer prevention, including obesity.



**Professor Linda Bauld**

Director of the Institute for Social Marketing, University of Stirling and Cancer Prevention Champion, Cancer Research UK

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# EXECUTIVE SUMMARY

*"I asked my mum if I could have it and she said 'no' and I was annoyed and I kept trying and she finally said 'yes' and I got to go to the shops to get it" Girl, Primary 5*

Being overweight or obese is the single biggest preventable cause of cancer after smoking and is associated with 10 different types of cancer and 18,100 cancer cases a year in the UK<sup>1, 2</sup>. If current trends in obesity continue, it could lead to 670,000 new cases of cancer over the next 20 years<sup>3</sup>. The total economic loss from obesity to the UK was calculated at £49 billion in 2012<sup>4</sup>.

Children who are obese are more likely to go on to become obese adults<sup>5</sup>. In order to combat the rising impact of children's obesity on the health of the nation, a range of measures are needed<sup>6-8</sup>. A comprehensive childhood obesity strategy is required which includes measures to address: food advertising and promotion, a sugary drink tax and product reformulation.

## HOW ADVERTISING IMPACTS ON CHILDRENS' BEHAVIOURS

Research has shown that promoting of food products to children can influence their behaviour in a number of ways, including

their food preferences, purchase behaviour and food consumption<sup>9-14</sup>. Evidence also suggests that junk food<sup>a</sup> advertising can result in children 'pestering' their parents, prompting more purchasing of unhealthy foods that would otherwise not have been bought<sup>15, 16</sup>.

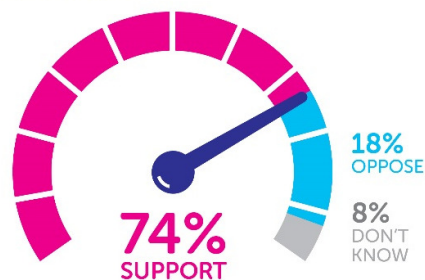
We need regulations to stop junk food advertising on TV before the 9pm watershed to prevent children being exposed to these adverts. Restrictions already exist during children's TV shows<sup>17</sup>. However most children watch television between 7pm and 8pm<sup>18</sup>, when family programmes are typically shown and the current restrictions do not apply. Closing this loophole would more than halve children's exposure to advertising<sup>11</sup> and help change children's behaviour towards unhealthy foods.

## WHAT GOVERNMENT SHOULD DO

**Restrict junk food advertising on TV until after the 9pm watershed to reduce children's exposure to junk food marketing**

### PUBLIC BACKS ACTION TO TACKLE OBESITY

**Q** Would you support or oppose introducing a ban on junk food advertising on TV before the 9pm watershed?



Source: YouGov survey, sample size of 1,774 UK adults  
LET'S BEAT CANCER SOONER  
cruk.org



<sup>a</sup> Food high in fat, sugar and salt (HFSS)

# JUNK FOOD TV ADVERTS RESULT IN CHILDREN'S "PESTER POWER"



## KEY FINDINGS

This research shows that, despite current regulations, children are still engaging with junk food advertising on television:

- Children are watching junk food adverts in the evenings and on weekends during family programmes, exposing the loophole in the current legislation.

*"I watch TV with my dad about seven o'clock because my, because my dad's not there in the day and I'm at school and that's the only times we really watch it together." Girl, Year 4<sup>b</sup>*

- TV advertising results in children pestering their parents that can lead to the purchase of junk food.

*"If I've seen it on an advert, and I've seen it in a shop I think to myself 'Is that, is that already in the store? Because I really want that'... and I said: 'Mum...' Boy, Year 4<sup>b</sup>*

- Children have a good level of nutritional knowledge, however they find that watching junk food advertising tempts them into eating unhealthy foods.

*"I don't normally think of [sweet] but when I see [sweet] I just want them!" Girl, Year 6<sup>b</sup>*

This study shows the impact of these adverts over time.

**Immediate effect** – adverts can make children hungry and want to eat junk food.

*"It kind of makes you feel like hungry because you think...when you see something tasty on TV it makes you 'Oh I wish I had that'" Boy, Year 6<sup>b</sup>*

**Medium term effect** – after seeing the adverts some children then pester their parents to buy junk food.

*"My little sister, because she saw [sweet advert] and went straight to my mum and said: "Mummy can I please buy this? Can I please buy this? Can I please buy this?" Girl, Year 6<sup>b</sup>*

**Long term effect** – in the supermarket children can remember the adverts and then want to buy those specific products.

*"You maybe see an advert and then you like forget about it ... but then you see it in the shops ... and you remember the advert and like you say "Oh are we going to have that?" Boy, Primary 5<sup>c</sup>*

## METHODOLOGY

Cancer Research UK commissioned the National Centre for Social Research to investigate how children engage with advertising of unhealthy food on television. This qualitative study was conducted in 25 focus groups across six UK primary schools.

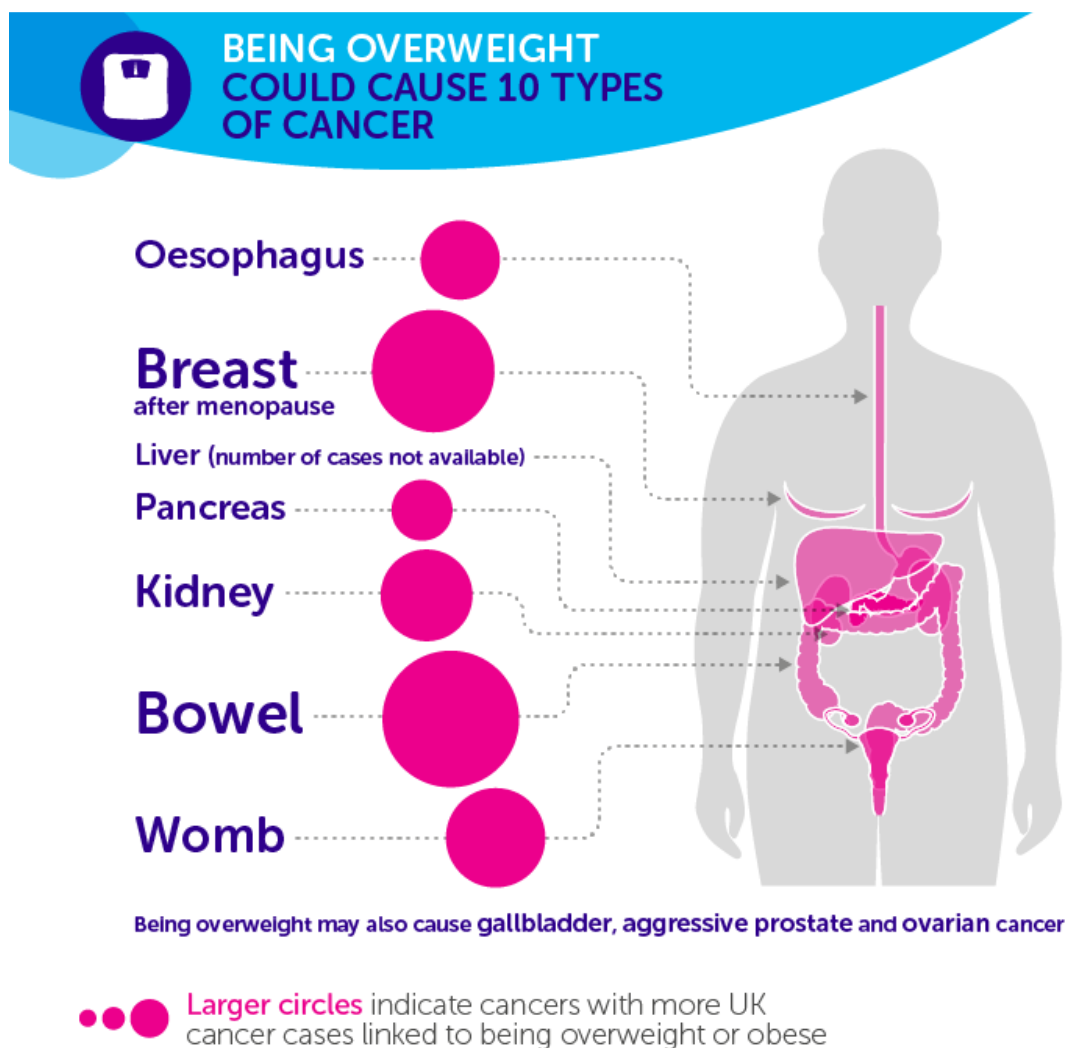
<sup>b</sup> English school year

<sup>c</sup> Scottish school year

# 1 INTRODUCTION

## 1.1 BACKGROUND

Being overweight or obese is the single biggest preventable cause of cancer after smoking and is associated with around 18,100 cancer cases a year in the UK (about 1 in 20 of all cancer cases)<sup>1</sup>. Obesity can cause up to ten types of cancer<sup>2</sup> (Figure 1). Cancers with the largest number of cases in the UK linked to being overweight or obese are breast, bowel and womb cancer<sup>1</sup>. Furthermore, a recent modelling study estimated that if current trends of overweight and obesity continue, it will lead to a further 670,000 cancer cases over the next 20 years<sup>3</sup>. Children who are obese are significantly more likely to go on to become obese adults<sup>5</sup>, and therefore be at higher risk of developing cancer.



