

Still Under Pressure; But Pressing for Change

Young people's perceptions of what influences
their food choices and what changes they want
to see

July 2019

Together we will beat cancer



Reference

This report should be referred to as follows:

“Still Under Pressure; But Pressing for Change: Young people’s perceptions of what influences their food choices and what changes they want to see.” Andy MacGregor, Kaushi Attygalle, Jessica Shields, Jessica Newberry Le Vay, Emily Whiteside, Malcolm Clark, Jyotsna Vohra. 2019

Authors

Andy MacGregor¹, Kaushi Attygalle¹, Jessica Shields¹, Jessica Newberry Le Vay², Emily Whiteside², Malcolm Clark², Jyotsna Vohra²

¹ ScotCen Social Research

² Cancer Policy Research Centre, Cancer Research UK

Acknowledgements

We would like to thank Irene Miller for leading the focus group facilitation. Transcription was conducted by Roni Butcher and Karen Stewart. Lesley Birse provided invaluable support to the research team. Thank you to Dr Stephanie Chambers, University of Glasgow, Dr Rachel Povey, Staffordshire University and Dr Claire Farrow, Aston University for providing peer review for the report. Thank you to Ben Chiu and Alex Kenney (CRUK) for providing steer to the study and report, and to Sophia Lowes and Briony Hudson (CRUK) for review.

Cancer Research UK

Cancer Research UK is the world’s largest independent cancer charity dedicated to saving lives through research. We support research into all aspects of cancer through the work of over 4,000 scientists, doctors and nurses. In 2017/2018, we spent £423 million on research institutes, hospitals and universities across the UK. We receive no funding from Government for our research. This research was funded by the Cancer Policy Research Centre, Cancer Research UK.

Cancer Research UK is a registered charity in England and Wales (1089464), Scotland (SC041666) and the Isle of Man (1103).
<http://www.cancerresearchuk.org/>



ScotCen Social Research

This research was conducted by ScotCen Social Research. ScotCen is an integral part of NatCen Social Research, Britain’s leading centre for independent social research.

NatCen is Company Limited by Guarantee Registered in England No.4392418. A Charity registered in England and Wales (1091768) and Scotland (SC038454).
www.scotcen.org.uk www.natcen.org.uk



Foreword

As people live longer, we are witnessing growing pressures on healthcare systems in the UK and across the world. Healthcare systems are still primarily focused on the delivery of a sickness service. However, with the growing population and the complex challenges that come hand in hand we need to prioritise moving towards a health and wellbeing service. This demands a transition from a diagnosis and treatment mentality to a prediction and prevention one.

With the wealth of research being undertaken in engineering, digital and data science we are now in a position where we can predict populations who are most at need and at risk to ensure that we offer preventative services at the earliest possible stage.

Overweight and obesity causes many health conditions and is the second leading cause of cancer after smoking. Researchers, academics and clinicians with the access to toolkits needed to make change, are responsible for identifying those most at risk and ensuring that services are in place to help them early. As a nation we cannot ignore that our childhood obesity levels are alarming, and we really must look long and hard as to the reasons why.

This report highlights the need to invest in health and not just in healthcare, and builds on my 2018 report, *Better Health and Care for All*. It is imperative that our approach to this challenge is across UK governments and that we get serious about tackling obesity, taking into account the social determinants of health. *The NHS Long-Term Plan* led by Simon

Stevens, has also committed to this in England with a promise for more NHS action on prevention and health inequalities.

This informative report highlights the opportunity that we have to utilise our expertise in behavioural science to positively influence young people's attitudes and behaviour. It clearly sets out to build on existing evidence on the impact of exposure to high in fat, salt and sugar (HFSS) marketing on young people's dietary attitudes, behaviours and health outcomes. It looks to further reflect on the current media environment which this audience must navigate in relation to the foods and drinks industry, in an era where all forms of media are so easily accessible to children and young people and therefore an easy influencer.

It is crucial that we get this right, it is our responsibility to improve children and young people's dietary attitudes and behaviours to ensure that they have better health outcomes in the future.



Professor the Lord Ara Darzi
Professor of Surgery and Chair of the
Institute for Global Health Innovation
Imperial College London

Executive Summary

In the UK, overweight and obesity is the second leading cause of cancer after smoking. Overweight and obesity causes 13 different types of cancer and over 22,000 cancer cases each year in the UK^[1]. It is estimated that each year, obesity costs the NHS in England £6.1bn and the wider UK economy £27bn^[2].

Childhood obesity rates in the UK are among the highest in Western Europe, with a third of children leaving primary school with obesity^[3]. A child who is obese is five times more likely to be so as an adult^[4], so acting early can protect them from a lifetime of avoidable ill-health and disease.

Exposure to marketing for food and drink high in fat, salt and sugar (HFSS) negatively influences dietary knowledge and behaviours and is associated with obesity-relevant outcomes such as consuming HFSS products.

Three years on

This study builds on a previous qualitative study conducted in 2016^[5], which found that young people are influenced in a variety of ways and that TV marketing (both linear and on-demand) was particularly influential. While TV advertising continues to have an impact on young people's lives and on their health, digital marketing has also become prominent.

The food and drink industry has embraced digital media and put it at the centre of their marketing strategies. Food and drink producers use a sophisticated range of digital marketing strategies, ranging from smartphone apps to social media. Within each activity, they also use a wide variety of creative and stimulating marketing activities to create engaging and attractive content.

As digital marketing becomes more widespread, there is a need to further build the evidence base on what impact this may have on young people's behaviours, attitudes and health outcomes.

To reflect changes in marketing environment and media habits, this study looks at young people's interaction with media and their perceptions of HFSS products and marketing, in particular digital marketing and its impact.

Nine focus groups were conducted with 60 11-19 year olds across Great Britain. From those conversations, three key themes were identified in this study:

Young people feel HFSS marketing is pervasive and targeted at them.

Young people are also influenced to consume HFSS products by cost, convenience, family habits and age.

Young people are concerned about the impact of HFSS marketing and are supportive of protective measures.

Not only does this study help to build the evidence base, it has also fed into the development of a UK-wide survey which will further build the evidence on the impact of HFSS marketing and other influencing factors on young people's dietary choices.

Young people feel HFSS marketing is pervasive and targeted at them

HFSS marketing, particularly digital, is prevalent in young people's lives

Immersion in marketing and brand reinforcement was demonstrated through young people's recognition of products on social media and across multiple other platforms.

Young people feel targeted by HFSS marketing

Young people felt that HFSS marketing targeted them by using spaces associated with younger audiences such as social media, and through appealing content.

"Well, I'm always on YouTube or something. It's got adverts and it's always, always there."

The tactics used in HFSS marketing make it easy to recall

Young people knew they had seen HFSS ads, even if they couldn't always recall them in full. Marketing tactics such as humour, deals and slogans cut through and were the most remembered, highlighting the power of such tactics in brand recognition and recall.

HFSS marketing influences purchasing of HFSS products

Young people were able to recall specific examples of when HFSS marketing had directly influenced their purchasing behaviours such as buying HFSS products or pestering parents to buy these products.

Young people perceive themselves as immune to HFSS marketing

Young people perceived that it was even younger children who were susceptible, rather than their peers or adults.

"I saw them on the side of a bus, and then I bought some, and then they were really good."

Other factors also influence young people to consume HFSS products

HFSS food and drinks are appealing, despite awareness of being unhealthy

Young people perceive HFSS products to be very unhealthy, but also find these products appealing and enjoyable to consume.

Food and drink choice is influenced by the cost and convenience of HFSS products

Health is an influence on food preferences, with young people reporting they would prefer to eat healthily. However, dietary choice is also influenced by cost, time, convenience (with HFSS choices perceived as cheaper and more convenient) and family.

Young people are more influenced by some factors, and less by others, as they get older

Age was cited as a factor influencing diet. Young people described how awareness of

the importance of healthy eating increases with age. However, participants also felt that during a young person's transition to independence, HFSS products may become more appealing due to their cost, convenience and availability.

Young people recognise the link of an HFSS diet with many health conditions, but awareness of the link with cancer was low

Young people linked a HFSS diet to health conditions such as cardiovascular diseases, diabetes, obesity and mental health issues. But young people's knowledge of the impact a HFSS diet could have on cancer risk indirectly through obesity was limited.

Young people are concerned about HFSS marketing and supportive of protective measures


Young people expressed concerns about the marketing of HFSS products

HFSS marketing was seen to be misleading and to glamourise HFSS products. The active and widespread promotion of HFSS products, especially compared to the lack of marketing of non-HFSS food and drink, was felt to be wrong. Product labelling was seen as inadequate.

Young people were supportive of measures to reduce their exposure to HFSS marketing and consumption

Young people called for HFSS marketing to stop targeting them as an audience. They were supportive of measures such as bans/time restrictions, restrictions on billboard and poster placement and for ads

to be more truthful in their depiction of products and their adverse health impacts. Plain packaging, restricting displays, and clearer product information labels were highlighted as having the potential to be effective.



"I never see any "Eat your salad" advertisements, and young children are constantly surrounded by all of these junk ads, and they get in the habit of eating it."

The Soft Drinks Industry Levy and product reformulation was perceived to have reduced personal consumption and popularity of HFSS products

A key concern amongst young people was the perceived lower cost of HFSS products compared to healthier options. Among those who were aware of the Soft Drinks Industry Levy, young people were broadly supportive and felt that it had reduced popularity and consumption of HFSS drinks.

What should government do?

Policy action across the UK so far has been insufficient in making it easier for young people to be healthy. The UK Government must swiftly implement a comprehensive 9pm watershed for HFSS ads on all media. In addition, the UK, Scottish and Welsh Governments should each introduce restrictions on price and location based promotions on HFSS products in all retail settings. Furthermore, evidence on how fiscal measures can improve public health should be built upon, to explore how these policies can be used to boost reformulation and change consumer behaviour.

Contents

Foreword 3

Executive summary 4

1 Introduction 8

2 Research Aims and Objectives..... 9

3 Methods10

4 Results.....12

5 Discussion 30

6 Policy Recommendations.....34

7 Strengths and Limitations.....36

8 Future Research36

9 Appendices 37

10 References.....43

1 Introduction

In the United Kingdom (UK), overweight and obesity is the second leading cause of cancer after smoking. Obesity causes many health conditions including 13 types of cancer^[1], and has a huge economic impact (through working days and lives lost), with an estimated cost to wider society of £27 billion each year, £6.1 billion of which are NHS costs alone^[2].

