

Young people's perceptions of how food marketing and wider environmental pressures influence their ability to be healthy

March 2022



Together we will beat cancer

Reference

This report should be referred to as follows:

Shields, J., Elliott, C., MacGregor, A., Islam, S., Greenhill, T., Newberry Le Vay, J., Froguel, A., Clark, M., Fitzgerald, K. "Staying healthy in a fast-changing world." Cancer Research UK. 2022.

Authors

Jessica Shields¹, Claire Elliott¹, Andy MacGregor¹, Sadman Islam², Torin Greenhill³, Jessica Newberry Le Vay², Alizee Froguel³, Malcolm Clark³, Karen Fitzgerald²

¹Scottish Centre for Social Research ²Policy & Implementation Research, Cancer Research UK ³Policy Development, Cancer Research UK

Acknowledgements

We would like to thank the following contributors:

Thank you to Scottish Centre for Social Research (ScotCen) for conducting the qualitative research which informed the 2016, 2019 and the 2021 iterations of the Youth Obesity Policy Survey (YOPS). Research and interviewing support were provided by Lesley Birse and Irene Miller. For the current iteration, transcription was conducted by Karen Stewart and Jo McGowan.

The youth panel from BiteBack 2030 for their support in the topic guide development.

Colleagues from Cancer Research UK for their input into the report: Dr Alexandra Feast, Sophie Kay, Brian Knowles, Yasmin Begum, Olivia Cheek, Heather Lafferty and Ian Caleb.

Nika Strukelj, BiteBack 2030; Dr Nathan Critchlow, University of Stirling; Emma Boyland, University of Liverpool; Mimi Tatlow Golden, The Open University; and Christina Buckton, University of Glasgow for sharing their insights.

Dr Daryll Archibald, University of Dundee; Alice Kininmonth, University of Leeds; and Dr Amy Yau, London School of Hygiene and Tropical Medicine for sharing their expertise with us in providing external peer 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 2020/21, we committed £388m towards cancer research. Our ambition is to accelerate progress and see 3 in 4 patients surviving their cancer by 2034.

This research was funded by Policy & Implementation Research, 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/

Scottish Centre for Social Research

This research was conducted by the Scottish Centre for Social Research (ScotCen), an integral part of the National Centre for Social Research (NatCen), Britain's leading centre for independent social research.

NatCen is a 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

Hi, I'm Yumna. I am a 17-year-old youth advocate and campaigner, living in Birmingham, committed to disrupting systems that are not equipped to serve us.

To change systems externally, we must change our mindsets internally. If you compare the ever-shrinking budgets for public health professionals to the large sums being poured into persuasive advertising by massive companies, it is no wonder children's health is being affected, as we are lured into buying more fast food. From a walk down the aisle in a supermarket, or on my way to school on the bus, these manipulative tactics must stop. Our built environment plays a part too, with socio-economically deprived areas and communities of colour finding it more difficult to access local, healthy and fresh food, due to factors like income inequality.

In 2020, the UK Government made a promise to put children's health first and introduce legislation to restrict the marketing and promotion of unhealthy food and drink. It's time they followed through with these crucial measures.

It will also be important to ensure that the rise of food delivery apps like Uber Eats and Deliveroo and social platforms like TikTok, do not allow for companies to find new ways to target children.

I live in one of the most deprived areas of the city, with high unemployment rates, high levels of food insecurity and a lack of opportunities for young people, which makes it difficult for children and young people to thrive in life. I have seen the effects of this myself. It is difficult to access fresh, nutritious, affordable and sustainably cultivated food, which could lead to a lack of focus in school and even contribute to increasing mental health conditions like depression, anxiety and panic disorders.

We are often seen as just consumers. But we must be seen more than that as people with

specific constraints and pressures in our lives that influence what we will likely eat and not eat. We must hold governments and businesses to account for the impacts of their policies and practices on local and global food security. Healthier eating should be the easier choice. Our food systems need to be strengthened worldwide to result in a dramatic shift in changing diets, health outcomes and adapt to the current climate crisis. Together, we can achieve transformational system change by listening, learning, applying, embedding and reflecting on the work we are doing.



Yumna Hussen, Chair of Birmingham Youth Board for BiteBack 2030

Executive Summary

Pushing towards wider changes to tackle obesity

This report has been developed from the Youth Obesity Policy Survey (YOPS) which is the third in a series of qualitative studies carried out with 11-19-year-olds across the UK. This survey examines the influence of high fat, salt and sugar (HFSS) advertising on children and young people's perceptions and dietary choices [1]. Our 2019 wave showed that young people felt the marketing of HFSS food and drinks was pervasive and targeted at them, and young people were supportive of protective measures against this marketing [1]. Since the last report, the UK Government have announced a new obesity strategy, committing to a 9 p.m. watershed on HFSS advertising on TV and the near total end of HFSS marketing online, expected in early 2023. Restrictions on locations and volume-based promotions in stores are expected to come into effect in late 2022 [2]. These policies will be a crucial step in protecting young people and improving their health. The COVID-19 pandemic has brought about new pressures for young people to try to live healthy lifestyles, by impacting their mental health, increasing snacking and limiting their ability to exercise [3].

Overweight and obesity is the second biggest cause of cancer in the UK [4]. The UK Government have begun taking crucial steps to protect young people, but it is vital that momentum and progress continue across all nations. It is also important to progress the national efforts to level up the health of the nation by continuing to support individuals to have a healthy lifestyle, and providing them with the tools they need to maintain this [5, 6]. To ensure progress is maintained, it is important to monitor how young people's dietary perceptions and attitudes are impacted by food marketing, and broaden our understanding of wider determinants of health, to understand what other environmental factors make it easier or harder for young people to be healthy.

What is the current situation?

Childhood obesity rates in the UK are among the highest in Western Europe. In England, by the time children leave primary school, almost one third are obese or overweight [7]. Children who are obese are around five times more likely to be obese as an adult [8], and adults who are overweight or obese are at increased risk of health conditions such as cancer [9]. By 2050, UK-wide NHS cost's attributable to overweight and obesity are predicted to reach £9.7billion a year, with wider society costs estimated to reach £49.9 billion [10].

Inequalities in obesity rates in the UK are stark and widening [11]. Obesity prevalence among adults in the most deprived regions of England is almost double that of the least deprived [11]. The obesity prevalence gap among children continues to widen, with children from the most deprived areas more than twice as likely to be obese as those from the least deprived areas [7]. Over 2 million children experience moderate or severe food insecurity, defined as the inability to afford or have access to food to make up a healthy diet [12]. Furthermore, they are unable to meet Eatwell Guide's dietary recommendations [13]. Inequalities are a key driver of obesity [11], and it's important to recognise that there are unique challenges facing those from more deprived communities. Therefore, we designed this study to hear the views of the many young people experiencing this.

The COVID-19 pandemic and associated restrictions have further exacerbated inequalities and food insecurity. Over 27% of UK households are worse off financially compared to before the start of the pandemic and as a result, families are more likely to purchase cheaper and more calorie-dense foods [14]. The convergence of obesity and the COVID-19 pandemic highlights the need for urgent and decisive action to protect the health and wellbeing of children and young people.