**FIGURE 1: OVERWEIGHT AND OBESITY IS LINKED TO TEN TYPES OF CANCER**



The number of children who are obese has increased over the past 20 years, with around 30% of children in England aged 2-15 overweight or obese<sup>19</sup>. The figures in the devolved nations are comparable over recent years, with 34% of 2-15 year olds overweight or obese in Wales<sup>20</sup>, 28% in Northern Ireland<sup>21</sup> and 31% in Scotland<sup>22</sup>. Children in more deprived areas are more than twice as likely to be obese than those in more affluent areas, and those in urban areas have a significantly higher risk of obesity than those in rural areas<sup>19</sup>.

In order to combat the rising impact of childhood obesity on the health of the nation, a multi-faceted approach is needed. There have been a number of reports reviewing the evidence for different policy interventions to address this problem<sup>4, 6-8</sup>. All of these conclude that childhood obesity is a complex, systemic issue that cannot be fixed by a 'silver bullet', but instead a wide-ranging programme is needed that incorporates food advertising and promotion, fiscal measures and product reformulation amongst other measures. In March 2016, the UK Government announced plans to bring in a soft beverages industry levy and is expected to publish their strategy for tackling childhood obesity later this summer (2016).



**FIGURE 2: TACTICS USED TO PROMOTE FOOD PRODUCTS TO CHILDREN**

There are numerous tactics used to promote food products to children, including promotional characters, movie tie-ins, celebrity endorsements and toy giveaways (Figure 2). And research has shown that this marketing to children can influence their behaviour in a number of ways, including their food preferences, purchase behaviour and food consumption<sup>9-12</sup>. Acute exposure to food advertising has been found to increase food intake in children but not in adults<sup>13</sup>. Furthermore, there is evidence to suggest that this can result in children 'pestering' their parents, prompting the purchasing of more unhealthy foods<sup>15, 16, 23</sup>.

Pester power can be defined as 'a child's ability to pester their parents into buying a certain product or brand'<sup>24</sup>. A 2016 European-wide study into pester power showed an increased likelihood of children who asked for items seen on television being overweight<sup>25</sup>. Moreover, parents from households of a lower socio-economic group can be more susceptible to pester power. This was illustrated by a higher level of agreement with the statement "I buy what the children want" in parents from the lowest socio-economic group (DE, agreement = 51%) as compared to the highest (AB, agreement = 41%)<sup>26</sup>.

In 2016 the World Health Assembly accepted the findings of the Commission on Ending

Childhood Obesity (ECHO)<sup>8</sup>. This report highlighted the need to decrease the intake of unhealthy foods in children by reducing “the exposure of children and adolescents to, and the power of, the marketing of unhealthy foods”. There have been attempts at voluntary initiatives to change children’s exposure to marketing of high fat, sugar and salt (HFSS) foods<sup>27</sup> (See Box 1); for example the EU pledge in 2012 to only show adverts to children under 12 that have met their own nutrition criteria<sup>28</sup>. However research has shown that statutory regulation, as opposed to industry self-regulation alone, will have more of an impact in reducing children’s exposure to HFSS food marketing; as well as having a wider impact to help change social norms around childhood dietary behaviours<sup>14</sup>.

### **BOX 1: HFSS FOODS**

**HFSS foods are foods that are high in fat, salts and sugar, based on the nutrient profiling model by the Food Standards Agency (FSA) and Ofcom. HFSS is the technical definition of what is commonly known as junk food.**

In the UK, current regulations have been in place since 2009 to prevent advertisements for HFSS products being shown in or around programmes specifically made for children<sup>17</sup>. However children watch the most television between 7pm and 8pm<sup>18</sup>. During this time programmes aimed at adults and families are typically shown and these programmes are effectively exempt from the current restrictions.

To date there has only been limited research exploring how British children engage with HFSS advertising on television since the current restrictions were put in place. A review by Ofcom into the overall exposure of children to HFSS advertising on television showed a 37% reduction following the new regulations<sup>27</sup>. However a study looking at just the Tyne Tees region of the UK found no difference in children’s exposure to HFSS television adverts between six months before, and six months after, the regulations were introduced<sup>29</sup>. In 2014, a study of primary school children in North West England found that exposure to television advertisements for so-called ‘healthy’ fast food meal bundles promoted a liking for fast food in general but did not drive healthier choices in children<sup>30</sup>.

However more evidence is needed to assess the impact that current levels of HFSS advertising on television has on obesogenic behaviours in children.

## **1.2 RESEARCH AIM AND OBJECTIVES**

The main aim of this research study was to explore how primary school children experience HFSS food advertising in the UK.

The main objectives of this qualitative UK-wide primary school study were to:

- Assess the pupils’ views of HFSS adverts in general, and their perceptions of any impacts these adverts might have on themselves and their peers;
- Identify what factors pupils find most and least appealing about HFSS television advertising;
- Investigate what associations, if any, the pupils make with the HFSS products being advertised;

- Ascertain which programmes and times of day pupils tend to view, or be exposed to, HFSS adverts (e.g. children/family programmes);
- Find out which groups the pupils feel the adverts are targeted at;
- Explore the nutritional knowledge of the pupils.

In addition, the pupils were asked for their views as to how healthy the HFSS foods being advertised are, and their likely impacts on health in the longer term.

This study will also be used to generate pilot data for the design of a larger study to investigate the factors that impact on childhood obesity in the UK.

## 2 METHODS

### 2.1 RESEARCH DESIGN

The aim of the study was to learn more about how primary school children experience HFSS food advertising in the UK. A qualitative approach was adopted in order to gain these in-depth perceptions. In summary, 25 focus groups were conducted in four primary schools in England and two primary schools in Scotland during May 2016.

### 2.2 SAMPLING

A qualitative purposive sampling approach was taken in order to identify the schools, and in turn the pupils, for the research. Sampling characteristics of interest for schools and their pupils were;

- Primary schools based in both England and Scotland;
- Primary schools based in different localities<sup>d</sup>;
- Demography;
  - Pupils of different ages (aged 8-10 in Year 4 (English) / Primary 5 (Scottish), and aged 10-12 in Year 6 (English) / Primary 7 (Scottish) classes)
  - Gender (typically single sex groups).

See Appendix 7.1 and 7.2 for further details on the schools.

### 2.3 SPECIALISED FOCUS GROUPS

Due to the age groups involved in the research, specialised focus groups ('friendship mini-groups') were convened. These groups are composed of young people comfortable in each other's company, typically four to five participants per group, and therefore willing to share their views in a group context. They are frequently single sex in composition. The researchers have to work closely with the school contacts in order to recruit participants for these groups. School contacts are briefed in order to recruit small groups of pupils who will be able to share views in each other's company, and importantly not to over-prepare the participants in order that they attend groups offering fresh insights and not socially desirable responses. In this instance, potential participants were informed that the group discussions would cover issues such as their views of healthy and unhealthy eating, and food and drink adverts they may have seen previously.

### 2.4 RECRUITMENT

Once the sampling approach had been agreed with Cancer Research UK, the research team approached schools in England and Scotland that corresponded to the sampling criteria. Four primary schools in England (Hertfordshire, Northamptonshire, and two in Oxfordshire), and two primary schools in Scotland (City of Edinburgh and North Lanarkshire) agreed to take

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<sup>d</sup> e.g. higher and lower levels of deprivation (determined by deprivation indices of catchment areas, and also by percentage of pupils entitled to free school meals); urban versus small town/rural communities; schools with different levels of ethnic diversity

part.