Levels of childhood obesity in the UK are of particular concern; childhood obesity rates are among the highest in Western Europe, with a third of children leaving primary school with obesity. A child who is obese is five times more likely to be so as an adult^[4]. In 2018 Public Health England announced that, in children aged 10-11, levels of severe obesity had reached a record high^[6]. It is vital to understand what is driving these obesity rates to support effective policymaking around obesity reduction.

There is an increasing body of robust evidence highlighting that exposure to marketing for food and drink high in fat, salt and sugar (HFSS) influences the types and quantity of food chosen by young people. High exposure to unhealthy food advertising is linked with a strong preference for unhealthy food^[7], more snacking^[8] and greater intake of HFSS food and drink, and lower intake of healthy food overall^[9].

In 2016, a report by NatCen, Institute of Social Marketing (ISM, University of Stirling) and CRUK on young people's perceptions of HFSS marketing showed that young people are exposed to a significant amount of HFSS marketing, particularly through television. From conducting focus groups with young people aged between 11 and 19, it was found that television marketing was particularly influential. Young people are aware that they are being marketed to, but this does not diminish the impact of the marketing^[5]. Young people's exposure to HFSS marketing is of concern as further research commissioned by CRUK has shown a clear association between junk food advert recall and obesity^[10].

Since the publication of the 2016 study, the policy context surrounding childhood obesity and HFSS marketing has changed. The findings from this previous research informed the development of Chapter 2 of the Childhood Obesity Plan, which includes a commitment to consult on the introduction of restrictions to HFSS marketing on all TV and online programming before 9pm^[3]. Both the Scottish and Welsh Governments support a UK-wide 9pm watershed for junk food advertising and look to Westminster to make this happen. Current advertising regulations brought into force in 2017 prevents the advertisement of HFSS products in children's media and media where young people under 16 make up more than 25% of the audience^[11]. While this regulation has been welcomed as an important first step in reducing the exposure of children to HFSS advertising, concerns have been raised about the changing profile of children's viewing habits and their increasing use of online video content and social media.

Not only has the policy environment surrounding childhood obesity shifted since 2016, but the nature of marketing and children and young people's interaction with media has changed. The traditional marketing mix (made up of mass media advertising such as on television, sponsorship and tactics like price promotions) has been extended as digital marketing has grown^[12]. In 2017 online advertising accounted for over half of total UK advertising spend, double that of television. Facebook's advertising revenue grown by 49% between 2016 and 2017^[13]. Digital marketing presents unique opportunities for food and drink marketers in that it can be tailored to specific audiences, it is low cost, quickly disseminated, users can be co-opted into the creation of content and internet use is very

high^[12]. This is particularly the case in younger age groups; 99% of 12-15 year olds go online for over 20 hours a week^[14]. Children and young people must navigate this digital marketing mix, which consists of an interacting network of marketing across multiple channels ranging from explicit marketing such as social media pages to subtle marketing through celebrity endorsement. This marketing links with and is reinforced by the continued presence of traditional marketing such as television and out of home^[12].

It is crucial to further build evidence on the impact of exposure to HFSS marketing on children and young people's dietary attitudes and behaviours and health outcomes, and reflect the current media environment which this audience must navigate. In response to the changing marketing mix, this report explores young people's perceptions of HFSS marketing. It examines whether, in this changed policy context and the expansion of digital marketing, young people's perceptions remain the same and whether HFSS marketing continues to so profoundly impact their dietary attitudes and behaviours.

Not only does this study in its own right help to build this evidence base; it has informed the design of a UK-wide survey of 11-19 year olds. This survey will enable us to further understand the impact that HFSS marketing has on young people, how this has changed over time.

2 Research Aims and Objectives

This qualitative study aims to explore:

- 1) Young people's online behaviours
- 2) Young people's perceptions of their exposure to high fat, salt and sugar (HFSS) marketing, and the impact this has on them
- 3) Young people's dietary attitudes and behaviours and the factors that influence this
- 4) Whether current regulation is fit for purpose in the context of changing media habits and marketing techniques.

3 Methods

Research Design

Nine focus groups were conducted in March-May 2019. The breakdown of focus groups is provided in Table 1. Four groups were conducted in the central belt of Scotland, three were conducted in two locations in England and two groups were held in the same location in Wales. All ages in the 11-19 years spectrum participated in the research. In total, 60 (34 female and 26 male) young people, took part in the groups.

Table 1: Breakdown of focus groups by age and country

Focus group code	Country	Number of participants	Age range (years)	Mean age
S01	Scotland	7	14-19	14.9
S02	Scotland	6	11-13	11.7
S03	Scotland	7	16-19	16.9
S04	Scotland	8	15-17	16.0
E01	England	5	12-15	13.2
E02	England	5	16-19	17.0
E03	England	5	14-18	15.6
W01	Wales	6	11-15	13.2
W02	Wales	11	13-15	14.4

Sampling and recruitment

A qualitative purposive sampling approach was adopted to recruit young people for the research. Sampling characteristics of interest were:

- Age (ages 11-19 years were represented)
- Social background
- Location (England, Wales and Scotland)
- Gender

The researchers worked closely with youth organisations and youth councils in order to recruit participants. The young people were recruited from pre-existing youth groups so that participants would feel comfortable with each other and able to share their views in each other's company. All groups were mixed gender and all young people in the groups contributed to the discussions. As pre-existing local groups were recruited, young people in each group tended to have similar social-economic backgrounds.

Participants were informed that the group discussions would cover issues such as their general views on nutrition, as well as food marketing, to ensure that they were not over-prepared. This aimed to decrease the likelihood of socially desirable responses being given during the discussions.

All potential participants were provided with an information sheet, opt-out form and privacy notice which outlined details of the research. These were circulated to young peoples' parents or carers (if they were younger than 16). If younger than 16, additional consent was required from a parent or carer. Information and consent sheets informed young people and their parents or carers about what participation in the research would entail. It also stated explicitly that participation was entirely voluntary and that the results would not include any identifiable information about the youth organisations or the participants.

Interview topic guide

The topic guide (Appendix 1) covered issues including:

- Young people's online and social media behaviours
- Young people's eating practices and favourite foods and drinks
- Young people's perception and engagement with food products and their associated marketing activity
- Young people's awareness and views of food marketing (unprompted and prompted) – exploring both digital and traditional formats of marketing
- Young people's perceptions of influencer marketing (traditional role models versus YouTube creators/celebrities)
- The perceived impact of food marketing on personal health
- Perceptions of risks, harms and problems (if any) associated with food consumption and how these relate to youth culture
- Issues perceived by young people as requiring particular attention with regard to the regulation of food production and marketing, in particular digital marketing

A list of HFSS marketing creatives was agreed between ScotCen and Cancer Research UK for use within the focus groups. Participants in each focus group were shown up to three recent examples of these creatives (Appendix 2), including videos of adverts which had been shown on television and YouTube, and screengrabs of social media and influencer advertising.

Analysis

A thematic approach to analysing the data was adopted, facilitated by NVivo 10. Analysis involved a number of stages. The initial analysis involved familiarisation; transcripts were read and re-read by the co-authors and emergent themes discussed. A draft analytical framework was drawn up and agreed by the research team, based on issues which emerged from the research objectives and discussion of the emergent themes. Each transcript was then coded, so that all the data on a particular theme could be viewed together. Through the review of the coded data, the full range of views and attitudes described by the young people was systematically mapped, and the accounts of different participants, or groups of participants, compared and contrasted. It was also possible to examine unprompted with prompted views of the young people in relation to HFSS marketing.

Ethics

An application was submitted to NatCen Research Ethics Committee. Approval for the study was granted in January 2019.

4 Results

The results of the focus groups have been pulled together into four key areas:

- 4.1 Young people's media behaviour
- 4.2 Young people's perceptions of HSS marketing
- 4.3 Other factors that influence young people's consumption of HFSS products
- 4.4 Young people's views on protective measures

4.1. Young people's media behaviour

This section explores young people's reported media habits, focusing particularly on social media. Use of more than one device at a time, or 'dual use,' is also explored.

4.1.1. Young people's online and social media behaviour

The participants reported using a variety of online applications and activities. They spoke of going online to use social media, play games, watch television programmes and films and communicate with their friends.

Most of the young people in the focus groups said that they watched television and accessed the internet on their phones, iPads, Xbox, PlayStation or laptops. Watching programmes and live broadcasts on a television appeared to be uncommon. Netflix and YouTube were the most commonly cited streaming and content sharing services, while Amazon Prime and BBC iPlayer were also popular.

Watching television programmes and films on platforms like Netflix, YouTube and Amazon Prime tended to be a solo activity. It was evident that young people were mostly on their own when using social media. Those who played games on their laptops, phones, PlayStation and Xbox devices or smart televisions were also typically alone when they did so, though if they were engaging or communicating with others remotely they did not necessarily consider themselves to be alone.

I don't know somebody that has'nae got Netflix. (S04, Age 15-17)

If you're watching like Netflix or your Xbox or that it's just in your room by yourself. (S02, Age 11-13)

Although young people tended to report watching television programmes online on a range of devices, those who did watch programmes directly on television sets often seemed to do so as a family activity.

On a Saturday night, me and my family normally sit down and watch some of the things that are on that night. (S03, Age 16-19)

4.1.3. Social media sites

The use of multiple social media accounts was common across the groups. The social media sites most frequently cited by young people were Snapchat, Instagram, Facebook and YouTube. Twitter and WhatsApp were also mentioned by participants. Most of the young people had their own accounts on social media, with those who did not able to use a family member's account. It should be noted that many social media accounts have a minimum age requirement of 13.

I have Instagram and Snapchat, but I only really use Snapchat to talk to my friends. I have WhatsApp too, but I wouldn't count that as something I go on a lot...
(E02, Age 11-15)

[I use] everything that's not Twitter and Bebo. (S04, Age 15-17)

4.1.2. Dual use of devices

The use of two devices at the same time appeared to be very common among the young people. Frequent comments were elicited about using one device whilst another was operating in the background. For example, watching television programmes on a mobile device and accessing social media on another appeared to be commonplace.

Normally just play games on my computer, and then also sat texting people on my phone. (E03, Age 13-15)

Sometimes I do watch something on my iPad, and then I'll just go on my phone to check Instagram or something. (S01, Age 14-19)

Like scroll on Facebook or whatever and then putting the telly on in the background...
(S02, Age 11-13)

However, there were also participants who said they rarely or never used more than one device at a time. For example, one young person noted that a second device would only be employed if the first was low or out of battery.