Key Findings

Young peopleⁱ are exposed to and influenced by the fastchanging marketing landscape for HFSS products

Recall of HFSS marketing remains high, with TikTok and food delivery apps highlighted as new sources of HFSS advertising

Young people recalled high exposure to the marketing of unhealthy food and drinks and recalled seeing this marketing on the same platforms that were reported in the 2019 iteration [15]. However, TikTok and food delivery apps (e.g., Just Eat and Uber Eats) were mentioned for the first time. Young people gave examples of both paid-for and brand-owned advertising within TikTok and other users posting about HFSS products. For food delivery apps, young people spoke about pop-up adverts and promotions offering free delivery and increasing the accessibility of purchasing HFSS products. The emergence of these new sources of advertising highlights the fast-changing nature of social media platforms and HFSS marketing strategies, and the need for regulations that can be future-proofed against such developments.

Young people have high recognition of HFSS brands

This current iteration included a brand recognition exercise for the first time. Young people across all age groups continued to show a high brand recall, identifying the company names of over 10 out of 12 logo snippets they were shown. Even when they couldn't name the brand, young people could still identify that they were associated with HFSS products.

"For Tesco's there was this ice-cream thing, and everybody's obsessed with it and I think as well TikTok has built that up. Like a lot of people want to go out to the shop more and try all these new things that everybody else is talking about do you know what I mean?". (NI04, aged 17-19)

ⁱ In reference to young people who participated in this study.

Lockdown had varied effects on young people's exposure to HFSS advertising and HFSS consumption

Differing opinions were expressed by young people on how the lockdowns due to COVID-19 had impacted their HFSS advertising exposure. It was felt that brands were more heavily marketed on social media during lockdown, and some young people said spending more time on their phones and devices meant they saw more advertising. Others reported less HFSS advertising exposure, particularly out-of-home advertising due to the restrictions in being

"Yes, because in lockdown I just thought, oh, I'm in the house anyway, so I'll just pig out. I'm at the point now where it's like, oh, I shouldn't have done that, but adverts keep coming up so I'm just like, oh, should I? No, I'll just leave it." (S01, aged 17-19)

able to go outside. 17-19-year-olds, with more independence over their purchasing and meal choices, reported increased HFSS consumption due to boredom and staying at home, whereas younger age groups believed that they had reduced control over their purchasing choices.

Young people gave explicit examples of how marketing influenced their food choices, particularly amongst the younger age group

In 2019, despite strongly expressing the opinion that advertising did not have an impact on them, young people still gave examples of HFSS marketing influencing their food choices. This was seen again in this wave; young people gave explicit examples of HFSS marketing influencing their own purchasing or what they asked their parents to purchase, particularly in the younger age groups.

Young people broadly support marketing restrictions of HFSS products

On the whole, young people were supportive of forthcoming restrictions related to the marketing and sale of HFSS products and considered the benefits to public health to offer a net positive impact. In line with previous iterations of this study [1], young people expressed concerns about the ubiquity of HFSS marketing, and called for a range of changes to be made to restrict the marketing of HFSS products.

"The thing is, it will have to be quite big if it's going to deter all these big companies from actually sticking to the rules because obviously, they can afford to pay a small fine, so it's going to have to be really significant." (E04, aged 17-19)

...and whilst supportive of these restrictions, further questions were raised

Some young people were concerned that high levels of brand awareness might limit the restrictions' impact on young people's consumption habits. Young people also emphasised the importance of addressing the underlying problems, such as income inequality and access to healthier foods. Moreover, some sympathy was expressed for brands being able to promote themselves, particularly online.

Other marketing tactics such as 'health washing' and packaging design also target and influence young people

'Health washing' marketing tactics influenced perceptions of healthiness but had complex impacts on young people

'Health washing' refers to advertising or packaging which employs marketing tactics that make a product appear to be healthier than it actually is [15]. When shown 'health washing' examples, young people were able to recognise that this marketing was different from HFSS

"To be honest, I think it's healthy and you can see in the video, it's showing organic stuff." (W01, aged 11-13, G&B)

advertising and perceived these products as healthier based on both nutritional cues (e.g., words such as free range, natural, protein, fruit, fibre) and non-nutritional cues (such as showing 'healthy looking' people in the adverts). However, young people, particularly the older age groups, were critical of the accuracy of these health claims and found the products to be unappealing. However, where the brands were already established as marketing and selling HFSS products, perceived impact was more complex. While young people were more likely to want to buy the products as a result of the advert, it was not always clear if this was in relation to the specific product shown or the more famous HFSS products from the brand's portfolio.

Young people proposed reforms on packaging and labelling of HFSS products

Design elements on packaging shaped young people's perceptions and appreciation of HFSS products. For example, young people were drawn towards packaging examples which included brighter as opposed to neutral colour schemes. Young people expressed similar concerns in this wave as in 2019, perceiving HFSS marketing to be misleading and focused on positive rather than adverse effects in product promotion. Young people proposed changes which included reducing the attractiveness of HFSS products and having clearer product labelling.

Young people highlighted mental health and systemic barriers such as low income as factors making it harder to be healthier

Young people had a holistic view of what it means to be healthy

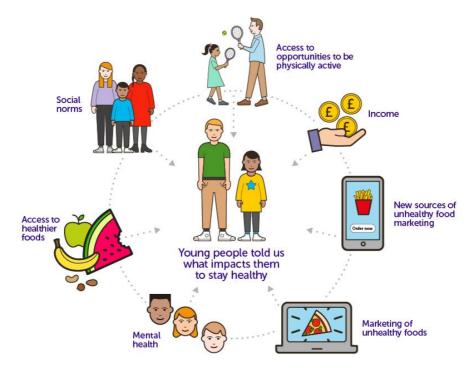
In general, young people gave a broad definition of health and described the ways in which different elements of health are interlinked. Mental health, exercise and a healthy diet were identified to be key elements of a healthy lifestyle. Positive mental health was linked with being important for self-care, whilst a balanced

"I think the basis of being healthy is to have a healthy mind and a healthy body, but that doesn't have to look a certain way." (E04, aged 17-19)

diet, which involved moderating HFSS consumption, was also important. A summary of the factors that have been identified by young people to impact on their ability to stay healthy is shown in Figure 1.

Figure 1: Overview of the factors young people highlighted as important for them to live a healthy lifestyle.

Young people have a broad definition of health



Low income was a key barrier to being healthy, by limiting access to healthy food and exercise facilities and influencing the burden of worrying about money

Income inequality was widely discussed by young people as a factor which affected the prospects of a healthier lifestyle. Like the 2019 findings, low income was perceived to be a barrier to eating a healthy diet. It was also identified as a barrier to accessing local food outlets which sold healthy food options. High prices for memberships of exercise facilities were also identified as a barrier towards making exercise less accessible. Low income was also associated with poor psychological outcomes such as stress and was seen to prevent families

"In the poorer areas you seem to find higher rate of obesity and stuff like that in kids, but it's because their parents don't have enough time because they're busy trying to keep the house afloat. They just don't have enough money to feed their kids the proper nutritional foods they need." (S03, aged 17-19)

from being able to prioritise health in their lifestyles.