Head teacher approval was gained before school staff contacts (most typically the class teacher) were fully briefed, in order for them to identify four to six participants for the mini-groups. Prepared information/opt-out consent sheets were circulated to the pupils' parents or carers. These information/consent sheets informed the pupil and their parent or carer what participation would involve, that it was entirely voluntary and that the results would not include any identifiable information about the school or the participants.

## 2.5 FIELDWORK

Four to five mini-groups were conducted in each primary school (typically one male and one female group in both Year 4/Primary 5 and Year 6/Primary 7), with 25 groups conducted in total, involving 137 pupils.

Given the school day and the ages of the participants (8-12 years old), the facilitators were typically allowed a maximum of 30-35 minutes to complete an individual mini-group.

## 2.6 INTERVIEW TOPIC GUIDES

NatCen developed the focus group topic guide following discussions with Cancer Research UK around which high in fat, salt and sugar (HFSS) foods to focus on and which adverts to use as stimulus materials in the groups (see Appendix 7.3).

The topic guide covered issues such as:

- Pupils' usual eating practices and favourite foods and drinks;
- Pupils' exposure to television and other advertising sources, as well as their awareness, knowledge and views of current HFSS adverts;
- After showing examples of HFSS adverts:
  - Prior awareness of the advert
  - Immediate reaction to advert: positive and negative thoughts
  - The messages the adverts are trying to get across
  - Which age groups would find the adverts most appealing
- Perceptions of impact of these adverts on the attitudes and behaviour of pupils, parents and carers in shops and within the family home;
- Whether they think these adverts are a good or bad idea, and what they would change about such adverts, if possible, in the future.

## 2.7 SELECTED ADVERTS

A list of HFSS adverts which had been shown on television up to 9pm in the preceding six months was collated. This list was further refined in order to identify adverts which were thought to be both appealing to younger people and also screened to coincide with family entertainment programmes.

Cancer Research UK and the research team reviewed the list, and removed adverts which, for example, involved seasonal themes (Christmas or Easter) and had the potential to divert the young people from the main issues of interest. Six adverts were identified which were thought to be appropriate for use in the mini-groups and covered:

- Sweets
- Crisps
- Fast food and meal deals.

Due to time constraints only two adverts were shown per group. The adverts shown in each group are outlined in the Appendix 7.4.

## **2.8 INCENTIVE**

The six primary schools that took part in the research each received a £100 donation to school funds.

## **2.9 DATA ANALYSIS**

All of the groups were digitally recorded with the consent of the participants. They were fully transcribed. These transcripts were then coded and summarised using an analytical framework based on the key research questions for the evaluation and the key themes discussed by the mini-group participants. This process of coding and summarising facilitates systematic analysis of the range of experiences and views expressed, similarities and differences between and within groups, and emergent explanations for particular experiences or opinions.

## **2.10 ETHICS**

Ethical scrutiny of the project was provided by NatCen's Research Ethics Committee, which includes senior NatCen staff, external research experts, and external professional experts, and is consistent with the requirements of the Economic and Social Research Council (ESRC, 2005, updated 2015) and Government Social Research Unit (GSRU, 2005) frameworks. Ethical approval was granted in April 2016.

# 3 PRIMARY SCHOOL PUPILS' EATING HABITS AND NUTRITIONAL KNOWLEDGE

The main aim of the discussion groups with primary school children was to gather their views of HFSS TV food advertising and the perceived effects of its exposure. However, in order to do so, it was important to first gain a better understanding of participants' eating habits and nutritional knowledge.

## 3.1 FAVOURITE FOODS AND EATING HABITS

Questions around children's favourite foods and eating habits were used as a warm-up. These often yielded wider conversations about what constitutes healthy and unhealthy foods which are discussed in the following sections.

Reflecting on some of their favourite foods, participants mentioned a range of homemade meals, processed foods (e.g pizza), but also fruits. Some participants mentioned liking the texture of certain foods, such as pasta, and liking rich, or 'fresh'-tasting foods. The reasons given for liking certain foods were linked to taste, notions of satiety, and also healthiness. This often led to participants describing how these foods were good for them; such as their belief that orange juice containing vitamin C helps to counteract colds<sup>e</sup>.

Fast foods and fizzy drinks were also mentioned; although there was a widespread awareness that consumption of these should be limited. On the whole, HFSS foods were viewed more as occasional "*treats*" that should be eaten only once a week or even less. However, it wasn't clear how often participants did actually purchase and consume HFSS food products: a few reported eating crisps on a daily basis while others said they would go to a fast food restaurant about once or twice a month.

## 3.2 EATING HABITS AT HOME AND OUT WITH FRIENDS

Following on from discussions around favourite foods, participants were asked about their eating habits at home, i.e. what sorts of food they ate at home and whether they tended to eat the same as their parents/carers. There was no clear pattern, with some mentioning eating the same foods as their parents and families, while others explained they did not; either eating different meals altogether, or eating the same meals but at different times. For example, many participants said they did not know what one or both of their parents ate for breakfast as they would have eaten before them. Participants, however, tended to eat more similarly to their family members at the weekend. Overall, there was a general view that the food consumed at home was mostly healthy.

Participants were also asked about what they tended to eat while socialising with friends,

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<sup>e</sup> The current evidence suggests that vitamin C does not prevent colds but might slightly reduce the length and severity of colds <http://www.nhs.uk/Livewell/coldsandflu/Pages/Preventionandcure.aspx>

whether this was at parties, while out together, or at home. Most recognised that the food consumed tended to be unhealthy, but also that it sometimes tasted better than foods they perceived as being healthy. In addition, several mentioned the association between unhealthy foods and enjoying themselves.

***“I think we usually have unhealthy things because usually when you hang out it's usually some kind of party, and I'm not really sure why. It's just something about food which is unhealthy for you just sometimes gives a better time. Just you know it's not very good for you.”***

(Year 6 boy from Northamptonshire)

Yet, there was much discussion about how such foods were viewed as a rarity, mostly eaten for a special occasion (e.g. birthday parties, sleepovers etc.).

***“You don't normally get to go out with your friends, so it's nice to have something unhealthy.”***

(Year 6 girl from Northamptonshire)

Nonetheless, it is interesting to note that a few were keen to point they did not always have unhealthy foods when with friends. One Primary 7 boy from North Lanarkshire, for instance, explained how he occasionally bought sandwiches ***“to just not always have the unhealthy option”***. Other participants mentioned sometimes eating salads or substituting unhealthy food and drinks for healthier options.

***“Last time I went [to a pizza restaurant] ... I put mushrooms on it, I put peppers on my pizza, so I was making it a bit healthier ... and I had orange juice instead of like [a fizzy drink], which has a wee bit like sugar, but is also better coz it has vitamins.”***

(Primary 5 boy from Edinburgh)

### 3.3 NUTRITIONAL KNOWLEDGE

On the whole, participants had a good understanding of what constitutes a healthy and unhealthy diet. Unsurprisingly, the older age groups (Year 6 and Primary 7) across both genders tended to have a more advanced understanding and nutritional knowledge (for example, mentioning processed foods, natural sugars in fruit and foods which give you energy). Year 6 and Primary 7 groups also often discussed the importance of eating a balanced diet; whether this was understood as eating something healthy to counterbalance something unhealthy they ate, or ensuring they eat foods with a range of nutrients.

***“You need a balance of fat, you need a balance of sugar, you need a balance of things like that. You can't have a straight diet where you can just have carbs, you can just have protein, you need a balance of everything to stay healthy.”***

(Year 6 girl from Hertfordshire)

Although less sophisticated, there was also arguably a good level of nutritional knowledge in the younger participant groups. For example, it was said in a Primary 5 Edinburgh girl group that ***“you do need fat in your body to be alive”*** while others mentioned calcium being good for your bones and how reducing the salt and sugar content of certain foods can make them healthier:



***“Taking away salt and sugar makes a big difference to some foods; like tomato sauce, they've got salt and sugar but if you take it away it's just like vegetables and tomatoes, fresh.”***

(Year 4 girl from Hertfordshire)

While participants agreed that HFSS foods tasted good, they were well aware that their over-consumption had negative health impacts, with a Year 6 girl from Oxfordshire arguing that ***“It is not nice to your body, but then it's nice for like your tongue”***. Sugar was mentioned as making people ‘hyper’ but then suffering a ‘crash’, although this effect was not always viewed negatively.