I only use my iPad unless my phone's on charge, but if my phone's dead I'll use my iPad, but if my iPad's dead I'll use my phone. (W02, Age 16-19)

4.2. Young people's perceptions of HFSS marketing

This section explores young people's unprompted recall of HFSS marketing as well as their responses to actual examples of adverts for HFSS products viewed during the group discussions. A particular focus for this study was the influence of digital marketing. This section therefore predominantly addresses characteristics which are relevant to digital marketing.

4.2.1. Unprompted recall of HFSS marketing

When asked to give examples of marketing for HFSS products, participants most commonly reported seeing advertising for fast food brands but did not recall specific details about the content of the adverts or where they had seen them. Where participants could give details of the specific content of adverts, these tended to be iconic adverts they found to be particularly humorous, or which were associated with particular seasonal or cultural events, such as special Christmas adverts commissioned by Coca Cola.

You're so used to seeing that van every year at Christmas that you just associate it with Christmas. It gets you all Christmassy. (FG S01, Age 14-19)

Young people also mentioned memorable elements of the advertising such as the use of humour, deals and special offers, branding, colours, slogans and songs. However, it should be noted that these advertising techniques are not unique to either HFSS advertising or digital marketing.

When asked where they had seen HFSS advertising, participants reported a range of media including television, cinema, social media, billboards, bus stops, in-store promotions and door drops. Young people were often unsure where they had seen particular adverts or when they had seen adverts from the same campaign in more than one place.

I've seen both – like a poster and a live ad playing. (FG S01, Age 14-19)

While young people were exposed to HFSS marketing via a range of sources, exposure through social media was particularly notable. Young people across all of the groups had seen HFSS marketing through social media including Instagram, Instagram Stories, Facebook, Snapchat, Twitter and YouTube. Young people were invited to interact with these adverts by clicking through to find out more about the products.

Yeah. And on Instagram. When you're flicking through people's stories, it'll come up – like make-up adverts, food adverts, chocolate adverts an' that. (FG S03, Age 16-19)

Well, I'm always on YouTube or something. It's got adverts and it's always, always there.

(Speaker 1)

But every minute... Every time I click on to a new video, it's an advert on the video. Advert, advert, advert, advert. (Speaker 2, FG S03, Age 16-19)

Unlike traditional forms of advertising, digital marketing allows viewers to choose not to view the full advert by skipping or scrolling past it. The consensus among the participants was that they paid little or no attention to HFSS adverts on social media and tried to skip them or ignore them when they could. However, examples were given of advertising tactics such as videos which could not be skipped until a certain duration of the advert had been viewed. For example, the trade-off between watching three minutes of adverts to access one hour of advertising-free music on Spotify was cited. It was also perceived that social media advertising was particularly targeted at young people as they were the

most likely users of social media.

You get adverts on Facebook and that but it's not really like... You scroll past them, hey?

(FG S01, Age 14-19)

Online, I've seen quite a few for McDonalds and KFC. They've been quite predominant online, and it's like for those stupid pop-up ad things – like just before you go in to a website, and it stays on your screen for about 30 seconds before you can cancel it, so that's kinda where I see them. (FG S01, Age 14-19)

And they're all on social media as well, so it's just trying to get them to come and get it. So say they're debating on where to go for dinner or something, if they see that popping up on their phone, they might be like, "Oh, that's looks good. I might want one of them."

(FG S03, Age 16-19)

Who do you think [HFSS advertising] is aimed at?

People who are on Instagram, which is usually like teenagers and older teenagers.

(FG S01, Age 14-19)

When the young people were shown actual examples of HFSS marketing in the groups, they were familiar with the advert shown or had seen other advertisements for the same product in the same marketing campaign, with the exception of the influencer advertising example. For example, when young people were shown a screenshot of a social media post advertising one product, they frequently referenced television or YouTube adverts for the same product. The participants' recognition of the different examples of marketing materials indicates that, while they may not be able to recall all of the details of these adverts at a later date, young people are being exposed to HFSS marketing via a range of sources.

In response to the specific examples of HFSS marketing shown during the groups, young people identified prominent features such as the look of the product, the use of colour, special deals and offers. These elements are common across digital marketing and more traditional forms of marketing. However, in contrast with traditional forms of marketing, digital marketing also allows viewers to interact with advertising through social media.

Each group was shown at least one example of an HFSS marketing social media post wherein viewers were invited to respond or react to the post in some way, for example, by liking, sharing or commenting on the post, tagging a friend or submitting a picture of themselves holding the product. Opinions were divided regarding this marketing approach. On the one hand, it was argued that they would share an advertisement or tag a friend as requested, with a reported example of previous engagement with a social media post in the hope of winning a prize.

I mean if it was like a deal for a friend or family deal thing, then you might want to tag your friends and be like, "Oh, this could be a good idea for us." (FG S01, Age 14-19)

However, on the other hand it was claimed that engaging with brands on social media was embarrassing and a waste of time. These participants thought that they would not engage with marketing in this way, saying that only *"Older people that have no shame"*

and "*Delusional folk*" (FG S02, Age 11-13) would become involved in such adverts.

In the main, the young people did not demonstrate a particularly sophisticated understanding of engaging with specific HFSS campaigns on social media as a marketing tactic. However, comments were received which demonstrated that the ways in which companies used campaigns, such as 'Is a Big Mac with bacon still a Big Mac?', to generate debate online and in person were successful at engaging with the public and raising the profile of HFSS products.

I think as well the comments make it so tempting. It's like, "Oh, I had this pizza. It's really good. They're right. Get the pizza." (FG E01, Age 14-18)

They're trying to get people involved, and to get them to buy the product so they can tell them what they eat. They don't really care if you think it's a Big Mac or not. They want you to buy it and see for yourself. (FG W01 Age 12-15)

4.2.2. Targeting, messaging and impact of HFSS marketing

In response to the examples of advertising shown, the young people almost unanimously identified the message of the adverts as promoting the purchase of the product. In general, the focus group participants spoke about the target audience for the adverts shown as being everyone, or people who liked the product being advertised. It was also argued, though, that the adverts viewed during the groups were targeted at specific groups, such as young children or teenagers, based on the content of the advert or the platform on which it appeared. Factors which were cited included the use of animated characters and bright colours to appeal to young children, and advertising through social media platforms which are predominantly used by teenagers.

I think it is cleverly done, and especially... I've seen it, and they play it pretty much every time I go to the cinema, so... And especially like when children's films and stuff, so I'd say that having the personified animation of everyday chocolate would kind of – especially for children – it would grab the children's attention because... And then, especially with cinemas, they would want that as a snack or something within the cinema. (Speaker 1)

Yeah. Within some of the adverts, when it comes to seeing the adverts, and they're seeing their children seeing that, the parents are probably thinking, "Look away, kids, from that advert," if that makes sense. (Speaker 2, FG W02, Age 16-19)

The young people strongly expressed the opinion that advertising did not have an impact on them or their own food choices. When prompted on the impact of the advertising they had been shown, they tended to speak about younger children as being susceptible to marketing, with 'pester power' – young children imploring their parents to buy the product being advertised – the likely consequence. The participants argued that their peers and adults were not influenced by advertising.

My younger cousins, they're between the ages of 7 and 10, so whenever they see a McDonalds advert or a KFC advert, that's all they talk about, and they just want it, but they're old enough to understand "No. You're not getting it because..." Whatever

reason, but they always go on about it whenever they see the advert.
(FG S01, Age 14-19)

Well, a young child would wanna buy it like right now. They would nag their parents to buy it – like get Coco Pops. (FG W01 Age 12-15)

Despite their assertion that marketing had no impact on them or their food choices, participants reported that the marketing materials shown during the group discussions had made them hungry and hanker after a few of the products which were featured in the adverts.

Everything you've showed us made us hungry right. (Speaker 1)

Aye. We want some Big Macs right now. (Speaker 2, FG S04, age 15-17)

The Snickers ad's like this Ninja guy, and he's running, and then the guy's like "Snickers – get some nuts," and that makes me really want a Snickers. (FG E02, Age 11-15)

In addition, participants were able to give tangible examples of occasions when HFSS marketing had influenced their purchasing behaviour directly, such as buying or asking a parent to buy new products that they had seen advertised or visiting a particular fast food outlet after being exposed to its marketing. This suggests that young people are susceptible to HFSS marketing, despite their assertions to the contrary. Indeed, some of the examples of the impact of HFSS marketing were given by young people who had claimed to be immune to the influence of advertising. However, these young people did not seem to be fully aware of the contradiction between these statements.

I saw them on the side of a bus, and then I bought some, and then they were really good. (FG E02, Age 11-15)

I talked about that on Saturday. I saw a Domino's ad on the TV and then I thought I'll have to go and buy myself a Domino's. (FG S02, Age 11-13)

4.2.3. Awareness of social media vloggers and Influencers

YouTube was popular among the young people, but vloggers and YouTubers did not feature greatly when they spoke about how they engaged with the site. When asked specifically about vloggers and YouTubers, participants tended to say that they did not watch them, though there were occasional exceptions. Examples of content watched on YouTube included toy reviews, tidying up videos, YouTuber challenges, shopping "hauls", documentaries, comedy shows, videos on cars, space and sports.

I like to watch, what's it called? Like "hauls" – like stuff people have got, like people showing you stuff that they've bought. (S03, Age 16-19)

Like blogs. YouTubers challenges and stuff. (E01, Age 14-18)

One of the aims of this research project was to explore young people's perceptions of influencer marketing. Social media stars and influencers were not spontaneously

mentioned as a source of HFSS advertising by any of the young people involved in the focus groups. Very few of the young people spoke about watching or following vloggers and influencers. When asked directly about influencer advertising, participants gave examples of influencers advertising beauty products and clothes. Participants in one group spoke about the high profile example of Kylie Jenner advertising 'SugarBear Hair Vitamins' but none of the participants in any of the groups were able to give an example of a social media influencer advertising HFSS products.

It could be argued that the young people were not able to provide examples of HFSS marketing by influencers as they were unable to recognise the posts by social media influencers as actual advertisements. However, when shown the promoted post featuring a prominent vlogger, most participants were able to identify this as advertising and highlighted the use of '#ad' to denote a post for which an influencer has received payment. The consensus of the young people was that the influencer had been paid to advertise the product and that the post may not reflect the influencer's genuine opinion.

Coz it's the caption that she puts on, it's like "ad." Whenever something's an ad, the people usually promoting it's usually getting paid. (FG S01, Age 14-19)

Because they've got money to say that it was good. (Speaker 1)

Aye if he's sponsored by them he cannae say nuttin' bad a'boot them like. (Speaker 2)

Exactly! It's like if you're a sponsor for Coca-Cola you're no' going to drink Pepsi like. They dinnae pay you for...to rip them ken what I mean, you've got to be nice a'boot it.