Young people called for support via school and outdoor facilities to help them live a healthier lifestyle

The participants highlighted possible changes in schools that could help support young people. These included providing healthier food options or expanding the health education curriculum to include broader topics including nutrition, mental health and eating disorders. Young people also suggested improving accessibility to exercise through more affordable gym memberships and information on ways to exercise without cost.

Mental health was seen to underpin and interact with other elements of health

Mental health was an ongoing theme that was very prevalent in this current iteration. Young people highlighted the ways in which low mood had made healthy living more difficult and how this impacted their daily activities. Young people also identified disordered eating and the impact of poor interpersonal relationships on their wellbeing as barriers to healthy eating and a healthy lifestyle. Finally, poor mental health also limited personal motivation, which was an important factor for young people to eat healthily and exercise.

Societal pressures, including interpersonal relationships, could act as both a barrier to and facilitator of a healthy lifestyle

Young people indicated that their ability to live a healthy lifestyle was influenced by the food choices made by their family and friends. At home, healthy cooked meals, rather than HFSS foods, were identified to support a healthier lifestyle. Meanwhile, out of home, young people felt under pressure to make the same food choices as their friends, regardless of whether this was healthy or unhealthy. Overall, young people were more likely to consume unhealthy foods out of home with friends.

"The people around you, your circle, all your mates an all they would determine your future, for example, if they're doing bad stuff then you're going to end up doing that. If they're around good stuff you're going to end up doing that." (NIO2, aged 14-16)

COVID-19 lockdowns were mostly viewed as detrimental to a healthy lifestyle

During periods of lockdown, over half of young people reported experiencing mental health issues, perceiving the pandemic as having a long-term negative impact on their mental health. Young people described how lockdown had led to the development of poor mental health and increased food consumption, alongside a reduction in time being spent on exercise due to restrictions to indoor and outdoor facilities.

"I think COVID has messed up everyone's mental health completely." (NI03, aged 17-19)

What should the UK Government do?

Prioritise the work of the Cabinet-level Health Promotion Taskforce

The UK Government must not lose its focus on securing the gains made to address childhood obesity and to level up health across the UK.



CRUK welcomes the newly created Cabinet-level Health Promotion Taskforce and encourages continued work to ensure oversight of the delivery of the Government's obesity and prevention commitments and coordination of the development of the obesity strategy's next stages.

Implement proposed HFSS marketing legislation in full and without further delay



CRUK supports the UK Government in introducing planned restrictions on the advertising and promotions of unhealthy food and drink, and calls for the Governments of Scotland, Wales and Northern Ireland to take forward similar measures.

Address potential loopholes and displacement from proposed HFSS marketing regulation



The digital landscape is fast evolving. The UK Government must task Ofcom, as the regulatory backstop, to undertake an annual review to monitor the use and impact of different and emerging types of advertising and platforms - including brands' own social media profiles, brand advertising and food delivery apps - on young people's dietary habits and exposure to HFSS advertising and consider whether further interventions are needed.

Address other packaging and promotional techniques that target young people



'Child friendly packaging' used by HFSS products influences young people's preferences ^[16]. CRUK therefore supports the Obesity Health Alliance's calls to address these promotional techniques, including the use of cartoons, brand equity and licensed characters, along with celebrities and sports stars.

Address the wider barriers that prevent young people from living healthier lives

If the UK Government wishes to deliver on its pledge to level up for all groups in society, it must:



Restore the public health grant to its pre-2015/16 real terms per-capita value and increase it to meet future pressure. An estimated £1.4 billion per year is needed by 2024/25 to address cost pressures and demand levels. This will ensure young people across England have access to services they need to support their mental and physical health. Funding should also be channelled into the local communities that need it most.

 Undertake further research – including by governments across the UK to better understand policy measures to tackle deprivation and mental health and their relationship to childhood obesity.

Contents

2
4
5
14
17
19
24
47
50
54
55
56
59

Introduction

Obesity rates in the UK remain high and inequalities are widening

Child obesity rates in the UK are among the highest in Western Europe; by the time children leave primary school, almost one third are obese or overweight [7]. By 2050, UK-wide NHS costs attributable to being overweight and obesity are predicted to reach £9.7billion a year, with wider society costs estimated to reach £49.9 billion [10]. Acting early is crucial, since children with obesity are around five times more likely to be obese as an adult [8] and adults who are overweight or obese are at increased risk of health conditions such as cancer and type II diabetes [17, 18].

Inequalities in obesity rates in the UK are stark and widening. Obesity prevalence among adults in the most deprived regions of England is almost double that of the least deprived. This gap in the overweight and obesity rates of the most and least deprived groups is wider in the UK than that of any EU country [19]. People in the most deprived areas are also more than twice as likely to be admitted to hospital for obesity-related health problems [19]. Among 10-11-year-olds living in the most and least deprived areas, the gap grew from 10% in 2006/7 to over 19% in 2020/21 [7, 20]. Urgent action is needed to tackle this growing inequality.

Young people face many pressures in trying to live healthier lives...

There is a well-established body of evidence 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 [21], more snacking and a lower intake of healthy food [22]. Young people have expressed concern about the volume and content of HFSS marketing to which they are being exposed to, and are supportive of measures to restrict marketing [1, 23].

Beyond marketing, young people's food choices are also impacted by a large number of other environmental factors, from cost and availability of food, to social norms and societal pressures. There is also growing evidence of a link between mental health and obesity [24]. There are disparities in how young people experience these environmental factors, and differences in quality of diet and physical activity are also evident across the socioeconomic groups. Over 2 million children experience moderate or severe food insecurity, defined as the inability to afford or have access to food to make up a healthy diet [12]. These children are also unable to meet Eatwell Guide dietary recommendations, with low income being a contributing factor [13].

...In an environment which is complex and shifting

The landscape which young people must navigate in trying to be healthy is complex and changing. The growth of new social media platforms, most notably TikTokⁱⁱ and the increased use of Instagram live, presents new forums for young people to share video content. Despite TikTok banning under-13s from using the platform, Ofcom found that 44% of young people aged 5-15 used it to watch content in 2020 [25], whilst a separate report found that 37% of

[&]quot;TikTok is a mobile platform enabling users to create and share short-form videos.

those aged 13-17 used the platform in March 2021 [26]. The use of TikTok in conjunction with the continued popularity of other video streaming social media platforms, such as YouTube and Instagram, has provided fertile ground for influencerⁱⁱⁱ advertising. For instance, more than half of young people aged 8-17 said they had bought products related to their favourite YouTubers [27].

Much attention has been given to the marketing of foods perceived as 'unhealthy', but there is a need for more evidence on the potentially misleading use of health information in the marketing tactics (so called 'health halos') of brand advertising. This effect occurs when individuals infer a positive health attribute from use of language such as 'low fat' or 'vegetarian' that are perceived to be less calorific [28], as well as non-nutritional aspects such as 'organic' or 'natural' products [29]. The evidence base for the health halo effect, also known as 'health washing', is growing with advertiser's rapidly increasing the use of this technique to encourage young people and their parents to buy a product [30, 31].