***“I've noticed that [fizzy drink] makes me really hyper, and it just makes me like be able to do stuff better. I don't know why.”***

(Year 6 boy from Hertfordshire)

Some foods, such as carbohydrates, curries, cheese and meats were seen as being both healthy and unhealthy.

***“Meat is good for your body, but it can be quite fattening.”***

(Primary 7 boy from North Lanarkshire)

### **3.4 UNDERSTANDING OF THE IMPACT OF HEALTHY AND UNHEALTHY DIETS**

Participants were then asked how the foods they had spoken about as either healthy or unhealthy would affect them in the longer term. The general consensus was that people having a healthy diet would tend to live longer, be more active and fit and would not get as ill as people who ate an unhealthy diet. It was also suggested that having a healthy diet would mean people would find it easier to limit their dietary intake. The positive influence of exposure to healthy foods from early childhood onwards was also cited.

***“If you've been brought up with a healthy diet you'll probably stick to that healthy diet...”***

(Primary 7 girl from North Lanarkshire)

Participants mentioned how eating healthily made them feel good about themselves, whereas eating less healthy options could have the opposite effect.

***“Sometimes when you have lots of healthy things ... it does this to me, it makes me feel more happier and refreshed (sic). And if you just have something unhealthy, sometimes it can make you feel a bit like dull or a bit ... not weakened, but like less energetic.”***

(Year 6 boy from Northamptonshire)

Again, the importance of having a balanced and varied diet was discussed, with participants recognising that eating a combination of the food groups was beneficial.

***“You should always have a mixture, ’coz if you didn’t have any sugars, you wouldn’t get the sugar you need, so you shouldn’t just have... ‘Oh, salad is healthy. I’ll just have salad all the time’, it doesn’t work, so you should probably mix salad up with like chicken or fish to...’coz if you’re just eating salad every day ’coz you think it’s healthy, you’re not getting all the things you need to...be healthy.”***

(Primary 5 boy from Edinburgh)

Participants thought that those with unhealthy diets were more likely to be inactive, housebound and unwell.

***“If you don’t eat healthy stuff then you get fat, all you’ll want to do is sit on the couch and do nothing.”***

(Year 4 boy from Oxfordshire)

Other perceived consequences of having an unhealthy diet included people having a shorter life expectancy; putting on weight and subsequently losing their self-confidence; losing teeth; being tired all the time; spending lots of money on food, and making people more likely to develop diabetes, become obese and have heart problems. It should be noted that a perceived increase in the likelihood of developing cancer was also linked to unhealthy eating in three discussion groups.

Some also discussed how dieting could be unhealthy, especially if carried out for too long, and that this was not something that children should be considering.

***“It’s good to be on a diet. ... It’s good to do it for about a couple of days or a week or something, but probably not for long ’coz then all your sugar will be like gone and then you will become quite weak even though you ... are eating healthy food.”***

(Primary 5 girl from Edinburgh)

### **3.5 WHERE PARTICIPANTS’ NUTRITIONAL KNOWLEDGE COMES FROM**

Participants explained how their nutritional knowledge was mainly gleaned from their parent/carers, and in some instances, older siblings. It is worth noting that teaching within school was hardly mentioned.

A few learned about food through cooking with their parents, and most through parental encouragement to avoid eating unhealthy foods. Some were also encouraged to examine the nutritional information either online or on food packaging.

***“My mum and dad are always talking about it. Like if there’s something that I thought ‘Oh, that looks good!’ they make me look at the packet, the ingredients and then if glucose or sugar is in the top 3 or 5 or something they say ‘Oh no, put it back’ or if it’s not too bad we will get it. But they normally look at it first and they either put it back or they put it in the trolley.”***

(Primary 7 girl from Edinburgh)

Interestingly, a few participants mentioned looking at product ingredients and nutritional information, both on food packaging and online, independent of their parents.

Other sources of nutritional knowledge cited were books, YouTube videos and television

(through TV cooking shows or TV programmes exploring unhealthy eating).

***“I’ve watched some people on TV that ate too much junk food and then it’s really bad for them.”***

(Year 4 boy from Northamptonshire)

# 4 PRIMARY SCHOOL PUPILS' TV VIEWING HABITS AND VIEWS ON ADVERTISING

After exploring participants' eating habits and nutritional knowledge, this chapter examines their television viewing habits, as well as their views and exposure to television advertising, including HFSS advertising. The aim here was mainly to ascertain recollections on what programmes, and at what times of the day, participants were exposed to food adverts and what they found appealing and unappealing about food advertising, and HFSS food advertising in particular.

## 4.1 TV VIEWING HABITS AND VIEWS ON TV ADVERTISING

Participants discussed a range of viewing habits, but in general reported watching television every day, at various times on weekdays and at weekends, though not necessarily for prolonged periods. They also watched television in the evenings, typically watching family entertainment programmes, soap operas and films. A few pupils mentioned rarely watching television at all, while some watched programmes on their tablets or on their computers.

Participants reported that they were most commonly exposed to adverts when watching television. However, exposure could also occur at the cinema or while viewing online videos or catch-up programmes, and while visiting games or music streaming websites.

They mentioned viewing adverts typically around 'dinnertime', in the evenings, and on channels not predominantly aimed at younger viewers (described as 'adult channels').

***"Mostly at night – like after 4 / half 4 – the adverts, 'coz adults are watching. (It doesn't tend) to be a lot in the children's programmes. It's mostly on adults' channels. Or it's like if it's on children's channels, it's usually like about like Peppa Pig and things like that."***

(Primary 5 girl from North Lanarkshire)

***"We watch telly and then we turn it off to go to bed so they're normally on around...from 7 up to 9."***

(Year 6 girl from Hertfordshire)

***"I watch some of the Britain's Got Talent so...that's one of the main times I watch TV."***

(Year 6 girl from Hertfordshire)

***"Sometimes before I go to bed I watch ... TV in my room."***

(Primary 5 girl, North Lanarkshire)

***"I watch TV with my dad about seven o'clock because my, because my dad's not there in the day and I'm at school and that's the only times we really watch it together."***

(Year 4 girl from Oxfordshire)

***"Well it's usually on the weekdays we would do school or work, come back in and then get things done, get the house clean, and around about seven o'clock till eight or nine, we would watch TV. But on the weekends, we would do – in the morning while eating our breakfast and throughout the day we wouldn't, and then again at the evening."***

(Primary 5 girl, North Lanarkshire)

Some participants also remembered viewing some specific food adverts before (and during half-time breaks in) football matches on Saturdays and Sundays.

## **4.2 GENERAL VIEWS ON ADVERTISING**

There was a clear dichotomy between participants who enjoyed most, or specific adverts, and those who found the adverts 'annoying' and 'boring' and who would usually try and avoid them when watching television. The entertainment value of the adverts was a key determinant as to whether the participants found them memorable, with humorous adverts being particularly appealing.

***"I like the fun colourful ones, like representing maybe food or a new toy. But say if it's like medical ones, I'll always fast forward them. I don't really like watching the kind of more sad ones."***

(Primary 7 girl from North Lanarkshire)

There was agreement among participants that if an advert 'looks cool', they would tend to watch it. Participants mentioned enjoying a range of adverts: for food products (see section below), video games (this was mentioned in the male groups), or for supermarket and car insurance comparison websites.

Reasons as to why some participants did not enjoy certain or all adverts were linked to frequency of exposure: some discussed how they would get impatient and annoyed if they had seen too many adverts or a particular advert many times before.

***"I think there's, like twenty [adverts] each episode ... I've been counting!"***

(Year 4 girl from Oxfordshire)

## **4.3 EXPOSURE TO, AND VIEWS OF, FOOD AND HFSS ADVERTISING**

Discussions around TV advertising often focused on adverts participants liked watching. Interestingly, all groups spontaneously cited food adverts (which were among their favourite types of advertising), and especially HFSS adverts, that they had found entertaining. Some participants were clearly highly knowledgeable of certain HFSS brands, and were able to demonstrate brand name recall and information retrieval about brands they had experienced.