(Speaker 3, FG S02, Age 11-13)

Those participants who were shown the social media influencer advertisement did not feel that this type of advertising was particularly memorable or would induce them to purchase the product. However, a minority view was that the content produced by social media influencers did impact on the food preferences of themselves and their peers. For example, YouTube challenges which show vloggers attempting to eat vast quantities of food and bloggers creating content based on their own lifestyles were cited as having the potential to influence young people. This raises an interesting question about the promotion of HFSS items through the content created by influencers, even when they are not overtly advertising HFSS products.

They've just got this big famous guy and they thought 'aye, if he posts a picture with Nutella folk will be like 'oh he's eating Nutella so I'll eat it.' That's no' how it works. (FG S02, Age 11-13)

Well, I don't really follow bloggers any more. I used to quite a lot, but they're always not exactly promoting, but they joke about healthy lifestyle and how that's impossible, and would then talk about all the junk food they eat, if that makes sense. So they'd try a healthy lifestyle and then say that it was a fail, and then go back to eating junk food. (FG E02, Age 11-15)

So did that have any impact on yourself at all or not?

Not on me in particular, but I know quite a lot of my friends who follow the same people decided that it was cool to eat junk food. (FG E02, Age 11-15)

4.3. Other factors that influence young people's consumption of HFSS products

This section explores other influences beyond HFSS marketing which impact on young people's dietary choices, and what makes HFSS products appealing and unappealing. It then explores young people's perceptions of HFSS products and understanding of the health impacts of a HFSS-rich diet.

4.3.1. Factors that influence young people's food choices

A range of factors were reported to affect young people's food choices, including:

- Family influences
- Financial restrictions
- Time restrictions
- Convenience
- Health
- Age and maturity

Family influences

As parents and carers shopped for the household for the majority of participants, their food choices were clearly influenced by their parents. Participants also added that their parents/carers tried to promote healthier eating by discouraging them from eating unhealthy food and trying to endorse healthy options.

Even just a packet o' crisps or something, and she's like, "OK. Don't eat loads o' that because we're gonna have dinner soon." (S01, Age 14-19)

My dad's put me on a strict diet last week, so that's why I'm cooking my own food, because I'm a bit insecure about my body and stuff like that. So he said, "OK. That's it. You're not eating any more crisps! No more o' that stuff. You're eating properly, and I'm taking you to the gym 4 times a week!" (E01, Age 14-18)

On Saturdays and Sundays, I'll have sugary stuff, but my mum encourages me to have the healthy stuff... (W02, Age 16-19)

Financial restrictions

Financial restrictions, and the price of products, played an important role in determining young people's food choices and purchases. Participants stated tending to buy products they could afford rather than those that were healthy, with healthier items often viewed as being more expensive. As a result, young people said that they were often tempted to

buy products that were on offer or included in a promotion. They also considered value for money when purchasing products, though value was most commonly equated to quantity rather than quality of the product. It is therefore unsurprising that young people tended to opt for the less healthy, but considerably cheaper, food or drink option.

If you go to like Asda or something and buy like a bag of carrots for like 69p you could get 3 packets o' noodles or something for that price. So like you'd rather pick 3 packets o' noodles that's going to last you rather than a bag of carrots. (S03, Age 16-19)

I do have to stop myself from going to fast food restaurants, and that might be because maybe their fries are good, but also it's way cheap, so it would be better if they hiked up the prices on that so I wouldn't be tempted to buy it. (E02, Age 11-15)

Time restrictions

Participants also said that time was a factor that influenced their food choices. Their work and study schedules determined what they ate and when they ate.

I don't wake up that early on school days, so I might not have time to eat breakfast, so I'll just sometimes have a Brunch Bar. (S01, Age 14-19)

I travel a lot, so if I'm at home I would much prefer to be like, "Oh right. I'll get up in the morning, stick something in the slow cooker for the day, go to work. That's it done. Or go to college or whatever." If I'm away at Cardiff or Glasgow or something like that, I'm like, "OK. I'll just try and find the first place to eat," and then that's it! (E01, Age 14-18)

Convenience

Young people also reported eating food that was easy and convenient to both prepare and clean up.

I cook what's most convenient. If I'm home alone, and I'm when I say 'more convenient,' I usually refer to what takes the... Or make sure I don't have to do a lot of washing up, so whatever's convenient. (E02, Age 11-15)

Aye or convenience, cheapness, a lot of cheap things are made to like make you addicted, like energy juices and that and because its cheap you're just going to keep buying it. Its convenience. That's all anybody really eats fatty foods for. (FG S02, Age 11-13)

Health

Health concerns also influenced young people's food choices. For example, existing allergies and health issues restricted some young people's diet and food choices. However, a desire to be healthy also impacted on the participants' food choices. The young people stated that they wanted to be fit and well and would prefer to eat healthily because of the physical and mental benefits associated with such a lifestyle. Those who did have such a diet, spoke of the benefits they had experienced.

I guess there's the aspect of health. For instance, when I eat healthily, I feel happier. I guess, mentally and physically, I feel kind of more awake, where, if I eat unhealthily,

then it's kind of the aspect of I just don't; I just feel kind of more 'euch,' so I guess that's kind of the aspect. (W02, Age 16-19)

Just because, if I eat it, I'll cry! It's like you want it [sweets], and you really enjoy it at the moment, but then, after you eat it, you start to regret what you've eaten, and then it kind of brings your mood down a bit, and it's not very good for mental health and stuff like that. And then you think, "Oh. Why did I do that?" (E01, Age 14-18)

Age and maturity

Another influential factor highlighted in a focus group with those at the older end of the 11-19 age spectrum was increasing age and maturity. There was a view expressed that as an individual gets older, and become more mature, he/she is less likely to eat as much unhealthy food as there is an increased awareness of the importance of eating healthily.

I just feel like, when you're older, you know not to eat all the stuff. It's not like something's stopping you. You just know not to do it. (S03, Age 16-19)

What makes HFSS food and drink so appealing?

There was consensus across the groups that HFSS foods and drinks were appealing to participants and that they enjoyed consuming them, particularly due to the taste and smell of the products, and the appearance of the products and their packaging.

It tastes so good, the salt and sugar. (FG E02, Age 11-15)

Temptation...Sitting there in front of you! (FG E01, Age 14-18)

Sometimes the packets are nice and colourful, so it kinda catches your eye, so you're like, "Oh, that looks good. I should try that." (FG S01, Age 14-19)

Novelty of the item was commonly mentioned as a factor in the decision to purchase high fat salt sugar products. There was agreement across the groups that young people would be more likely to buy a product if it was a new variety or flavour, or if a friend of family member had recommended it.

Like family members, friends. When they go out, the way they say how nice it is, or the way they like it. Like just an urge to do it now. (FG E01, Age 14-18)

That happens a lot with me. I go to Tesco, see a new Pepsi or Coke, I'm like, "Ooh! Me and my sister might like that!" (FG E01, Age 14-18)

Young people expressed the belief that salt and sugar in HFSS products have addictive properties. They also thought that these addictive qualities meant that people who consumed HFSS products were more likely to go on consuming them.

It's basically the same as smoking. You get addicted to smoking. You get addicted to sugar. (FG W01 Age 12-15)

Salt and sugar are so addictive. (Speaker 1)

Salt's not addictive. (Speaker 2)

Yeah. It's really... It makes your palate worse as well.... It's like it makes you physically want to eat more junk food, the more salt you have. It's really bad. Yeah. I mean if ever I eat that stuff, I feel terrible about myself afterwards! (Speaker 3, FG E02, Age 11-15)

What makes HFSS food and drink unappealing?

When asked if there was anything which made HFSS products unappealing to them, participants spoke about their personal preferences, health concerns and worries about how HFSS products were made. Watching videos about how fast food is made influenced some young people's consumption behaviour as they no longer bought certain products or visited fast food outlets.

And just the fact that it gives you a lot o' bad health problems. It's not good for you. (FG S03, Age 16-19)

It is also like we've seen loads of YouTube videos about this is what's at McDonalds. Things like that. (FG E02, Age 11-15)

I've haven't had hot dogs cos what it's made out of [laughs]. (Speaker 1)

You haven't had hot dogs because of what it's made out of?

Hot dogs are minging. (Speaker 1)

Yeah. I saw that video on Iceland. (Speaker 2, FG E01, Age 14-18)

4.3.2. Perceptions of HFSS food and drink

Classification of HFSS products

The young people were able to give many examples of HFSS food and drinks, most commonly naming fast food brands such as McDonalds, Burger King, KFC and Subway and brands of drinks such as Coke, Pepsi, Red Bull and Mountain Dew. Participants also gave examples of more general food categories such as fast food, sweets, crisps, fizzy juice and energy drinks.

Everything that says "McDonalds" is just high fat, high salt. (FG E02, Age 11-15)

Perceived healthiness of HFSS products

The consensus of the young people was that HFSS food and drink were very unhealthy. No individual argued that HFSS foods offered any nutritional value or merit; many added that a diet based on these items would lead to negative health outcomes (see below).

However, there was also a view that HFSS foods would not have major adverse impacts if consumed in moderation and that HFSS foods could also contain healthier products, such as pizzas with vegetable toppings. In addition, there was recognition of the potential impact of reformulation for reducing fat, salt and sugar levels. It was also pointed out that foods promoted as being part of a healthy, balanced diet, such as fruit, could also be high in sugar.

The pizza ones could be healthy... Because like – (Speaker 1)

You can get a veggie pizza. (Speaker 2)

Somebody could have a lot of sugar and salt but still be healthy. (Speaker 3)

Fruit is natural sugar so... (Speaker 4, FG S04, Age 15-17)

McDonalds and Burger King and KFC are not healthy. They don't have any vegetables there (FG W01, Age 12-15)

4.3.3. Health impacts of HFSS food and drink

The young people were aware of a range of negative health outcomes associated with having a predominantly HFSS food and drink based diet. The most commonly cited conditions associated with such a diet were cardiovascular disease (including heart attacks, strokes, hypertension and arteriosclerosis), diabetes and obesity. It was also thought that an HFSS diet would impact on mental wellbeing, with possible outcomes ranging from depression, eating disorders and too much sugar affecting mood and behaviour. Dental health was thought to suffer if food and drink high in sugar were consumed regularly.

What do you think the impact of an HFSS diet may be?