The COVID pandemic has brought about shifts and challenges for young people trying to live healthy lifestyles. Use of online and virtual platforms has increased markedly, providing more opportunities for HFSS advertisers. Evidence shows that young people increased their screen and social media use during the COVID-19 pandemic [32, 33], with Scottish data suggesting that young girls and older teenagers have increased their social media use the most [34]. Findings from the recent National Child Measurement Programme in England has also shown an increase in obesity levels during the pandemic, with prevalence amongst younger age groups increasing by 4.5% between 2019/20 and 2020/21. The data also confirms that children living in more deprived areas are twice as likely to be obese than those living in the least deprived areas [7].

The COVID-19 pandemic and associated restrictions have further exacerbated inequalities. Food insecurity has risen, with over 27% of UK households worse off financially than before the pandemic, and as a result, families are more likely to purchase cheap and calorie dense foods [14].

What is the government doing?

Since the publication of the 2019 Youth Obesity Survey, the obesity policy landscape has changed significantly. The UK Government has published '*Tackling obesity: empowering adults and children to live healthier lives*' [35], which included commitments to ban the advertisement of HFSS products on television before 9 p.m. and a near total ban on paid-for advertising online – currently planned to be implemented at the start of 2023 [2]. If implemented in full, this would see restrictions to HFSS advertising extend significantly beyond the current ban during children's programming and in very specific circumstances online. The UK Government has also introduced bold legislation to end the promotion of HFSS products by restricting volume promotions such as 'buy one get one free' and the placement of these foods in prominent locations intended to encourage purchasing, both online and in physical stores in England [2]. The Scottish Government consulted on similar restrictions for Scotland in 2020, but the Restricting Food Promotions Bill has been delayed due to COVID-19 [36]. The SNP manifesto sets out a commitment to address the promotion of unhealthy foods in the current

ⁱⁱⁱ The Advertising Standards Authority (ASA) defines a social media influencer as "anyone who has been paid by a brand to advertise a product on their own social media, because of their social media influence." Source: ASA, Recognizing ads: Social media and influencer marketing, 31 July 2020

parliamentary term [37]. The Welsh Government, in the 'Healthy Weight Healthy Wales Delivery Plan 2020-2022' [38], sets out plans to address the use of price promotion and discounting practices, aiming to encourage retailers to promote healthier products and alternatives.

While welcomed by many organisations, the UK Government's '*Tackling Obesity*' strategy has been criticised by some organisations and public health leaders for failing to tackle factors which contribute to health and food choice, including poverty and income inequality, local environment, and access to affordable healthy food options. In addition, concerns have been expressed regarding the potential for the '*Tackling Obesity*' strategy to contribute to weight stigma through the use of stigmatising language and a focus on individual, rather than societal, factors [39, 40].

Building on progress to address all factors influencing obesity

In order to strengthen the next steps taken by governments across the UK, future policies must tackle key drivers of obesity through a whole systems approach, with a focus on health inequalities. The recently published Obesity Health Alliance's (OHA) 10-year '*Healthy Weight Strategy*' [16] sets out future research and policy directions to further enhance marketing regulations, improve nutritional labelling, encourage further reformulation of processed food, and actively refute weight stigma.

Research aims and questions

This report presents the third wave in a series of qualitative studies, previously conducted in 2016 and 2019 by ScotCen and commissioned by Cancer Research UK. Similar to the previous iterations of this research, this study not only helps build the evidence base in its own right, but also informs the third round of a large-scale UK-wide survey of 11-19-year-olds.

Previous waves have explored the influence of HFSS marketing, particularly on television and through digital media. In this wave, we build on this previous work by examining not only the continued role of marketing in influencing young people's diets, but also the wider determinants of health. Recognising that there are unique challenges facing those from more deprived communities, this report also focuses on how inequalities affect the experience and impact of marketing tactics on young people.

This qualitative scoping study will enable CRUK to track trends over time and allow the survey to be responsive to shifts in the policy context and young people's experiences. We firstly aim to explore any changing attitudes and perceptions towards HFSS marketing and advertising since the last iteration. Additionally, we also look to gain a deeper insight into any wider societal factors which may influence young people's ability to live a healthy lifestyle.

Changing landscape in HFSS marketing and advertising

Findings from the 2019 iteration, highlighted the pervasive nature of HFSS marketing, particularly on television and via digital media [1]. Young people had expressed concerns about the volume and content of HFSS marketing to which they were exposed to and were broadly supportive of measures to restrict HFSS marketing.

Aims:

- Explore the influence of high fat, salt and sugar (HFSS) advertising and marketing, on children and young people's perceptions and dietary choices in comparison to the previous waves.
- Understand young people's views on the proposed marketing restrictions in order to examine whether the change in policy is adequate in the context of changing online habits and marketing techniques, or whether further changes may be needed.

Research questions:

To explore these aims, the following research questions were put forward:

- Two years on from the 2019 YOPS qualitative scoping study, is there evidence that young people's views differ on HFSS foods because of their exposure to HFSS marketing and advertising and how they perceive it?
- How do young people perceive marketing health claims on a food's nutritional quality and does this influence their perception of HFSS food and drinks?
- What are young people's opinions of the proposed HFSS marketing, promotion and restrictions and the role that they think the food and drink industry generally play?

Role of inequalities on young people's ability to live a healthy lifestyle

Within the 2019 iteration, young people also spoke about other factors which influenced their consumption of HFSS foods, including cost and convenience [1]. We therefore look to gain a deeper understanding of the influence of these factors in this current iteration.

Looking into the broader pressures faced by young people in this study will help to build a more holistic picture of the environment young people live in and how these factors influence young people's ability to make healthier choices.

Aims:

- Explore the wider pressures influencing young people's relationship to HFSS products.
- Understand the role of inequalities on young people's ability to live a healthy lifestyle.

Research questions:

- What are young people's views on what constitutes a healthy lifestyle?
- What do young people identify to be the barriers and enablers of a healthy lifestyle?
- How do young people view the impact of different health behaviours (e.g., smoking and alcohol consumption) on their ability to stay healthy?
- The impact inequalities may have on young people's relationship to HFSS marketing and dietary behaviours.

Methods

Research design

ScotCen conducted 16 online focus groups between April and June 2021. The breakdown of the focus groups is provided in Table 1. Four groups were conducted in each of the four nations of the UK, with a spread of ages across the age group of interest (11-19). In total, 96 young people took part in the groups, with 54 female and 42 male participants contributing to the discussions. The mean age of the participants was 15 years old, standard deviation of 0.8. A more detailed breakdown of the composition of the groups is outlined in Table 2 below.