In addition, they remembered songs and catchphrases from the adverts they had seen on TV, and in a few instances were adept at recalling the voice-overs on one of the selected food adverts almost verbatim.

Participants tended to see food and HFSS food adverts on TV in the evenings, after school, and also during the weekends when watching family programmes.

***“I mainly see adverts while, while - like food adverts ... on adult channels.”***  
(Year 4 boy from Hertfordshire)

Many had also seen them online (on YouTube), and a few at the cinema.

***“I don't watch TV much, I'm mainly on my iPad. And when I'm watching YouTube videos it comes up with adverts before and that's when I mainly see them and think okay.”***  
(Year 6 girl from Oxfordshire)

***“When I'm on Spotify, and it comes up with adverts saying that if this advert wasn't there it would be, this wouldn't be free. That's when I really see food adverts.”***  
(Year 6 girl from Oxfordshire)

Reflecting on the selected HFSS food adverts shown during the groups, participants were keen to stress the importance of the entertainment value of an advert. Generally, humour was paramount in their attitude formation, and they especially appreciated the adverts that they identified as targeting children (in particular, the sweets adverts).

***“I usually like watching the food adverts because sometimes like they're really funny, for example the [sweet] one which is hilarious and (name of person) has a very good impression of that.”***  
(Year 4 boy from Oxfordshire)

A few adverts were thought to be so appealing that they encouraged peer discussion and socialisation.

***“I wouldn't just say “Oh there that boring [fast food] advert, wasn't that great”. You wouldn't talk about that. You would talk about something like the [sweet] advert that's very good like they're all talking dead funny and you could make like a conversation out of it.”***  
(Primary 7 girl from North Lanarkshire)

***“Sometimes when we're having a laugh, we sometimes like have a laugh about the adverts sometime.”***  
(Year 4 girl from Northamptonshire)

***“We try and make the funny voices and do the advert.”***  
(Year 4 girl from Northamptonshire, talking about one of the selected sweet adverts)

Similarly to what is discussed below about TV advertising in general, participants expressed mixed views about food and HFSS food adverts: they found some boring (this was often linked

to over-exposure) and some engaging. For instance, a pupil from Northamptonshire explained that when he watched programmes he had recorded, he would tend to skip the adverts but would stop to watch a sweet advert that he particularly liked.

It is worth noting that some participants displayed some scepticism towards the content of certain food adverts. This was especially true in the older age groups. Doubts were expressed in relation to fast-food chain adverts advertising healthier meals and frozen foods adverts claiming that the food contained no sugar. In the Edinburgh school, the Primary 7 girl group argued that HFSS TV advertising was ***“about making money”*** while the Northamptonshire mixed Year 6 group mentioned ***“camera trickery”*** and how such adverts could be deceptive.

Importantly, there was a consensus in all age and gender groups that, while some HFSS TV food adverts were highly entertaining, they were also ‘bad’ as they encouraged people to eat unhealthily.

***“They don’t care about other people’s wellbeing because if they fall ill they just don’t care – they will just make profits.”***

(Year 6 boy from Oxfordshire)

***“Adverts are good for the companies because they make money from people buying the products, but bad for us as we spend our money and eat unhealthy foods.”***

(Year 6 boy from Oxfordshire)

The participants agreed that advertisers needed to be more responsible and that adverts should contain accurate information about the health status of foods. Talking about one of the selected crisps adverts, one group from Northamptonshire was also keen to point out that the use of competition prizes should be banned as it encouraged people to purchase unhealthy foods.

# 5 PRIMARY SCHOOL PUPILS' EXPERIENCES OF HFSS TV ADVERTISING: FROM HUNGER TO PESTER POWER

After showing participants agreed advertising stimulus materials, we asked them to discuss the perceived effects of such adverts and of HFSS adverts in general. The aim was mainly to uncover what associations, if any, participants made with the HFSS products being advertised, and how this impacted on their attitudes and behaviour. In order to do so, we first asked participants:

- What they thought about the adverts we showed them
- Who they thought the adverts were aimed at
- How the adverts made them feel
- What were the perceived effects, if any, of the adverts

This led to wider discussions on HFSS foods and HFSS TV food advertising with participants spontaneously discussing the food adverts they liked and if/how they thought such adverts changed their and other people's behaviour.

It is important to note that the adverts were shown prior to any discussions around HFSS or 'unhealthy' food adverts in order to avoid any bias regarding the perceptions of healthiness of the examples of foods advertised. All participants were nonetheless well aware that the products in the advertising stimulus material were HFSS products, and that their consumption should be limited.

This chapter discusses participants' experiences of HFSS TV advertising. In particular, it looks at what are the perceived short, medium and longer-term effects of HFSS TV food promotion on the attitudes and behaviour of participants, but also on their parents and carers, in shops and within the family home. It also reflects on wider discussions which touched upon the perceived effects of such adverts on children and people in general.

## 5.1 PUPILS' EXPERIENCES: SHORT-TERM EFFECTS OF HFSS ADVERTISING

Overall, participants were highly responsive to the selected advertising stimulus (although some adverts were better received than others). This tended to initiate wider discussions about food adverts they liked and disliked, and their reasons for doing so. Interestingly, such adverts tended to be mostly HFSS adverts.



When discussing what their immediate reaction was after exposure to the selected adverts, most commented on how the adverts made them feel hungry and also agreed on their persuasive intent.

### 5.1.1 EXPOSURE EQUALS HUNGER

While mini-group discussions were not appropriate to measure whether exposure was linked to increased food consumption, it was nonetheless apparent that watching HFSS adverts – both the selected adverts and others discussed spontaneously – reportedly made participants in all the groups feel “hungry”.

***“With the [take-away pizza] advert like they're just so cool and they're so yum...We always have to go and get it because I can't resist not going without [take-away pizza] when I see the advert...At the end he like smashes...the [take-away pizza] on the screen and you feel like you're just going to lick the screen.”***

(Year 4 boy from Oxfordshire)

After watching one of the crisps adverts, one Primary 7 girl from Edinburgh explained: ***“It made me ... hungry. You kind of get the taste in your mouth...”***. Another girl from the same group, talking about a fast food advert, shared similar views: ***“Just seeing the food at the end when they had it all laid out on the table made me want to eat something.”***

It was said in a number of groups that the HFSS food adverts shown during the research made the product of interest look “so tasty” and “addictive”.

***R1: “It kind of makes you feel like hungry because you think...when you see something tasty on TV it makes you “Oh I wish I had that” and then when you have the opportunity to get that you obviously...”***

***R2: “Get it.”***

***R1: “Get it and then you'll just eat it. Just keep eating them.”***

***R2: “It becomes addictive.”***

(Year 6 boys' group from Oxfordshire)

Even though some children were participating whilst arguably experiencing higher levels of hunger (groups convened before lunch time), the ‘hunger effect’ towards such food-related stimuli was evident in all the groups, whenever they were conducted.

### 5.1.2 ADVERTISED HFSS PRODUCT DESIRABILITY AND INFLUENCE ON DIETARY CHOICES

In addition to hunger, exposure was reported to have a direct effect on some participants' dietary choices and was repeatedly linked to a craving for HFSS type of food.

***“You might be eating a piece of fruit, you might see the advert and you might just throw it in the bin and ask your mum for money and leg it to the shop.”***

(Year 6 boy from Northamptonshire)

In a similar way, after being shown a sweet advert, a year 6 girl from Hertfordshire exclaimed: ***“I don't normally think of [sweet] but when I see [sweet] I just want them!”***

A group from Oxfordshire discussed how watching such adverts would encourage them to eat the advertised product if it was in the house (they would have previously asked their parents to buy the item, although it was added that these requests were not always successful).

While it appeared that watching a certain HFSS advert often made participants want to eat the specific advertised product, some also explained that it made them crave unhealthy food in general. For instance, reflecting on one of the fast food adverts that has just been shown, it was said that ***“(the advert is) kind of encouraging you to eat like unhealthy things”*** (Primary 7 girl from Edinburgh), and an advert for sweets prompted: ***“Some adverts don’t always get me appeal to that very type (of sweets). It just gets me peckish for some other food”*** (Year 6 boy from Northamptonshire). Therefore, although participants appeared receptive to specific brands being advertised, there also appeared to be a wider generic impact:

***R1: “If you see ... an advertisement for pizza ... if you do want pizza, you would get it, but not from that brand.”***

***R2: “Yeah. You might ... you might just get like a normal one.”***

(Primary 5 boys’ group from Edinburgh)

In addition to “*encouraging*”, other terms such as “*convincing*”, “*tempting*” and “*persuading*” were used by some participants to describe how HFSS TV advertising exposure could often result in an increase in purchase desire for children as well as adults.