Diabetes. (Speaker 1)

Maybe diabetes, heart attacks. (Speaker 2)

Liver disease, obesity... (Speaker 3, FG E01, Age 14-18)

Sugary ones would probably do bad things to your teeth and that. (Speaker 1)

Salt does bad things to your heart. (Speaker 2)

Aye, high calories like your cholesterol and all that... (Speaker 3)

Aye it all affects it, like some food can even like... Some produced food like... What is that called? Like... Ready meals and that like some stuff like that can even cause cancer. Its mental what food actually does to your health but folk still sell it... (Speaker 4, FG S02, Age 11-13)

I guess it's the effect that... It has on your body, but there's the risk... Like the sugary – there's the risk of diabetes. The salty – there's a risk of high cholesterol. And I just don't really wanna put my body through that... (Speaker 1)

Also, the consumption also can lead to kind of mental health issues and tooth decay. Also the development of eating disorders if you eat too much, and then you're just like, "Wait a minute. I've eaten too much" and then kind of concerned about your

weight and some stuff like that, so the overall thing of mental health. (Speaker 2, FG W02, Age 16-19)

Even though obesity was cited as a condition that could arise from eating unhealthy foods, few participants were able to report a relationship between HFSS foods and the development of cancers, as it was apparent the participants were not aware of the fact that obesity is the second largest preventable cause of cancer in the UK, and of the thirteen cancers associated with overweight and obesity. After prompting, it was thought that HFSS foods may result in cancer, though the participants did not seem to know which cancers might be associated with such a diet, and what the mechanism for this might be. Apart from the general statement that cancer might result from consumption of HFSS foods, specific types of cancer that were cited included liver, bowel and heart cancer. However, it wasn't clear that participants attributed this to an indirect link through obesity, or whether they were considering a direct link between HFSS foods and cancer.

Cancer is... I mean cancer's on a massive spectrum. Just because you do something, it doesn't mean you're gonna get it, because cancer's pretty much just development of cells... Like with a heart attack and stuff, the fat kind of goes in to your arteries and stuff like that, and that's what causes the cardiac arrest. Cancer's a bit more complicated. I don't even know what type o' cancer you would get through eating like bad food. (Speaker 1)

Would it be liver cancer, coz it's affecting your liver? (Speaker 2)

Well, that would be alcohol. And stomach maybe? Intestine... (Speaker 3)

Bowel probably. They're the only ones I can really think of. (Speaker 4, FG E01, Age 14-18)

What about cancers? Do you think an HFSS diet could have any impact on cancer?

Can you get heart cancer? (Speaker 1)

Aye, because you know when you're obese you're more likely to get cancer. (Speaker 2)

Are you? (Speaker 1)

Aye... Coz your heart can't cope with the stuff. (Speaker 2, FG E03, Age 13-15)

Do you think that they might be linked to cancer?

Yeah. (Speaker 1)

Sometimes? (Speaker 2, FG S03, Age 16-19)

4.4. Young people's views on protective measures

This section explores young people's concerns about the way HFSS products are marketed, and what changes they would like to see being made.

4.4.1. Concerns about HFSS marketing

The young people outlined a number of concerns related to the marketing of unhealthy foods and drinks. The adverts were perceived as being misleading, focusing on positive aspects such as taste, low cost or happy and satisfied consumers, rather than the adverse effects associated with such foods. They were also said to glamourise the products and use techniques to make the foods look as attractive as possible. In addition, the labelling of HFSS products was said to be inadequate, with full information not being provided and the print being too small to allow proper scrutiny. As the young people perceived that the advertising could influence members of the public, they argued that it was fundamentally wrong that unhealthy items were being promoted actively, and that such marketing was so ubiquitous. The relative lack of marketing of healthy items was also noted as being an issue of concern. It was also argued that those living in more deprived areas would opt for cheaper items, even if these were the unhealthy option.

I never see any "Eat your salad" advertisements, and young children are constantly surrounded by all of these junk ads, and they get in the habit of eating it. When I started secondary school, I had my own money, my own phone, going to school on my own. I am so cool and independent, and I bought so much junk, and then you get addicted because it's everywhere. It's everywhere. You think it's just what everyone does, and you're young and naïve so you don't understand the impacts, and that needs to change... (Speaker 1)

I don't think it's good that they don't show how much sugar is in it, and, if it does, it's in small letters and you would need a microscope to read it. (Speaker 2, FG E02, Age 11-15)

They never show the real damage it can cause. It's always put in a really good light. (FG S01, Age 14-19)

Especially with lower classes and those who can't afford it. You would find that there is more obesity within lower classes than middle and upper classes because they can't really afford to be buying these expensive fruit and vegetables every single day. Therefore, they kind of substitute for cheaper food. (FG W02, Age 16-19)

Those in older age groups also spoke of their growing independence from potential constraints encountered in the home and school environments, and how the proliferation of takeaway and fast food outlets in local communities could be alluring to young people undergoing this transition given their convenience and relatively low cost.

4.4.2. Changes to HFSS marketing

The young people called for a range of changes to be made to the marketing of unhealthy food and drink. These were:

- Prevent the targeting of children and young people
- Make the packaging and display of HFSS products less attractive
- Clearer product labelling
- Address the perceived price discrepancies between HFSS and healthy products
- Provide more education around healthy food

Prevent the targeting of children and young people

One of the most commonly cited changes was for the HFSS marketing to stop targeting young people and young children. Hence, HFSS adverts on television and online (e.g. YouTube) should not be aimed at younger age groups. Respondents either suggested a total ban on such advertising or a restriction on the times these adverts could be screened, though they did not always agree on a time when a watershed should apply. Similarly, it was argued that billboards and posters (e.g. bus adshels) should not be in the vicinity of areas that young people frequent, such as schools and playparks. As HFSS marketing was viewed as being ubiquitous, at the very least the participants stated that there should be a decrease in such advertising. It was also argued that this advertising had to be more truthful in terms of its depiction of HFSS products, and their adverse health impacts.

I don't think they should have advertisements that make the consumer believe that this food will have a beneficial impact on their life: so the Snickers "Get some nuts" one really makes it seem like having that Snickers bar helped this guy out. He's gonna really be able to run across the rooftops and do all the parkour when, in reality, he's just gonna become morbidly obese and have heart disease (FG E02, Age 11-15)

Instagram and Facebook are most guilty for it, but YouTube as well. They're kinda ones that have the most food adverts... (FG S01, Age 14-19)

I don't think they should show like sweetie adverts and that during the day while kids are awake because that's what makes them addicted to sugar and that, they see that and "oh mum, I want to try that." My wee brother is the exact same. He's 11, every single time he goes into a shop... He'll buy a multibag of sweeties and there's no' need fae that. But it's because he sees it on the telly, Xbox, YouTube, and like obviously its self-discipline I know but... Like he wouldnae have the idea of being able to do that every day if he didnae see it on the telly either. (FG S02, Age 11-13)

Make the packaging and display of HFSS products less attractive

The packaging of HFSS food and drink was reported as being attractive and alluring to young people. As a result, it was suggested that measures adopted to reduce tobacco

sales, such as HFSS foods having to be sold in dull, nondescript packaging, were worth considering. Similarly, restricting displays of sweets within shops, including at the point of sale, were perceived as having the potential to reduce “pester power” and limit the influence on younger children.

See if they actually made healthy things that had bright packaging and all that, and made it seem fun, more weans would want to buy it. But see when you're buying like your chocolate in the shop that's the first time you see bright colours and all that, that's what you're going for first... (Speaker 1)

Make the packaging green, just do what they done with fags. (Speaker 2)

Make the packaging plainer, aye. (Speaker 3)

“This will cause heart disease”. (Speaker 4, FG S02, Age 11-13)

I'd like to see more of what calories and stuff are in it. Even though it does show you on the packet, it should let you know on the advert just in case anyway. (Speaker 1)

I'd like to see... (Speaker 2)

...More of an explanation. (Speaker 1)

...[The marketing of] more good foods instead of junk foods. (Speaker 2, FG S03, Age 16-19)

Clearer product labelling

A call for clearer information on HFSS product labels, in relation to calorific intake, nature of ingredients and more obvious warnings if an item exceeded healthy guidelines in terms of fat, salt or sugar was made.

If the Government could pass legislation to make it so that adverts have to say how many cubes of sugar one serving of this thing has in it, or it would have to say that on the packaging or something like that. Even if they made it in really small print, if it had to say that then that might make it more transparent because it's like “Carbohydrates: carbohydrates of which sugars,” there's about 100 grams. That's your 100 grams. So it would be quite hard to visualise how much sugar you're eating and drinking. (FG E02, Age 11-15)

Address the perceived price discrepancies between HFSS and healthy products

One of the biggest concerns highlighted by the young people was the perceived discrepancy between the price of healthy and unhealthy items, with the view expressed that the cheaper HFSS products would be particularly appealing to those with less money. As a result, it was argued that this imbalance in price should be addressed. One proposal was that HFSS products be subject to increased retail prices, either via taxation or via a ban or decrease in multibuy offers or similar promotions. These multibuy promotions were perceived as being successful, and therefore a reduction in HFSS promotions coupled with an increase in healthy food multibuy promotions and offers were viewed as helping to address the imbalance in costs of healthy and unhealthy food.

A good example for that is the McDonalds monopoly promotion... It's like, "Oh. I could win things!" Like most of the time, you win a free small prize and stuff like that, so you're winning more food... So let's just say you went to McDonalds and bought a medium fries, and you had the card, and it says that you've won a McFlurry or something like that, that's a free McFlurry to put down your system. More sugar, more unhealthy stuff going down your system and stuff [laughs]. (FG E01, Age 14-18)

And then I think the problem with that is that healthy food is more expensive, and I think the bigger problem to tackle, before raising the price of fast food, is, or would be, to lower the price of healthy food because if you're just gonna keep raising the price, people need an alternative – something that's still cheap – and the aim of this is to make them healthy or keep people healthy... (Speaker 1)

If you tax fast food higher, you could use that ring-fenced money to subsidise healthy food. (Speaker 2, FG E02, Age 11-15)

I think instead of having a multipack of Mars Bars for £1 or something like that, then it should be the opposite way where it should be like 2 punnets of blueberries for £1, or something like that. (FG W02, Age 16-19)

Provide more education around healthy food

In one group it was reported that leaving school was a time of transition for young people, and some might be unprepared for their growing sense of independence. If those in this transitional phase lacked skills in cooking and budgeting, there was a concern that the convenience, cost and ubiquity of fast food outlets would be difficult to resist. It was suggested that schools, colleges and universities do more to help educate young people in these fundamental skills in order that they adopt healthy lifestyles.