Age	Scotland	England	Wales	Northern Ireland	TOTAL
11-13	1	1	2	1	5
14-16	1	2	1	1	5
17-19	2	1	1	2	6
TOTAL	4	4	4	4	16

Table 1: Breakdown of focus groups by age group and country

Focus Group code	Country	Number of participants	Age range (years)	Mean age
S01	Scotland	7	16-19	17.3
S02	Scotland	5	11-12	11.5
S03 ^{iv}	Scotland	6	17-19	18.5
S04	Scotland	7	14-16	15.0
TOTAL	SCOTLAND	25	11-19	15.6
E01	England	4	14-16	14.8
E02	England (rural)	6	11-13	11.5
E03	England	5	14-16	14.8
E04	England (urban)	5	17-19	18.2
TOTAL	ENGLAND	20	11-19	14.8
W01	Wales (rural)	7	11-13	11.9
W02	Wales (urban)	7	11-13	11.7
W03	Wales	7	14-16	14.7
W04	Wales	4	17-18	17.3
TOTAL	WALES	25	11-18	13.9
NI01	Northern Ireland (rural)	6	11-13	12.3
NI02	Northern Ireland (urban)	7	14-16	15.3
NI03	Northern Ireland	7	17-19	18
NI04	Northern Ireland	6	17-19	18.2
TOTAL	NORTHERN IRELAND	26	11-19	15.9
TOTAL	UK	96	11-19	15.1

Table 2: Detailed breakdown of focus groups by age and country

^{iv} One participant in this focus group had recently turned 20

Sampling and recruitment

A qualitative purposive sampling approach was adopted to recruit young people to the research project. We aimed to recruit a percentage of participants from deprived backgrounds, and capture a spread of young people according to the following sampling characteristics:

- Age: 11 to 19 years old
- Socio-economic background: Half of the groups conducted were mainly comprised of young people from deprived backgrounds.^v
- Location: Groups were conducted in England, Scotland, Wales, and Northern Ireland.
- Gender: Male, female and self-described gender identity.
- Ethnicity: The majority of the respondents originated from a 'white' background, with representation from a range of ethnic groups.^{vi}

The majority of groups were recruited by Criteria^{vii}, a specialist recruitment agency for research with hard-to-reach groups. Criteria were provided with detailed sampling information and purposive quotas, as well as information to share with participants. Criteria recruit using a variety of online methods including blogs and community message boards. The company maintains a database of contacts, including those from more deprived groups, who opt in to being contacted for research. Additional screening was conducted by Criteria via the telephone using screening tools drafted by ScotCen.

For three of the groups conducted in Scotland, ScotCen worked with youth organisations to recruit participants from pre-existing youth groups, two of which had participated in the previous wave of the research (YOPS 2), although the young people themselves had not taken part in YOPS before.

To ensure that participants were not over-prepared, they were informed that the group discussions would cover issues such as the food and drink they like, its marketing and ways in which healthy eating may be encouraged in the future. The aim of this approach was to decrease the likelihood of socially desirable responses being given during the discussions.

All potential participants were provided with an information sheet and privacy notice which outlined details of the research; including what participation would entail, that participation was entirely voluntary, and that any published findings would not include identifiable information about the participants. These were circulated, either by Criteria or a contact within youth organisations, to young people over 16 and to their parents or carers if they were younger than 16. Young people under the age of 16 required a completed consent form from their parent/carer. At the beginning of the focus groups, verbal consent was also obtained from young people of all ages. All participants received £20 in recognition of their time and contribution to the study.

^v Total participants in 13 Focus Groups: 78; in Socioeconomic groups: 71. This was measured in two different ways: the eligibility of free school meals at some point during their schooling and Index of Multiple Deprivation (combined measure of deprivation based on 7 domains which reflects a different type of deprivation experienced by individuals living in an area) as measured by their postcode. More information can be found at https://www.criteria.co.uk/what-we-do.html

^{vi} 52 White (reported as White British, White Scottish, White Irish), 12 mixed, 12 Asian or Asian British, 1 Black African, 1 Black Caribbean

^{vii} For more information on the screening tools please contact either Andy MacGregor (andy.macgregor@scotcen.org.uk) or Sadman Islam (Sadman.Islam@cancer.org.uk)

Data collection

Due to the COVID-19 pandemic, data collection was conducted online using Zoom video conferencing software. Each session lasted for 45 to 60 minutes. Each focus group was moderated by two researchers: a lead moderator guiding the discussion and a co-moderator taking notes, sharing the creatives and providing technical support where needed.

The co-moderator's contact details were provided to participants at the start of the sessions so that they could be informed if participants experienced any technical difficulties. Focus groups were audio-recorded using either encrypted recorders or Amolto and transcribed verbatim.

The topic guide (Appendix A) was developed between ScotCen and CRUK and covered issues including:

- Young people's eating practices and favourite foods and drinks and the perceived influence of home and the external environment.
- Young people's perception and engagement with food products and their associated marketing activity.
- Young people's awareness and views of food marketing exploring both digital and traditional formats of marketing, including billboards, shop fronts/displays, as well as branding and packaging and the use of health halos.
- The interaction between dietary practices and other health-related behaviours (e.g., physical activity, alcohol consumption and smoking).
- Which factors are perceived to make healthy eating practices more difficult and what factors may facilitate healthy eating?
- The role of industry in promoting risks, harms and problems associated with obesity and food and the potential actions (if any) required to address these.
- Views of young people in relation to the rapidly evolving policy context, and issues and areas (if any) perceived by young people as still requiring particular attention with regard to the regulation of food production and marketing.

A list of HFSS marketing creatives, including short and long video advertisements, brand logos and packaging, was agreed between ScotCen and CRUK for use within the focus groups. To ensure that these creatives were appropriate for young people aged 11-19, we consulted with youth-led charity and campaigning organisation, 'Bite Back 2030', in March 2021 to pilot the creatives and provide feedback before the fieldwork began.

Participants in each focus group were shown brands of HFSS products, two video adverts for HFSS products, then either two short adverts, one long advert or four packaging examples depicting examples of 'health washing' (Appendix B). After the focus group, the research team provided links to mental health support providers and other forms of support. These links were also shared via email the next day.

Analysis

Transcripts of all focus groups were summarised and thematically analysed using the Framework approach, using NVivo 12 [41]. This software ensures that that the analysis was fully documented, and conclusions were clearly linked back to the original source data. This approach allowed the identification and development of themes in young people's attitudes to HFSS advertising and health. It also allowed comparison between responses, for example, between those in different age groups. YOPS 3 qualitative scoping data was also compared and contrasted with findings from previous sweeps of YOPS qualitative scoping work.

Key topics and issues which emerged from the research objectives were identified through familiarisation with the transcripts. Through reviewing the coded data and charts, the full range of views and attitudes described by young people were systematically mapped and the accounts of different participants, or group of participants, were compared and contrasted. Emergent patterns and explanations from both prompted and unprompted views during the online focus groups, were also compared and contrasted.

The coders involved in the analysis held regular meetings to check that the initial agreed framework was still working, and any modifications were agreed on by all those involved prior to being implemented.

Ethics

An application was submitted to NatCen Research Ethics Committee. Approval for the study was granted in April 2021.

Results

This section firstly explores themes concerning young people's perceptions and attitudes around food and drink marketing, covering recognition of HFSS marketing and of 'health washing' marketing, perceived impact, concerns about HFSS marketing and what changes they would like to see. It then explores young people's perceptions of wider environmental factors that make it harder or easier for them to live healthier lives. A summary of all the themes which have been explored in this study are discussed in Table 3. More information on the focus group codes can be found in Table 2.

Themes	Overview
Recall of HFSS marketing and consumption	Exploring young people's awareness and recall of HFSS marketing and the impact this has on their HFSS consumption and comparing current findings with the 2019 iteration.
Brand recognition	Exploring young people's recall and recognition of HFSS brands across different platforms including social media.
COVID-19 and lockdown	Exploring the impact of lockdown on young people's ability to live a healthy lifestyle, consumption of HFSS foods and exposure to HFSS advertising.
'Health washing' marketing	Exploring the positioning of health claims on less healthy foods and young people's perception of the overall nutritional quality and consumption of these products.
Views on Policy change	Exploring young people's opinions of proposed policy restrictions and also views about the way HFSS products are marketed.
Product information and health messaging	Exploring how young people engage with product information and understand the range of sources that young people use to access information about health.
Social attitudes and norms	Exploring the social environment and its effects on the consumption and perception of HFSS foods.
Wider determinants of health	Exploring young people's overall view on what constitutes a healthy lifestyle, and the factors that they identify as possible barriers or enablers towards living a healthy lifestyle.