### 5.1.3 PERSUASIVE ADVERTISING STRATEGIES

Talking about one of the selected sweet adverts, participants across the groups were in agreement over the efficiency of its persuasive strategy, i.e. consumption of the said product will give you energy, and make you “*excited*”, “*happy*” and “*hyper*” (being hyper was viewed as something that was both negative and positive in different groups).

***“It kind of shows like if you eat it then you’re gonna have loads of energy, so it kind of persuades you to buy it, so then when you’re like tired, you can eat it and have energy.”***

(Year 6 girl from Northamptonshire)

***“It makes you feel as if you’re happy and excited, and it feels like you want to try it because the guy’s dancing in it because he’s eaten it and it tastes good.”***

(Primary 5 girl from North Lanarkshire)

Talking about the same advert, a Year 4 girl from Oxfordshire explained how exposure would often result in purchasing in her family: ***“They’re my brother’s favourites so we always have to go out and buy them once he sees the advert”***. It was also claimed that a group participant bought a certain HFSS food because she found its advert ‘funny’.

It is also worth noting that participants found the acting in one of the selected fast food adverts to be both natural and convincing, with the result that it made eating the food a more attractive prospect:

***“They didn’t look like they were putting on a face or acting even though they were. It looked quite natural.”***

(Year 6 girl from Hertfordshire)

***“They’re all smiling, eating it so you’re like: ‘It must be good because if they’re eating it then...’”***

(Primary 7 girl from North Lanarkshire)

Finally, one of the selected adverts for crisps shown to some of the groups featured a football celebrity, and it was clear his endorsement had a powerful influence on participants’ purchase desire and brand preference, though a minority expressed more sceptical views.

***“It’s to say that the football players like it, so like, you should get it ‘cause they’re eating it.”***

(Year 4 boy from Northamptonshire)

***“I think it’s trying to make people buy it because there’s the best football player in the world on it and like kids are gonna be probably, they’ll try to go into the shop and like get it ‘cause they wanna go and watch a football match.”***

(Year 6 boy from Northamptonshire)

***“The fact that they put [famous football player] ...in it you’re just like ‘Oh! these people eat it!’”***

(Primary 5 boy from Edinburgh)

***“(T)hey probably only eat it because they get paid for it!”***

(Year 6 boy from Oxfordshire)

While HFSS advertising and exposure to the selected adverts seemed to impact on most participants’ food behaviours and purchase desire, it is important to note that not all the adverts had the same effect on participants. Some appeared to be more effective in this regard than others (especially the sweet adverts which were arguably more targeted towards children). For example, one of the fast food adverts prompted the following response from a Primary 7 girl from North Lanarkshire: ***“I wouldn’t go out and buy it after the advert, but it would make me want to eat it. But I wouldn’t really want to go out and buy it”***. In two groups it was also discussed that watching HFSS adverts would not necessarily change people’s eating habits but would instead encourage people who already like the advertised products to purchase and eat them.

***“It might change certain people, like if they think that the adverts are quite good, they might make them want to go but I think most people think the adverts are quite bad so they won’t...it won’t change them.”***

(Primary 5 boy from Edinburgh)

This section has discussed participants’ immediate reactions to the selected advertising stimulus material and to other HFSS adverts they spontaneously recalled. Generally, exposure

was clearly related to hunger for, and the intent to purchase, HFSS products. The following two sections examine how children reported that it can also influence their food preferences and eating behaviours over a period of time through pester power and advert recall when out shopping.

## **5.2 PUPILS' EXPERIENCES: MEDIUM-TERM EFFECT OF HFSS TV ADVERTISING: PESTER POWER AFTER EXPOSURE**

After watching the selected adverts and discussing their immediate reaction to them and HFSS food adverts in general, participants were also asked whether they had ever asked someone to buy the advertised products for them.

Most participants reported asking their parents/carers for things they had seen advertised on television even though they have not tried them previously. They appeared to be especially receptive to the advertisement of new food products, flavours or eye catching pack designs:

***"I saw an advert for like [crisps] and they had like new flavours and you kind of wanted to try them."***

(Primary 7 girl from Edinburgh)

Another perceived effect of exposure to HFSS food TV advertising was that it often led participants to ask their parents to buy the advertised food:

***"I saw this sweet cake I'd like ... and my mum was sitting next to me, and I was like, 'You've got to buy that by tomorrow.'"***

(Year 4 boy from Hertfordshire)

***"I think adverts sometimes like annoy my mum because like I see it on the TV and they look really good, but then when you get them and they're just like a bit boring and you might not like them."***

(Year 4 girl from Oxfordshire)

While there was evidence that many participants had simply requested that their parents/carers buy the advertised products (with different levels of success), several accounts also demonstrated the prevalence of pester power. Some participants explained how they had to "plead", "nag" or "beg" their parents/carers to buy HFSS products they saw advertised, or how they would get 'annoyed' if they refused to do so. According to participants, pester power was more prevalent among younger children:

***"My little sister, because she saw [sweet advert] and went straight to my mum and said: 'Mummy can I please buy this? Can I please buy this? Can I please buy this?' And she just pestered and pestered and pestered."***

(Year 6 girl from Northamptonshire)

In addition, younger participants seemed to be more likely to pester their parents into purchasing a certain product.

***“When someone doesn’t know what [sweet] are and then they see an advert like that and they’re tiny children, they might get dragged into nagging for it...like nagging their parents...because that’s what I do.”***

(Year 4 girl from Oxfordshire)

***“When they had a [chocolate] advert out and I had never tried [chocolate] yet...I asked my mum if I could have it and she said ‘no’ and I was annoyed and I kept trying and she finally said ‘yes’ and I got to go to the shops to get it.”***

(Primary 5 girl from Edinburgh)

Interestingly, some older participants reflected on how they used to be heavily influenced by HFSS TV advertising but had become more sceptical about the messages delivered by adverts, over time:

***“When I was younger, I used to like get very excited for these adverts and begged my parents to buy it, but now I don’t really do that because I know how unhealthy it is.”***

(Year 6 boy from Northamptonshire)

***“I am more like cautious about what I buy.”***

(Primary 7 boy from North Lanarkshire)

Although a majority of participants admitted to having asked or pestered their parents to buy HFSS foods after seeing them advertised on television, a few were keen to point out that they never did such a thing (although they may have wanted to):

***“I’ve seen lots of different adverts, like [fast food] ones, but I’ve never really wanted to go to my parents, I’ve wanted to but I’ve never done it...because I know I really shouldn’t have it. But it looks really nice.”***

(Year 6 girl from Northamptonshire)

## **5.3 PUPILS’ EXPERIENCES: LONG-TERM EFFECT OF HFSS TV ADVERTISING: RECALLING ADVERTS AND PESTER POWER IN SHOPS**

Whether or not participants were particularly attentive to HFSS food adverts when they watched television, group discussions demonstrated (1) participants’ aptitude in recalling specific adverts when out shopping, and (2) how this influenced parental shopping purchases made at the supermarket or in shops.

It was evident in the group discussions that purchase intentions or purchase-influencing behaviours relied mostly on the participants being able to recall the product and brand that was featured in the promotional activity they had been exposed to.

***“You maybe see an advert and then you like forget about it...but then you see it in the shops ... and you remember the advert and like you say ‘Oh are we going to have that?’”***

(Primary 5 boy from Edinburgh)

***"I do go out and talk to my friends because say we were planning to like meet at the shopping centre, I would maybe tell them like 'Oh do you remember that [sweet] advert? It's just in that shop there, why don't we go by them?' So it's just, I do that for like a reminder almost."***

(Primary 7 girl from North Lanarkshire)

***"So a lot of the adverts have like slogans and stuff, and you remember them ... and then you start singing it in the shop."***

(Year 6 girl from Oxfordshire)

It was also reported that young people could help their parents/carers to pick out items when shopping.