I think teenagers are probably where the restrictions need to be held – teenagers to young adults, college students / uni students – because uni students, that's the first time they're living out on their own and stuff like that, and probably they don't know how to cook and stuff, and then if you see all these adverts, it's more tempting to kind of just go to like Burger King or something like that... I think it should be restricted on students, so at least the university teach students how to live – like there's a sort of programme to teach students how to live – before they move to university and stuff. (FG E01, Age 14-18)

Perceptions of existing regulation

The participants demonstrated a partial awareness of the Soft Drinks Industry Levy, or sugar tax. There was relatively high awareness of the impact on sugary, fizzy drinks, with the increased expense of drinks like Coca Cola resulting in them becoming less popular, both in terms of personal consumption and the reported observation of those young people working in the retail sector. In addition, the reformulation of drinks such as Irn Bru was criticised in the Scottish focus groups, as the participants tended not to like the new formulation, and the lower sugar version of Lucozade also did not seem to be popular. Despite this, the consensus was that the sugar tax was a good idea, and would reduce consumption of unhealthy drinks due to the increased cost, as well as make evident the amount of sugar in such a product. However, it was also incorrectly reported that the sugar tax already applied to foods, and examples were given of increases in the price of

sweets and chocolate. Those who were aware that the tax currently applies only to fizzy drinks were broadly supportive of it being applied to foods in the future, and those who thought the tax already covered food also tended to be in favour of its continuation. Indeed, calls for additional taxation to cover foods high in fat and/or salt, and in one specific case a “red meat tax”, were also proposed.

I mean I'm kind of guilty when it comes to fizzy drinks – I love the stuff! – but I don't pick up full fat ones because (1) sugar tax makes them too expensive, and (2) I don't like full fat to start off with! I work at [name of place], and all our drinks, except Coca Cola are diet or low sugar. We sell them for £2.50. But the Coca Cola we've put up to £2.70 because of the sugar tax, and people have stopped buying the Coca Cola because it's more expensive, and personally I see that as a good thing because people aren't consuming themselves in sugar! (Speaker 1)

[It's a] good idea, coz it's showing people how much sugar is in drinks. (Speaker 2, FG E01, Age 14-18)

Coz if it's higher, less people'll buy it, and it's healthier. Not healthier, but less people drink it. It's a help with health... (Speaker 1)

And I don't get why a bag o' sugar doesn't have sugar tax. (Speaker 2, FG E03, Age 13-15)

Well, sugary foods, they go up in price so they try and stop people buying them, when they used to be lower... Well, say you were away to buy... This isn't the real price. Say you were away to buy a Mars Bar. It's 10 pence. Then, wi' the sugar tax, it could be fifteen pence, so it just goes up in price so that people don't want to buy it. But people still do buy it. (FG S03, Age 16-19)

Mostly everyone loved Irn Bru because they could not stop buying it, it was the most natural thing that everyone loved. But then as soon as it went down in sugar everyone just like stopped mostly. (FG S02, Age 11-13)

There was a minority view expressed by the young people that such marketing was legitimate, HFSS food and drink was enjoyed by many and as a consequence no further restrictions were merited.

No' excluded till after 9 no' that late because they're going to be in their beds. Like a wain's still got to have enjoyment and stuff, and sweeties and that, just no' as much, in moderation I suppose. (FG S02, Age 11-13)

However, the consensus of the young people was that HFSS marketing is pervasive and influential, and action should be taken to decrease its appeal in order to address negative health outcomes in the future.

5 Discussion

This study explored how 11-19 year olds across Great Britain perceive HFSS marketing and the influence on their dietary choices. Three key themes were identified from this study:

- Young people feel HFSS marketing is pervasive and targeted at them
- Young people are also influenced to consume HFSS products by cost, convenience, family habits and age
- Young people are concerned about HFSS marketing and are supportive of protective measures

Young people feel HFSS marketing is pervasive and targeted at them

Participants reported that HFSS marketing was ubiquitous, with television, cinema, social media, billboards, bus stops, in-store promotions and door drops mentioned as media through which they had been exposed to HFSS advertising. As might be expected, given the young people's reported use of social media and online sites on dual devices, the awareness and importance of digital marketing to which young people were exposed was striking. Participants in every group had seen HFSS marketing through social media including Instagram, Instagram Stories, Facebook, Snapchat, Twitter and YouTube, with the capacity to interact with these adverts further by clicking through to receive more information about the products. In terms of digital marketing, young people thought that the marketing was most likely to be aimed at them in that they were most likely consumers of the social media sites and relevant platforms.

One of the unique advantages of digital marketing is the ability to co-opt internet users into sharing and creating content^[12]. This marketing approach of inviting users to respond or react to the post in some way, for example, by liking, sharing or commenting on the post, tagging a friend or submitting a picture of themselves holding the product, polarised opinion. Participants arguing that it was embarrassing and would only appeal to 'uncool adults' whereas others said that they might like or tag a friend, especially if a prize was on offer. It was recognised that specific campaigns were successful at provoking debate online and in person, engaging with the public and raising the profile of HFSS products.

When the young people were shown actual examples of HFSS marketing in the groups, they were familiar with the advert shown or had seen other advertisements for the same product in the same marketing campaign. Digital media has been shown to facilitate such brand immersion and amplify brand and product messages, which is linked to recall of HFSS marketing^[12]. Recall of HFSS marketing is itself associated with likelihood of being obese^[10]. This study builds evidence around the prevalence of HFSS marketing and the repetitive exposure in many different forms, which contributes to the obesogenic environment young people must navigate.

While young people couldn't always recall where they had seen HFSS marketing or the specific content, marketing tactics such as humour, slogans and bright colours were the most remembered. This suggests that, while these tactics may not mean food and drink marketers are purposively targeting younger audiences, these tactics do resonate with young people and increase their ability to recall HFSS marketing. These marketing tactics

are also associated with positive brand and product attitudes in children and young people^[12].

Influencer advertising is another unique advantage of digital marketing. This form of marketing of HFSS products did not seem to have generated great awareness or interest in the young people, and the actual example of influencer marketing shown during the groups provoked a lukewarm response. However, existing evidence suggests that subtle forms of marketing such as influencer content are difficult for children and young people to recognise^[12]. Therefore, it may not be that young people aren't seeing influencer marketing, rather there are low levels of media literacy and low recall for this type of marketing.

The consensus among the participants was that they paid little or no attention to HFSS adverts and would skip them or ignore them if possible. Young people also perceived themselves to be immune to the influence of HFSS marketing, though thought it may impact upon parents and carers via 'pester power' and they also gave examples of others who had been susceptible to its advertising. Despite reporting that they ignored HFSS adverts and their immunity to their advertising power, young people were easily able to recall marketing tactics such as humour and slogans. They also gave personal examples of acting upon HFSS advertising previously, yet did not seem to be fully aware of this apparent contradiction. We know from existing evidence that children and young people have good general media literacy^[5] but low digital marketing literacy, given the subtle marketing tactics that are used and the blurring of marketing with peer activity^[12]. The 2016 study found that even when young people are aware of marketing tactics and feel negatively towards them, they are still vulnerable to the impacts^[5]. This study suggests it continues to be the case that vulnerability to HFSS marketing goes beyond media awareness, but now in 2019 this may be reduced due to an increase in subtle marketing of HFSS products.

Young people are also influenced to consume HFSS products by cost, convenience, family habits and age

Young people had high awareness of the type of food and drink that would be included in a definition of HFSS products. They reported enjoying HFSS food and drink in terms of its cost, value (including amount on offer) and taste. It was often stated that HFSS products were less expensive and offered better value than healthier options. In relation to this, it was also stressed that those living in more deprived communities were likely to opt for a cheaper, better value offer. Despite this, the participants were aware of adverse health impacts associated with an HFSS-rich diet, and also admitted to feelings of guilt as well as feeling unwell after consuming HFSS products.

Factors which were cited as influencing young people's food choices included the pivotal role of parents and carers, price, convenience and health. Though health concerns were perhaps not the most commonly cited factor, the high level of awareness of the adverse health effects of HFSS, the view that elements of HFSS foods are addictive, as well as increased knowledge of how fast food is manufactured and what it contains, were significant and are likely to become more so, especially as an individual gets older.

While awareness may increase as a child ages, other factors such as cost and convenience were seen to play more of a role as an individual transitions to independence. This suggests that awareness of the health impacts of an HFSS-rich diet alone may be insufficient to protect young people. This extends beyond health

awareness; young people are still vulnerable to the influence of HFSS marketing even when aware of the marketing tactics involved^[5].

Reducing childhood obesity cannot be achieved by education and awareness alone. These other influences on young people's dietary choices highlights the need to look holistically when developing policies to reduce childhood obesity at all the factors which may in combination result in exposure and vulnerability to a HFSS-rich diet.

Young people are concerned about HFSS marketing and are supportive of protective measures

HFSS adverts were perceived as being misleading, focusing on positive aspects such as taste, low cost or happy and satisfied consumers, rather than the adverse effects associated with such foods. The labelling of HFSS products and information provided as to nutritional content were described as inadequate. The ubiquitous nature and active promotion of marketing of a fundamentally health-damaging product were criticised, and contrasted with a perceived lack of marketing of healthier items.

It was felt that HFSS marketing must stop targeting young people and young children. Respondents either suggested a total ban on such advertising or a restriction on the times these adverts could be screened, though they did not always agree on a time when a watershed should apply. It was also argued that billboards and posters (e.g. bus adshels) in areas that young people frequent, such as schools and playparks, should not display HFSS marketing. As HFSS marketing was viewed as being pervasive, at the very least the participants stated that there should be a decrease in such advertising. It was also argued that this advertising had to be more truthful in terms of its portrayal of HFSS products, and their potential impacts on health.

Restricting displays of sweets within shops, including at the point of sale, were perceived as having the potential to reduce "pester power" and limit the influence on younger children. A call for clearer information on HFSS product labels, in relation to calorific intake, nature of ingredients and more obvious warnings if an item exceeded healthy guidelines in terms of fat, salt or sugar was made.

One of the biggest concerns expressed by the participants was the perceived discrepancy between the price of healthy and unhealthy items, with the view expressed that the cheaper HFSS products would be particularly appealing to those with less money. A ban or decrease in multibuy offers or similar promotions of HFSS items was proposed. A reduction in HFSS promotions was thought to be even more effective if coupled with an increase in healthy food multibuy promotions, which might help address the imbalance in costs of healthy and unhealthy food.