Table 3: Overview of the themes which were explored in the study

Perceptions and attitudes towards HFSS marketing

Recognition, perceptions and attitudes

This section explores young people's recall and perceptions of and attitudes to, the marketing of HFSS food and drink and draws out any areas where the findings differ from the previous iteration of this research conducted in 2019.

Recall of HFSS marketing remains high with new sources of advertising platforms identified

When asked where they saw or were aware of marketing for HFSS products, young people gave very similar responses to those given in the previous rounds of research. Advertising on social media was, once again, highly prevalent among young people's answers, including social media platforms such as Instagram, Snapchat, YouTube and Twitter. However, unlike in 2019, young people identified TikTok and food delivery apps such as Just Eat and Uber Eats as sources of advertising. Young people gave examples both of brands and companies advertising on TikTok and of seeing other users posting about HFSS products which influenced them to purchase or try these products. When speaking about advertising on delivery apps, young people gave examples of pop-up adverts and promotions offering free delivery.

The emergence of these new sources of advertising is perhaps unsurprising, given the rise in popularity of TikTok and delivery apps among young people since the previous round of research was conducted, and particularly during the COVID-19 lockdown when restaurants were closed, and takeaway food outlets were still open. However, it is important to note how quickly new social media platforms and sources of HFSS marketing can become commonplace.

"TikTok advertise mostly, where I see the ads and people could press and then they could go to the website, which I think's kind of helpful, so people will get attracted and buy them". (E03, aged 14-16)

"...for Tesco's there was this ice-cream thing, and everybody's obsessed with it and I think as well TikTok has built that up. Like a lot of people want to go out to the shop more and try all these new things that everybody else is talking about do you know what I mean... Yeah but I've had no luck finding them like, like I find myself in Tesco's every time I'm in there walking up and down the ice-cream thing looking for these Little Moons that I still haven't found since everybody has been talking about them". (NI04, ages 17-19)

"Places like Just Eat, they do like no delivery charge on certain things, so it's just like you're paying the regular price, so you're just like, I might as well." (E04, aged 17-19)

Young people gave tangible views of the impact of HFSS marketing on their food choices

As was the case in 2019, young people gave tangible views of seeing specific HFSS marketing and going on to purchase these items or to ask their parents or carers to purchase them.

The reasons that young people gave for consuming HFSS products were also similar to those given in 2019, including taste, cost, convenience, and personal preference.

High recognition of HFSS brands were seen across all age groups

Young people were asked to identify companies which produce HFSS items from snippets of their logos (Appendix B). Brand recognition was extremely high across all groups, identifying on average over 10.5/12 logos in each online discussion. In instances where the groups could not name the company from the logo, they could still identify the type of products produced by this brand. For example, those who were unable to name the Wall's brand stated that it was associated with the sale of ice-cream. Young people were also able to cite multiple additional brands which produce and market HFSS items.

COVID-19 lockdown led to an increase in exposure to HFSS marketing and consumption

The focus groups were conducted during the COVID-19 pandemic with various levels of lockdown restrictions. This is a major change compared with the previous round of research carried out in 2019. Differing opinions were expressed by the young people as to the impact of lockdown on both their consumption of HFSS items and the amount of advertising to which they were exposed to.

In general, young people from the oldest age groups who lived independently or were more responsible for purchasing and preparing their own meals tended to say that their consumption of HFSS products had increased due to boredom and not being able to go out. In contrast, young people from the younger age groups spoke about having less personal choice over what to purchase as they were not going into shops. Differing opinions were expressed as to whether lockdown had an impact on the amount of marketing for HFSS products that young people came across. Some described seeing more advertising on social media due to using their phones and other devices more frequently. There was a perception that brands were marketing more heavily on social media during lockdown. However, others argued that they had seen HFSS marketing less frequently as they were not going outside as regularly and had therefore been exposed to less street advertising.

"Yes, because in lockdown I just thought, oh, I'm in the house anyway, so I'll just pig out. I'm at the point now where it's like, oh, I shouldn't have done that, but adverts keep coming up so I'm just like, oh, should I? No, I'll just leave it." (S01, aged 17-19) "Because not everyone is working anymore, everyone's in their house, so they've thought that's a better way to get our money..." (S01, aged 17-19)

"Yes, because I used to see them on bus stops and billboards and everything, but now because of COVID I've not been going out as much, so I've not been seeing them a lot." (E02, aged 11-13)

Perceptions of HFSS and 'health washing' marketing

This section explores young people's responses to examples of advertising and marketing for HFSS and 'health washing' products viewed during the group discussion. Additionally, the section examines how the young people perceive 'health washing' and the influence this might have on their behaviour, drawing on comparisons between the types of marketing.

Young people provided varied responses to 'health washing' marketing

The elements of HFSS marketing that young people found most appealing were similar to those identified in the previous iteration of this research, including jingles, the use of colours, animations (and depictions of 'monsters') and songs. For the advertising examples where 'health washing' was used, the elements that caught the attention of the young people were no different.

However, the packaging examples for 'health washing' products were described by the focus group participants as boring, bland and unexciting. Whilst the colours used in the advertising for HFSS products were considered bright, the young people picked up on the neutral colour schemes used by the 'health washing' packaging. Furthermore, young people preferred the 'health washing' packaging examples which used brighter colours, such as green.

In the same way to previous iterations of the research, young people had usually seen the advert themselves, had seen other adverts for the same product or could recall a memorable advert by the brand. High levels of brand recognition meant that young people were able to recall a number of adverts based on elements such as the voice and jingles used.

"It's a bit boring, like the only one that caught my eye is the burger on the bottom left because it's like nice coloured, the rest are just kind of boring bland colours." (NI04, aged 17-19)

"I think everyone recognises the Haribo adverts because there're several of them with like the same format, so you might think that's a bit odd at the time but it like sticks with you and then you remember the brand." (E04, aged 17-19, HFSS Haribo)

'Health washing' marketing tactics influenced young people's perceptions of healthiness

In general, focus group participants recognised that the marketing depicting 'health washing' was different from the HFSS advertising. In response to the specific examples shown during the groups, words used on the packaging/adverts such as 'free range', 'natural', 'organic' and 'protein' were indicators used by young people to assume that the product was healthy. This also influenced what they believed was in the product, for example they then thought the product had protein, fruit and/or fibre in it. There were also non-nutritional cues that indicated to the young people that the product was healthier, including having 'healthy looking' people in the adverts, showing animals and nature in the adverts.