***"Like me and my family always go out shopping on Saturday, so usually if I see [sweet] I remember that advert and I buy them."***

(Primary 7 girl from North Lanarkshire)

***"So this is how normally I think about food ... if I've seen it on an advert, and I've seen it in a shop I think to myself 'Is that, is that already in the store? Because I really want that.' Me and my mum were walking, right, and I was standing there, and I said: 'Mum...'"***

(Year 4 boy from Hertfordshire)

A Year 6 girls' group from Oxfordshire talked about how they remembered the songs, slogans and catchphrases from the adverts they had seen on TV when they were out shopping or socialising with their friends, while a Year 6 boy from Northamptonshire explained: ***"We usually see [take-away pizza advert] about 7/8ish at night and then, on say a Saturday, when we've got back from somewhere, we'll just go and get a pizza or a take-away."***

In general, it appears that advert recall for certain HFSS TV adverts (including some of the selected advertising stimulus material) was particularly strong and that exposure to HFSS food promotion was reported to influence participants' purchase behaviours while shopping with parents/carers.

On the whole, this chapter has discussed the perceived effects (immediate and longer term) that HFSS TV food promotion has had on participants' attitudes and eating behaviours, at home and when out shopping. It has shown how exposure is closely interlinked with hunger, purchase desire and pester power. This was clearly manifest in the admission by most participants that they had tried one or several HFSS products after being exposed to their TV adverts.

## 6 DISCUSSION

This study has shown that, despite current regulations, children are still engaging with HFSS food advertising on television and they believe it is influencing their behaviour. This study aimed to gather British primary school children's views of HFSS television advertising, and its perceived effects on their and other people's eating behaviours and dietary choices. In order to do so, it also gathered data on pupils' eating habits, nutritional knowledge, television viewing habits and perceptions of television advertising in general.

Overall, participants appeared to have a relatively advanced nutritional knowledge. They also tended to view HFSS foods as a treat, as demonstrated by their accounts of their eating habits at home (where they reported eating a relatively healthy diet) and when out socialising with friends (when they reported eating more HFSS type foods, clearly associating eating 'badly' with having a good time). It should be noted that although participants seemed to equate an 'occasional treat' as occurring once or twice a week, evidence suggests that young people consume these unhealthy foods on a much more frequent basis<sup>6</sup>. In addition, participants were able to explain what the short and longer term impacts of a healthy or unhealthy diet on people's health and lifestyle are, emphasising the importance of maintaining a balanced diet. This notion of balance appeared to be key with those who enjoyed HFSS foods as a treat arguing that this was not problematical unless this became the dietary norm.

Discussions around television viewing habits and advertising revealed that, while participants tended to watch television in the evenings and weekends, they were also exposed to advertising, including HFSS advertising, online (for instance on YouTube or when watching programmes on demand) and in the cinema. Overall, exposure appeared relatively high in spite of the most recent food television advertising regulations, with participants viewing HFSS adverts during family programming and during sporting events, during the daytime at weekends and in the evening during the week. As such, a ban on showing such HFSS adverts during children's television programming is clearly inadequate, as the young people had seen and were highly knowledgeable of HFSS adverts on television, online and in the cinema.

The research participants, especially the older pupils, appeared to have developed quite sophisticated views of advertising and its aims. Unprompted, they described HFSS and other adverts they had seen and enjoyed in great detail, and had engaged with in such a way that they even discussed, and in one case acted out scenarios, based on these adverts with their friends. There was also a perception, particularly of the Year 6/Primary 7 pupils, that advertisers were only interested in promoting their products and financial gain. However despite this, it was also acknowledged that these adverts achieved their aims and influenced young people to want these products and to either buy them themselves or pressurise parents and carers to purchase them on their behalf. Previous work has shown that young children do not recognise the persuasive intent of commercial marketing<sup>31</sup>, and are unable to demonstrate a critical understanding of advertising until around 11 or 12 years old<sup>32</sup>. This would explain the different views on advertising seen in the younger and older pupils.

Interestingly, HFSS adverts were among pupils' favourites types of advertising. When the selected adverts were shown in the groups, participants remembered seeing them, finding them entertaining and enjoyable. Advert and brand recall was apparent among all the groups, with many reporting that they enjoyed watching 'fun' adverts which utilised humour in particular. After viewing the specific adverts, participants also then described similar adverts,

featuring the same or similar brands. Only one of the screened adverts featured celebrities, and it was not shown to all of the groups. Nevertheless, the use of celebrity endorsement in this context did seem to have a potent effect, and if further regulations of HFSS adverts are to be brought in, this is another issue that is potentially worthy of consideration.

On the whole, HFSS food advertising appeared to be a significant determinant of children's attitudes and eating behaviours, at home and when out shopping. Previous research has demonstrated this can influence their behaviour in a number of ways, including their food preferences, purchase behaviour and food consumption<sup>9-14</sup>. Within this study, exposure to HFSS adverts was closely related to hunger, product desirability and purchase intent, with participants reporting that they had tried one or several HFSS products after being exposed to their television adverts.

Research suggests that 'pestering' often proves to be one of the most successful influencing techniques. Spungin (2004)<sup>33</sup> states 'by advertising to children, companies are encouraging the child to nag their parents into buying something that is not good for them, they don't need or the parent cannot afford'. The participants' accounts in this study clearly showed how 'pester power' tended to occur on two levels:

- (a) Immediately/not long after exposure to the advert with many pupils admitting to having asked or pestered their parents or carers to buy them HFSS foods after seeing them advertised on television or elsewhere (Figure 3);
- (b) On a later occasion, when out shopping. This tended to be linked to the participants' good recall ability: a purchase request in the shops often reflected that the advertisement had had persuasive power and influence over young people's product choices, and in turn they sought to influence their parents.



**FIGURE 3: HFSS ADVERTISING ON TELEVISION CAN LEAD TO 'PESTER POWER'**

While a number of studies have shown that the promotion of food products to children can influence their behaviour in a number of ways<sup>9-12</sup> qualitative accounts have been sparse. This study has not only helped fill such a gap by yielding rich in-depth data from the mini-group discussions but it has also shown that children's exposure to HFSS remains high in spite of the current restrictions. Due to time constraints, it was not always possible to explore all issues in



depth. Further analyses of the qualitative dataset could involve more detailed examination of key results to see if there is evidence of age, gender or socio-economic differences in response. Similarly, more detailed exploration of primary school children's views of more generic effects of HFSS advertising, as well as more nuanced examples of peer pressure and its influence on young people's dietary choices, would be worthwhile. Furthermore, as this is a qualitative study it is not possible to quantify the exposure of primary school children to HFSS advertising or test the strength of the association between exposure and behaviours.

This study has provided valuable pilot data for the development of a large quantitative study investigating HFSS marketing to primary school children. A recent study looking at secondary school children in Scotland found high levels of HFSS marketing, which was accompanied by high levels of HFSS purchasing<sup>34</sup>. A similar, national study of primary school children can provide a more detailed picture of their exposure to HFSS advertising on television, and assess the impact that this has on attitudes, consumption behaviours and pester power. In addition, this current study has only focussed on television. Children are nowadays exposed to HFSS advertising through many different media and is often not recognisable as advertising. Indeed promotional tools like sponsorship, product placement and advergames are designed to disguise their commercial intent and get under the viewer's cognitive radar. A future study that includes a more detailed focus on children's exposure to wider HFSS marketing in general, and online advertising specifically, would provide more comprehensive evidence of young people's exposure to these adverts. This would arguably be a more representative reflection of the influence of these adverts on young people, their peers and families.

In conclusion, this research has demonstrated that young people aged 8-12 years are knowledgeable about nutrition and its health impacts. However, despite current regulations, they are exposed to HFSS adverts on television and via other sources, and acknowledge that such adverts have the capacity to influence them and their peers, as well as what is being purchased by family members. As a consequence, if public health policy aims to reduce the intake of HFSS foods in the UK in the future, young people's current exposure to HFSS adverts, on television and via other media, will need to be addressed.