At best, the young people only demonstrated a partial awareness of the sugar tax. It was incorrectly reported that the sugar tax already applied to foods, and examples were given of increases in the price of sweets and chocolate. There was, however, relatively high awareness of its impact on sugary, fizzy drinks, with the increased expense of drinks like Coca Cola resulting in them becoming less popular. The consensus was that the sugar tax was a good idea and would reduce consumption of unhealthy drinks due to the increased cost, as well as make people aware of the amount of sugar in such a product. Those who were aware how the sugar tax is currently applied were broadly supportive of it being applied to foods in the future, and those who thought the tax already covered food also tended to be in favour of its continuation. Indeed, calls for additional taxation to cover foods high in fat and/or salt, and in one specific case a "red meat tax", were also

proposed.

Three years on

Our 2016 study highlighted that young people experience a significant amount of HFSS advertising, which is designed in a way that targets and appeals to them. Despite being aware of the marketing tactics used, young people are vulnerable to the impacts of exposure to HFSS marketing^[5]. Subsequent research showed the link between exposure to commercial television and increased HFSS consumption, and that high marketing awareness in itself can increase the risk of obesity^[9, 10]. This study examined whether, in the face of changing policies, marketing tactics and media use, young people's perceptions of HFSS marketing has changed. It has found that this is not the case. Young people still feel highly exposed to and targeted by HFSS marketing, and report that this marketing influences their dietary choices. Young people themselves are aware of the obesogenic environment they must navigate, and express concerns about the way HFSS products are portrayed to them by marketers.

In 2016 we found television marketing to be particularly influential. This study shows that young people still recall seeing HFSS marketing across traditional forms of media, such as television, but that digital marketing is where they feel most exposed and targeted by HFSS marketing. This suggests that television marketing, along with other traditional tactics, has not been replaced by digital marketing but rather the marketing mix has been expanded. This report adds to the growing evidence highlighting the need to address the influence of more traditional marketing and digital marketing alongside.

The policy changes which have taken place since 2016 have been insufficient in changing the way young people view, and report being impacted by, HFSS marketing. Further action must be taken to reduce its potential impact and address the negative health outcomes associated with an HFSS based diet.

The 2016 study informed the design of a UK-wide survey of 11-19 year olds, which resulted in a series of reports and peer review publications building the evidence on the link between exposure to HFSS marketing and obesity-relevant outcomes in children and young people. This study has again informed the design of a UK-wide survey, which will build further on this evidence base to investigate trends over time in the impact HFSS marketing has on young people, and help us better understand the wider obesogenic environment.

6 Policy Recommendations

In 2016 Cancer Research UK ran focus groups with 11 to 19 year olds discussing factors impacting their diets and weight. Yet, three years – and two chapters of the UK Government’s Childhood Obesity Plan – later, young people’s experiences tell a disappointingly similar story. Children are still widely exposed to marketing for unhealthy food and drink, feel targeted by this marketing, and report that this influences their purchasing and consumption habits.

This reflects the lack of concrete policy progress, except on sugary drinks, made in recent years. Both the UK Government and Scottish Government committed to a shared ambition to halve childhood obesity rates by 2030. Yet, this will not be achievable without ensuring that the intentions set out in their respective national obesity strategies are delivered fully and without further delay.

We are calling for all UK governments to prioritise implementing policies that will modify the food environment, reducing pressure on children at all points at which they are exposed to cues or nudges towards unhealthy food.

Restricting junk food marketing

One vital measure to reduce children’s exposure to HFSS marketing is the introduction of a comprehensive 9pm watershed on TV and online. The success of the marketing mix relies on reaching consumers at multiple points. With children recalling adverts across traditional and digital media, and on multiple platforms, any measures to reduce exposure must encompass all media which young people access. Children themselves support this policy, and favour even broader restrictions, including on outdoor advertising. Both the Scottish and Welsh governments have also sought to ensure that the UK Government acts with urgency.

Protecting children from the subtle tactics we have previously identified in HFSS food marketing^[12] is particularly important given that children see themselves as immune to it.

Ending price and location-based promotions on unhealthy foods

Children report that their food and drink choices are influenced by traits of food and drink choice such as cost and convenience – unsurprising as the current retail environment is skewed heavily towards the promotion of unhealthy foods^[15].

We are calling for mandatory measures to restrict the promotion and marketing of food and drink high in fat, salt and sugar to be implemented across retail and out of home settings. This will be an important step in reshaping the obesogenic environment to one that is more conducive to healthy living.

Ensuring that the UK, Scottish, Welsh and Northern Ireland governments reach consensus on how regulations will work in each nation will allow for a UK-wide impact, while also creating a level playing field for industry. Previous voluntary measures have not achieved the desired impacts and, given the scale of excess weight in the UK, we must introduce regulatory measures if we are to tackle the obesity crisis.

We are also supportive of restricting various other forms of promotion, such as location-

based promotions (end of aisle, checkouts, etc.). These restrictions will further tackle the obesogenic environment and re-stack the odds of eating healthily back in favour of the consumer.

Further measures

In Chapter Two of its Childhood Obesity Plan, the UK Government said it may consider further use of the tax system to promote healthy food across the UK if the voluntary sugar reduction programme does not deliver sufficient progress.

Fiscal and pricing policies have been shown to be effective in promoting healthy behaviours, as tobacco and alcohol taxes have shown, and more recently the sugary drinks tax. These policies also have a pro-equity impact. A report from Public Health England on tax and fiscal measures to promote better health outcomes concluded that there is merit in pursuing such measures^[16].

Those at the coalface of the childhood obesity epidemic – children and young people themselves – support measures that will go further to tackle childhood obesity. This group view the Soft Drinks Industry Levy (SDIL) positively and support its extension to other products, such as confectionary and chocolate and other products high in fat, salt and sugar.

When SDIL is reviewed in 2020, the UK Government should commit to extending the levy to sugar-sweetened milk-based drinks and consider tightening current sugar thresholds to encourage further reformulation. The UK Government should also work with devolved administrations to continue to build the evidence on fiscal measures and explore how these policies can aid reformulation and change business and consumer behaviour.

Recommendations

Introduce a comprehensive 9pm watershed on HFSS food and drink products on all media which children are exposed to, in and out of the home. This includes restrictions on TV and similar measures online.

Introduce restrictions on price and location-based promotions on HFSS food and drink products in all retail settings, in-store and online.

Build the evidence on fiscal measures and explore how these policies can aid reformulation and change business and consumer behaviour.

7 Strengths and Limitations

This was a qualitative study, conducted with 60 (36 female and 24 male) young people across England, Scotland and Wales. The research team recruited young people aged 11-19 from a number of youth organisations, with those from areas of lower socioeconomic status well represented. A key strength of the study is that as a result of participants being comfortable in each other's company, as they were members of the same organisation, they contributed fully to the groups discussions and rich data were elicited. The research team were able to build on the experience of the first qualitative study designed to inform survey development, and again used a range of HFSS marketing creatives, though participants were able to report examples of advertising spontaneously. To avoid priming the participants, information and recruitment materials did state that the group discussions would cover issues such as dietary behaviour and views of healthy and unhealthy foods, as well as the marketing of such products, but did not overemphasise the advertising aspect.

There are also several weaknesses associated with this study. As it was a qualitative study, while it is possible to explore the views of participants in detail in terms of HFSS marketing awareness, knowledge, influence and perceived impact, it is not possible to assess the prevalence of these issues or extrapolate these findings to the whole population. Also, the relatively small numbers who participated in this project made qualitative sub-group analysis limited, for example, by location, sex or age band. Existing group dynamics, while meaning participants were comfortable, may also be a limitation if participants did not want to go against popular opinion amongst their peers.

8 Future Research

The findings of this study have informed the development of the second wave of the Youth Obesity Policy Survey, a UK-wide survey of 11-19 year olds investigating the impact of HFSS marketing on dietary attitudes, behaviours and health outcomes. The survey will be conducted in late summer 2019.

This study shows that young people's awareness of the link between obesity and cancer is low. Further research with young people to identify what type of campaign or other measures may be successful at promoting the link between obesity and cancer will be important in supporting awareness raising with this audience.

Awareness of influencer marketing was suggested in this study to be low, and views on whether this kind of marketing would have an impact on young people were mixed. The evidence base on this topic is currently limited, and more evidence is needed to understand how influencers may be impacting on young people's dietary choices and attitudes.

This report also highlights the need to address other attributes of HFSS products beyond marketing. Cost and convenience were highlighted as key influences of an HFSS diet, and further research into these factors may be influential in supporting wider policy development around reducing childhood obesity.

9 Appendices

Appendix 1: Topic Guide

Aim: The initial introduction will aim to set an appropriate tone for open discussion and for sharing views and experiences.

Introduction

Explain the research approach and purpose

Hi, I'm here to talk to you today about food and how it is marketed. I work for an independent not-for-profit research organisation called ScotCen. I am not linked to any food or advertising companies or organisations and I am only interested in listening to what you have to say. This research has been funded by Cancer Research UK.

Format and purpose of discussion

I have a number of questions to ask you about food marketing and how you spend your time online and watching television. To help me to do that, I have some images and film to show you. We have 45 minutes (for school groups/an hour for youth groups) together so to make sure you have a chance to answer all of the questions, I may have to move the discussion on at times, but you'll have the chance at the end to talk about anything we've missed. We will end on time.

Explain the purpose of the digital recording and how data will be used

If it's okay with everyone here, I would like to record our conversation today so that I don't miss anything you say and to help me accurately capture the discussion. We might use some of what you say in our report, but your names will not be used and no one will be able to identify you. Only the team involved in the research will hear the recording and the recording will be destroyed once the research is over. Transcripts will be kept for 2 years and then destroyed.

Offer reassurance about confidentiality

Any details we have about you will be confidential. We will not use any of your names in the research and nothing will be used that could identify you. You are here voluntarily today so it is up to you how much you want to take part. It would be great to hear from everyone today so please try to speak one at a time and allow everyone to have their say. It is okay to disagree with one another but be respectful of one another. Finally, I would ask that anything shared today stays in this room.

Provide opportunity to ask questions

Does anyone have any questions?

[Complete consent forms if not completed already]

Warm up (5 mins)

Aim: Use initial warm up discussion to develop an understanding of eating preferences, norms, attitudes and behaviours amongst young people, how young people decide what to eat and any restrictions on this.

We're going to talk about how food is marketed to young people but to start with, I'd like to hear about what kinds of food you like to eat.