F: "It would make me think it's healthy because it says "natural".
M: "Yes, I think so, because it makes you think there's less chemicals in it, I guess, or less stuff in it." (W03, aged 14-16)

"I would say the people that promote it, like, I'm not trying to be rude, but say if there was an overweight person in the advert then, no one is going to go and eat it because they would think it's going to make you overweight. Then if it's someone who's healthy looking, then it's more likely that someone would actually go and eat it and make you look healthy." (W04, aged 17-19, 'health washing' McDonald's)

"To be honest, I think it's healthy and you can see in the video, it's showing organic stuff." (W01, aged 11-13, 'health washing' G&B)

On the whole, focus groups participants expressed scepticism as to the accuracy of these health claims, particularly in marketing for established HFSS brands such as McDonald's. This was true especially among the older focus group participants, who indicated that these products be calorie dense, high in sugar, contain high amounts of fat and oil, or are advertising a smaller serving size than the young people felt people were likely to consume. In the focus groups where this was discussed, the young people suggested that companies might be trying to make products look healthy when they blatantly are not. However, there were other groups who responded to this 'health washing' marketing as the promotion of healthier alternatives or offering alternatives for people who had dietary requirements.

"I suppose it depends on the portion sizes as well, like how much you're actually eating, with every food it's how much you consume of whatever you're wanting to eat as well as how healthy it's going to be." (NIO4, aged 17-19)

"I'd say probably healthier than other stuff, but then just because it says 'protein' in big writing doesn't mean that it's got less sugar." (S02, aged 11-13) "I've heard of like the McDonald's one, they try to be healthy sounding, but we all know that's not true." (S01, aged 16-19, 'health washing' McDonald's)

'Health washing' marketing was identified to promote the purchasing of products

As in the previous wave of the research, young people reported that the main message of the adverts they were shown was to promote the purchase of the products. This was true for both the HFSS and the 'health washing' examples. In response to the 'health washing' marketing examples, new to this iteration of the research, the focus group participants identified several key messages they felt the adverts were trying to convey. These included the brands/companies suggesting that they or their products:

- Are healthier and promote better lifestyles
- Behave responsibly
- Consider environmental impacts Give options to people with dietary requirements who may not have had access to such food and drink otherwise, e.g., when catering for vegans.

"[They are] trying to say that they're a good company. They get their product from good places, treat the animals right before making them into food." (S01, aged 16-19, 'health washing' McDonald's)

"Yes, they've made it look more like, ethical than the process actually is." (S01, aged 16-19, 'health washing' McDonald's)

"If somebody is vegan and they don't have many choices, they might want to go Domino's because they know it's going to be vegan." (E03, aged 14-16, 'health washing' Domino's)

"Those men were playing, and I think it was a lady as well, they were playing football. I play football as well and then they were trying the food as well, so I think the effect is that they're showing what people do in real life, but they're also getting McDonald's." (E02, aged 11-13, 'health washing' McDonalds)

"Yes, I think what they said about the green background and like the health and eco-friendly, I think that was very intentional because the vegan lifestyle is seen as a more eco, alternative way to eat and without dairy. Like a big part of being eco-friendly is not using dairy, so I think that they did that on purpose using the green and the beads and stuff like that in the background." (E04, aged 17,19, 'health washing' Magnum)

"Because it's more natural, like all of them, the brand, or the actual name of the product, it's all... It's a more natural option, possibly, better for the environment sort of thing, so to make you think you're making a better choice by picking that over something that's maybe not environmentally friendly." (S03, aged 17-19)

Different target audiences were identified by young people for 'health washing' marketing

The focus group participants identified differences in the intended audience for the HFSS and the 'health washing' examples. While the HFSS adverts were seen as aimed at young people, the 'health washing' marketing was felt to be aimed more at older people and people with specific dietary requirements such as vegans, vegetarians, people on diets and people who go to the gym. Factors which were cited as identifying the target audience for the marketing examples included the use of animation, colours and health messaging.

In addition, the focus group participants spoke of the target audience for both types of marketing as being people who already like the products, similar to the previous iteration of the research. Also common to both types of advertising was the fact that young people felt that the examples shown were aimed at specific groups of the public based upon the content of the advert, specifically those who were featured in it. This was a theme which arose in the 2019 iteration of the research, yet it appeared to apply equally to the 'health washing' examples that were new to this wave. Examples that were cited by the young people included marketing aimed at office workers (McCoys advert), gamers (Pringles advert), people who get up early (McDonald's advert), people who do not want to cook (KFC) and vegans/gym-goers (packaging examples).

"I think they're targeting people who are more like health-minded or like more actively thinking about the things that are in their food." (E04, aged 17,19)

"I think so, because little kids don't really think about protein and stuff like that, do they? They just think, like, sweets and all of that stuff, so probably older people." (W03, aged 14-16)

'Health washing' marketing has complex impacts on young people

The young people had mixed opinions on whether the marketing would have an impact on their own behaviour, as well as on their friends and family members. In the second iteration, young people strongly expressed the opinion that advertising did not have an impact on them or their food choices, despite also going on to give examples of occasions when HFSS marketing had clearly influenced their purchasing behaviour. In the 2021 groups, the HFSS adverts appeared to have an impact on younger age groups in particular, with participants stating that they would like to try the product or would be likely to ask their parents to purchase it. For both types of marketing, the perceived impact of seeing the adverts was also related to whether young people already liked the product or if they were hungry at that time.

M: "Yes. It puts me in the mood to go and get some' Haribos.
F: "I probably have to agree with everyone else. It would make you want to buy some in the shop and stuff like that." (W03, aged 14-16, HFSS Haribo)

"It depends if you're hungry. Sometimes you want McDonald's, but sometimes you're like, if you see it you might feel like you're hungry when you see it, but sometimes you're not hungry. It depends if you feel like you want it." (E02, aged 11-13, 'health washing' McDonald's)

For the marketing examples that depicted 'health washing', the perceived impact appeared to relate to the type of marketing. For the packaging examples, participants rarely said they wanted to purchase or try the product themselves because they felt that the product was not for them, was unappealing, and was too expensive in comparison with HFSS products. However, several young people thought that people who liked healthy foods or had specific dietary requirements might want to try these products as a result of being influenced by the packaging, as they might be deemed appropriate for their healthier lifestyles.

For the examples of 'health washing' adverts, where the brands were already established as marketing and selling HFSS products, perceived impact was more complex. Young people said that they might be more likely to buy the products as a result of seeing the advert, but it was not always clear if they were referring to the brand or the specific product.

"Because they're dear all the time. You'd rather, you get a bigger munch out of a bag of crisps and a couple of bags of sweets like." (NIO1, aged 11-13)

"Yes, my sister's vegan and I know like every time something new vegan comes out in like a fast-food place, she'll definitely go straight to go see it for sure.... Just those bits about their health promises and if they're vegan or veggie or stuff, they do definitely stick out to the people that care about these things." (E04, aged 17,19, 'health washing' Domino's)

"When you go to the shops or something and if you see Ben & Jerry's, you might want to just try it because you saw an ad on it and it looked good." (E03, aged 14-16, 'health washing' B&J)

Similar to the previous iteration of this research, the consensus among young people was that they paid little attention to adverts and, even if they perceived the advert to be memorable in some way, they would still skip it if possible. The impact of advertising also appeared to be somewhat mitigated by the fact that young people also perceived that advertising does not necessarily reflect the reality of the product.