## 7 APPENDICES

### 7.1 DEMOGRAPHIC CHARACTERISTICS OF ENGLISH SCHOOLS

School region	Percentage of free school meals <sup>f</sup>	Proportion of pupils from minority ethnic groups or with English as an additional language <sup>g</sup>
Hertfordshire	6.6%	Just over half of the pupils are White British. Among other pupils, at least 17 ethnic groups are represented. An above-average proportion of pupils speak English as an additional language.
Northamptonshire	8.2%	7.2% pupils with English not as first language.
Oxfordshire 1	0%	Unknown.
Oxfordshire 2	7.6%	The proportion of pupils from minority ethnic groups is broadly average, as is the proportion of pupils who speak English as an additional language.

### 7.2 DEMOGRAPHIC CHARACTERISTICS OF SCOTTISH SCHOOLS

School region	Proportion of pupils who live in 20% most deprived datazones in Scotland <sup>h</sup>	Proportion of pupils from minority ethnic groups <sup>i</sup>
Edinburgh	5 - 10%	>20%
North Lanarkshire	35 - 40%	>20%

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<sup>f</sup> <http://www.education.gov.uk/edubase>

<sup>g</sup> Information extracted from the school's latest Ofsted reports

<sup>h</sup> <http://www.gov.scot/Topics/Statistics/Browse/School-Education/Datasets/contactdetails>

<sup>i</sup> <http://www.gov.scot/Topics/Statistics/Browse/School-Education/Datasets/contactdetails>

## 7.3 TOPIC GUIDE FOR PUPIL DISCUSSION GROUPS

### **Aim of the focus groups (for researcher)**

The aim of focus groups with pupils is to gather their views of unhealthy food advertising on TV and more particularly to:

- Ascertain pupils' views as to which programmes and times of day they are exposed to HFSS adverts (e.g. children/family/adult programmes);
- Examine which groups the pupils feel the adverts are targeted at;
- Assess the pupils' views of the HFSS adverts, and perceptions of any impacts these adverts have on themselves and their peers;
- Identify what pupils find most and least appealing about HFSS television advertising;
- Find out, what associations, if any, pupils make with the HFSS products being advertised;
- And explore the pupils' views of the impact of the HFSS adverts, if any, when they see the products in small and larger shops.

The discussions will explore their views and experiences.

### **The topic guide**

This guide is intended as a guide for the Researcher running the discussion. It sets out a number of necessary contextual and factual topics and questions that will be covered during focus groups. The guide does not contain follow-up probes and questions like 'why', 'when', 'how', etc. as participants' contributions will be explored using prompts and probes in order to understand how and why views, behaviours and experiences have arisen. The group will last approximatively 30 minutes.

### **1. Introductions**

- Introduction: We are researchers: 'what is a researcher?'— our job is to ask people like you questions about what you think and feel about different topics – as you know today we are going to be discussing food adverts that you see on TV.
- This research is for an organisation called Cancer Research UK – they want to hear what you think about food and TV food adverts.
- We're going to spend the next 30 minutes talking to you about what you like to eat and drink, and what you think about the food adverts you see on the television. We are also going to show you some adverts and ask you what you think of them.
- We're very interested in hearing all your views but it's up to you whether you take part or not. It is also up to you how much you want to say and if you can't answer a question we won't mind.

- After today we'll be visiting other schools and speaking to other children. We will write a report about what everyone has said. We won't be naming anyone so no one will know what you have said.
- We would like to record this discussion so we have a record of what was said and so that we don't have to scribble down notes as you speak. No one but us will hear the recording and it will be kept in a safe place.
- Do you have any questions?

## 2. Pupil Introductions

*Aim: to allow participants to introduce themselves and get used to the group discussion environment.*

- Ask pupils to introduce themselves and include their
  - Name
  - Age

## 3. Introduction; eating habits and favourite foods

*Warm-up questions. We want to find out more about children's favourite foods, eating habits and notions of nutrition.*

- Favourite foods
  - What foods do you like then in general?
  - Why do you like these foods?
- Eating at home
  - Do you eat this sort of food at home?
  - During breakfast/lunch/dinner do you eat the same food that your parents/guardians eat?
- Good food vs bad food
  - Do you think these foods that you like are good for you?
  - What do you think make food good for you?
  - In overall, would you say that the food that you eat is good for you?
- What foods do your friends like? What foods do you eat when you get together or go out with your friends?

## 4. TV viewing habits

*This short section aims to explore which programmes and times of day participants are exposed to food adverts, and what they find most appealing about television advertising in general.*

- Do you watch TV after school, or on the weekends?
  - What sort of times?
  - How often?
  - With whom?
- Do you watch adverts?
- Do you like watching adverts?

- What time of day do you tend to see adverts on TV?

## 5. HFSS food adverts

*This section focuses specifically on HFSS food adverts and aims to explore:*

- *what participants find most appealing about HFSS television advertising;*
- *the associations they make with the products;*
- *who they feel the adverts are targeted at;*
- *if they remember the adverts when they are in a supermarket.*

### • SHOW ADVERT 1

- Who do you think this advert is for? You? Your parents/ guardians? Everybody?
- Do you like the advert?
- How does it make you feel?
- Does the advert make you want to buy this food? Why? What do you think of this food? Have you ever eaten it? If so, did you like it? Do you think that it is good or bad for you? Do you want to eat it? How often do you think you should eat this food?
- When do you buy this type of food?

### • SHOW ADVERT 2

*Repeat questions*

### • SHOW ADVERT 3 (ONLY IF TIME)

*Repeat questions*

- Do you think these adverts change your or other people's behaviour in any way? If so, how?
- Overall, do you think adverts like these are good or bad?
- What, if anything, would you change about such adverts?

## 6. Food advertising on TV

*This section looks at TV food advertising in broader terms. It aims to find out participants' views on all kinds of food adverts on TV. It also seeks to uncover their perceptions of any impacts they think food adverts can have on themselves and their peers.*

- Has there been any instance when you have seen the advert and then tried the food afterwards?
- Do you ask your parents/ guardians to buy some foods you see in adverts?
- Do you remember the foods you see on television when you go shopping? Do you spend your pocket money on them?

ONLY ASK IF ENOUGH TIME

- What you think about food adverts on TV?
- Are there any food adverts that you like?
- Do you talk with your friends about food adverts?

#### **7. Nutritional knowledge (ONLY IF TIME)**

*This section explores understandings of nutrition and healthiness touched upon in section 1 in greater detail.*

- Where does your knowledge about food come from?
- Perceptions about their healthiness
  - What foods and drinks do you think are healthy for you?
  - What foods and drinks do you think are unhealthy for you?
  - What do you think the effects might be in the future if someone has an (a) healthy diet (b) unhealthy diet?

#### **8. Any other comments/questions?**

- Thank participants for their time
- Check if participants have any questions

## 7.4 GROUP COMPOSITION AND ADVERTS SHOWN

Group ID	School ID	School Year and Gender	Adverts Shown
1	School A	Year 4 (girls)	Maoam/ Hula Hoops
2	Oxfordshire (England)	Year 4 (boys)	Haribo/ Walkers
3		Year 6 (girls)	Haribo/ KFC1
4		Year 6 (boys)	Maoam/ KFC2
5	School B	Year 4 (girls)	Maoam/ KFC1
6	Oxfordshire (England)	Year 4 (boys)	Walkers/ KFC1
7		Year 6 (girls)	Maoam/ Hula Hoops
8		Year 6 (boys)	Haribo/ Walkers
9	School C	Year 4 (girls)	Maoam/ Hula Hoops
10	Hertfordshire (England)	Year 4 (boys)	Haribo/ Walkers
11		Year 6 (girls)	Haribo/ KFC1
12		Year 6 (boys)	Maoam/ KFC2
13	School D	Year 4 (girls)	Hula Hoops/Haribo
14	Northamptonshire (England)	Year 4 (boys)	Maoam/KFC1
15		Year 4 (boys)	KFC2/Walkers
16		Year 6 (mixed)	Maoam/ KFC1
17		Year 6 (boys)	Haribo/ Walkers
18	School E	Primary 5 (girls)	Haribo/ KFC1
19	Midlothian (Scotland)	Primary 5 (boys)	Maoam/ KFC2
20		Primary 7 (girls)	Maoam/ Hula Hoops
21		Primary 7 (boys)	Haribo/ Walkers
22	School F	Primary 5 (girls)	Maoam/ Hula Hoops
23	North Lanarkshire (Scotland)	Primary 5 (boys)	Haribo/ Walkers
24		Primary 7 (girls)	Haribo/ KFC1
25		Primary 7 (boys)	Maoam/ KFC2

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