1. *What are your favourite kinds of things to eat and drink?*

PROMPT:

- At school, at the weekends

2. *How do you decide what you want to eat and drink?*

3. *Is there anything that stops you from being able to eat what you want all the time?*

PROMPT:

- Money, time, parents, wanting to be healthy

Media consumption and viewing behaviour (10 mins)

Aim: Explore young people's media consumption including:

- Broadcast (linear) television
- On demand broadcast television
- Online on demand (e.g. Netflix, Amazon Prime)
- YouTube (What do they watch? Gaming/beauty/influencers)
- Social Media (Who do they follow? How do they interact?)
- Gaming (Playing themselves or watching others)

Include discussion of screen time, devices, dual use, age-gated sites, access to own/others' accounts, parental control, when and where, who they are with, type of content (aimed at children vs family/adult shows).

I'm also interested in how you spend your time online and watching television.

4. *Do you tend to spend more time on a laptop, computer, tablet; mobile phone or watching TV on a television?*

5. *Do you tend to use more than one device at the same time?*

6. *What kind of things do you like to do on these devices?*

PROMPT:

- Broadcast television

- On demand television (Netflix, Amazon prime)
- YouTube videos
- Computer games

7. *Which social media sites do you use?*

PROMPT:

- Do you have your own account, or do you use someone else's?

8. *Who are you usually with when you're watching TV or going online?*

PROMPT:

- On their own, with parents, with siblings, with friends
- Games – do you tend to play alone? With others?

Food preferences and marketing (10-15 mins)

Aim: Find out what foods young people think fall into the HFSS category and explore what would make them want/not want to buy or consume these types of products.

Explore unprompted recall of HFSS marketing including where young people see advertising and how often. Include content, memorability, message and perceived impact of marketing.

I'd like to move on to talking about the way that food is marketed and advertised.

When we talk about high fat salt sugar products, we mean food and drink that contain high levels of fat, salt or sugar and provide little nutritional benefit. Examples of these could be sweets, chocolate, biscuits, cake, pastries, puddings, ice cream, crisps, savoury snacks and soft drinks with added sugar.

9. *What kinds of foods and drinks do you think would be included in this definition? Can you give me some examples?*

10. *Which of these products if any, do you like to eat or drink?*

PROMPT:

- What makes you want to eat/drink them?
- What makes you not want to eat/drink them?
- What makes them appealing/unappealing?

11. *Can you think of any advertising you have seen for these types of products?*

PROMPT:

- What was the product that was being advertised?

- Where did you see the advert (on TV, online, on social media)?
- What do you remember about the advert?
- Was there anything you liked/didn't like about it?
- Who do you think it is aimed at?
- What do you think the advert is trying to get you to do?

12. *How often do you see this kind of advertising? Where/when and on which platforms?*

13. *Can you think of any food or drink marketing that has had an impact on what you or your family has bought or eaten? Can you give any examples?*

Digital marketing examples (20 mins)

Aim: Use a selection of advertising creatives for discussion. Try to match sources of advertising with the way in which different age groups consume media (Ofcom usage data). Examples of marketing may include:

- Different platforms (television, YouTube, social media platforms, pop-up ads)
- Promoted brand-generated content
- Social media marketing campaigns using user-generated content
- Influencer advertising

Explore whether young people have seen the advert before and on what type of media, what stands out to them, what appeals to them, whether they know that it is an advert, who it is targeted at, the message and the impact.

I would like to show you some examples of food and drink marketing and hear what you think about them.

14. *What do you think of the advert?*

PROMPT:

- How you seen it before? Where/when? On what platform?
- What do you think of it?
- Would this advert catch your attention?
- What stands out to you?
- Who do you think would like this advert? Who is it aimed at?
- What message is this advert getting across? What is it trying to tell you?
- [If influencer or user-generated content – Do you think this is an advert? What suggests that it is/is not an advert? Do you think this is the person's honest opinion? Do you think they are receiving payment for making this post?]

15. *What impact do you think this advert would have on someone who saw it?*

PROMPT:

- Impact on young person? On parent/carer?

Health knowledge and risks associated with food (5-10 mins)

Aim: Explore young people's perceptions of how healthy HFSS products are and their health impact.

We've been talking about how foods and drinks are marketed and advertised. I'd now like to hear about the impact the high fat, salt and sugar foods have on health.

[Give reminder of HFSS definition]

16. How healthy do you think these products are?

17. What impact do you think high fat-salt-sugar foods might have on people's health?

PROMPT:

- If someone consumed a lot of them? If someone consumed them over a long period of time?
- Are there any specific illnesses that you think might be linked with consumption of high fat-salt-sugar products? (Probe for CVD, diabetes, dental health, cancers)

Policy implications (5 mins)

Aim: Explore young people's concerns about the ways that HFSS food is marketed, and any changes they would suggest making to how HFSS foods are marketed and sold, prompting on device-agnostic 9pm watershed, price, special offers etc.

18. Do you have any concerns about the way that high fat-salt-sugar foods are marketed?

19. Are there any changes that you would like to make to the way that high fat-salt-sugar foods are marketed and advertised?

PROMPT:

- Do you think there should be any restrictions on where and when HFSS products can be advertised?
- Do you think there should be any restrictions on price/deals/promotions for HFSS foods?
- *If not mentioned above, ask about 9pm watershed specifically*
- *If not mentioned in previous sections, are you aware of the 'sugar tax'? What is it? What are your views of the 'sugar tax'?*

20. Do you have any other comments in relation to HFSS foods and their marketing that we have not covered up to this point?

Appendix 2: Creatives

The creatives used in the focus groups are listed below.

Television:

- McDonalds Big Mac Debate - <https://www.youtube.com/watch?v=zzrBgSwSKV0>
- Cadbury swirl - <https://www.youtube.com/watch?v=FOv5Q2mgJUI>
- KFC Fried Chicken - https://www.youtube.com/watch?v=B5_xesq0-oY
- Kellogg's coco pops (30% less sugar) - <https://www.youtube.com/watch?v=G8oHECxlCk>

Instagram:

- Dominos
- Nutella (influencer)
- McDonalds (influencer)

Facebook:

- Snickers
- Pringles
- M&M's

Twitter:

- McDonalds

10 References

- [1] K. Brown, H. Rumgay, C. Dunlop, M. Ryan, F. Quartly, A. Cox, A. E.-B. L. Deas, A. H. L. Gavin, D. Huws, N. Ormiston-Smith, J. Shelton, C. White and D. Parkin, "The fraction of cancer attributable to modifiable risk factors in England, Wales, Scotland, Northern Ireland, and the United Kingdom in 2015," *British Journal of Cancer*, vol. 118, pp. 1130-1141, 2018.
- [2] Public Health England, "Health matters: obesity and the food environment," Public Health England, London, 2017.
- [3] HM Government, "Childhood obesity: A plan for action, Chapter 2," HM Government, London, 2018.
- [4] M. Simmons, A. Llewellyn, C. Owen and N. Wollacott, "Predicting adult obesity from childhood obesity: A systematic review and meta-analysis," *Obesity Reviews*, vol. 17, no. 2, pp. 95-107, 2016.
- [5] A. B. A. MacGregor, H. Lepps, L. Porter, D. Eadie, J. McKell, A. M. Mackintosh, C. Thomas, L. Hooper and J. Vohra, "'It's just there to trick you': A qualitative study of 11-19 year olds perceptions of food and drink marketing," Cancer Research UK, London, 2016.
- [6] Public Health England, "Severe obesity in 10 to 11 year olds reaches record high," Public Health England, 24 July 2018. [Online]. Available: <https://www.gov.uk/government/news/severe-obesity-in-10-to-11-year-olds-reaches-record-high>. [Accessed 20 June 2019].
- [7] E. Boyland, J. Harrold, T. Kirkham, C. Corker, J. Cuddy, D. Evans, T. Dovey, C. Lawton, J. Blundell and J. Halford, "Food commercials increase preference for energy-dense foods, particularly in children who watch more television," *Pediatrics*, pp. e93-e100, 2011.
- [8] E. Boyland, S. Nolan, B. Kelly, C. Tudur-Smith, A. Jones, J. Halford and E. Robinson, "Advertising as a cue to consume: A systematic review and meta-analysis of the effects of acute exposure to unhealthy food and non-alcoholic beverage advertising on intake in children and adults," *American Journal of Clinical Nutrition*, vol. 103, no. 2, pp. 519-533, 2016.
- [9] C. Thomas, L. Hooper, R. T. F. Petty, G. Rosenberg and J. Vohra, "10 Years On: New evidence on TV marketing and junk food eating amongst 11-19 year olds 10 years after broadcast regulations," Cancer Research UK, London, 2018.
- [10] F. Thomas, L. Hooper, R. Petty, C. Thomas, G. Rosenberg and J. Vohra, "A prime time for action: New evidence on the link between television and on-demand marketing and obesity," Cancer Policy Research Centre, Cancer Research UK, London, 2018.
- [11] Advertising Standards Authority, "Guidance on identifying brand advertising that has the effect of promoting an HFSS product," 16 June 2017. [Online]. Available: <https://www.asa.org.uk/resource/hfss-product-ads-and-brand-ads-identification.html>.

- [12] N. Critchlow, K. Angus, M. Stead, J. Newberry Le Vay, E. Whiteside, M. Clark, B. Hudson and J. Vohra, "Digital Feast: Navigating a digital marketing mix, and the impact on children and young people's dietary attitudes and behaviours," Cancer Research UK, London, 2019.
- [13] J. Kollewe, "Google and Facebook bring in one-fifth of global ad revenue," The Guardian, 2 May 2017. [Online]. Available: <https://www.theguardian.com/media/2017/may/02/google-and-facebook-bring-in-one-fifth-of-global-ad-revenue>.
- [14] Office of Communications, "Children and parents: media use and attitudes report 2018," Office of Communications, London, 2018.
- [15] T. Coker, H. Rumgay, E. Whiteside, G. Rosengery and J. Vohra, "Paying the price: New evidence on the link between price promotions, purchasing of less healthy food and drink, and overweight and obesity in Great Britain," Cancer Research UK, London, 2019.
- [16] Public Health England, "Fiscal and pricing policies to improve public health: a review of the evidence," Public Health England, London, 2018.
- [17] O. o. Communications, "The Communications Market 2018: Narrative Report," Office of Communications, London, 2018.
- [18] HM Revenue & Customs, "Soft Drinks Industry Levy: Policy Paper," HM Revenue & Customs, London, 2016.
- [19] Public Health England, "Reduction and reformulation programme: Spring 2019 update," Public Health England, London, 2019.
- [20] Public Health England, "National Child Measurement Programme: Changes in children's body mass index between 2006/07 and 2015/16," Public Health England, London, 2017.