Perceptions of current policy and restrictions on HFSS marketing

This section explores young people's concerns about the way HFSS products are marketed, what changes they would like to see to their marketing, and whether young people believe the changing policy context is fit for purpose in the context of changing media habits and marketing techniques. The section also examines young people's opinions of proposed policy restrictions as well as the role companies and industries play more generally.

Young people called for a range of changes to the packaging and labelling of HFSS products

The young people discussed a number of concerns related to the marketing of HFSS products, with almost identical concerns to those expressed by young people as part of the 2019 iteration. The ubiquity of marketing for HFSS products and the lack of marketing of healthy items, were still identified as relevant issues.

As in the 2019 iteration of this research, HFSS marketing was perceived as misleading, focusing on positive aspects such as taste, low cost, or happy and satisfied customers, rather than the adverse effects associated with such products. Focus group participants also felt concerned that HFSS marketing is specifically aimed at young children, and the labelling of HFSS products, was inadequate, with full nutritional information either not being provided or the print being too small to inform consumers adequately.

The focus group participants called for a range of changes to be made to the marketing of HFSS products. Many of these changes were similar to those discussed by young people in the 2019 iteration of the research, such as:

- Prevent advertisers from targeting children and young people.
- Less frequent and more truthful depictions of HFSS products.
- Make the packaging of HFSS products less attractive.
- Label products in a clearer way.
- Address price imbalance between healthy and unhealthy foods.

In a few of the groups, the following changes in HFSS marketing were suggested:

- Changes to the marketing of healthy products, including making the packaging more attractive and making it easier to advertise healthy products during the day, whilst also making HFSS advertising more expensive during this time.
- Requiring supermarkets to change their layout so that healthier options were more accessible, such as at the checkouts, while unhealthy options were in less convenient locations.
- More accurate portion sizes. Young people felt that these should be more tailored to how much they are likely to consume, or there should be a stronger reminder that labelling may reflect relatively small portion sizes.
- Age restrictions on energy drinks.

"Daytime advertising is about selling the product, so I think healthy products, they should do it during the daytime to get people to make more sales and get people to eat more healthier." (W03, aged 14-16)

"They could also make it compulsory for supermarkets to have healthy food like at the checkouts and the unhealthy food slightly further away so that you don't automatically see it. Or you have to like go past the healthy food to see the unhealthy food. That's not affecting what consumers can buy, but it's encouraging them to like purchase certain products." (E04, aged 17-19)

Young people expressed differing views on the impact of the proposed restrictions

Young people were asked about their views of several restrictions proposed by the UK Government with respect to the way that HFSS items can be advertised. These were:

- 1. Banning paid-for online advertising of HFSS food and drink and a 9 p.m. watershed for such adverts on TV
- 2. End of price and location-based promotions of HFSS foods, such as 'buy one get one free'
- 3. Calories to be displayed on menus to help people make healthier choices when eating out

Young people expressed quite nuanced views of the impact of proposed changes to the marketing of HFSS foods and whether the proposed changes would make a difference to purchasing and consumption, i.e., would changes remove the perceived underlying barriers to eating healthily, and how would companies be impacted by these restrictions.

In general, young people felt that the changes would have a net positive impact because they would see HFSS products less frequently, although opinion was divided on whether this would lead to them buying fewer products. Many of the young people said that, even if these changes were implemented, people would still be aware of HFSS products through other forms of advertising or in shops, and already have such a high brand awareness that these changes may not immediately impact their consumption habits. It was suggested that the impact of these restrictions may be more limited for young people who have high brand awareness and may be more beneficial for young people who are not yet aware of HFSS brands and marketing.

"I think, yes, if they're not seeing the advertisements of the unhealthy products, obviously, yes, I think it will make people eat healthier." (W03, aged 14-16)

The focus group participants were sceptical about whether the proposed changes would get to the root of what they saw as the main issues related to HFSS marketing and consumption. Young people felt that restricting HFSS advertising did little to support healthy lifestyles in isolation and suggested more advertising, subsidies, and multi-buy offers for healthy products, as well as education, both for parents who buy the majority of the shopping, and for young people themselves to help improve the quality of their lifestyles.

"Yeah, I don't think there should be any restrictions because I think when we talked earlier about people on a lower income background, they'd be more likely to purchase...kind of out of no fault of their own, what you're doing is just punishing poor people or the most...or poorer people or those who are less well off in society. That's never a way forward instead you should be making them more accessible, so they access healthy food instead of just pushing a tax or making things expensive because it just makes their life harder. It serves no real purpose." (NI04, aged 17-19)

There was considerable debate among the focus group participants about the impact on companies as a result of these proposed changes. Young people reflected on the difficulties of balancing a company's right to advertise versus the perceived health benefits from the restrictions. Whilst many felt that the benefits to public health were worth the potential loss of revenue to companies (as a result of the restrictions) others felt they were too restrictive for companies and also impinged on personal choice.

"I think it's probably too restricted to have a ban because they're still companies that need to sell their products, but even if they were restricted, it's like a certain amount of times you see the advert per device or something or like that." (W04, aged 17-19)

There were also specific concerns raised related to the individual policies. Whilst the majority of the young people expressed support for an advertising ban before 9 p.m. on television, the total ban on online advertising was less well received.

The young people expressed concerns that the multibuy ban would penalise lower income families who may be more dependent on these offers, whilst being ineffective at preventing young people who could afford the products from consuming them. It was therefore proposed that multibuy offers should be extended to healthier foods instead.

"Like for people that are low-income families that's really most of the food they can afford and some of them mainly rely on those deals like Buy One Get One Free...I don't think it's fair to take that away from someone that needs it." (NI04, aged 17-19)

The proposal to display calories on menus was broadly supported as enabling people to make healthier choices, although there was some debate about whether they or the general public would be likely to pay attention to the information. Several groups expressed concern that displaying calories on menus would cause young people and particularly those experiencing disordered eating, to worry about the calorific content of their food. "It might be better for some people if they're counting calories, but it won't be good for other people... It would be good for like older people like adults, but it might not be good for children...I'm not really sure, it might make them worried if it's high in calories." (NI01, aged 11-13)

Young people had mixed views on the role of industry in determining policy and restrictions

Young people had differing views on the role that industry should play in determining the rules and restrictions for the promotion of HFSS products. It was common for the focus group participants to express uncertainty and to have no strong opinion about who they thought should be setting the agenda. Suggestions as to who should be involved in setting policies regarding the advertising of HFSS products included the government, health policy organisations, broadcasters, and companies themselves.

> "I think it should be run by a company, like a marketer who has been in the industry for a lot of years should start his/her company and take control of that area." (E02, aged 11-13)

> "... it should be something to do with the TV broadcasters that actually put the adverts on." (W03, aged 14-16)

> "Someone that you can rely on, because say like companies are going to make their food no matter what. If they know they're going to get money out of us, they're going to do it; they don't really care about how it benefits us, as long as they get money at the end of the day. But say if you've got sponsors that are like the NHS and stuff like that...then people would be more willing to go out and buy that because they know that it's going to be good for them." (S03, aged 17-19)

Young people were also generally ambivalent about what the penalties should be for companies that are seen to break existing rules. While some young people suggested fines, two-step warnings and bans on selling products, others expressed concern that fines would have to be sufficiently high to deter larger organisations. Some felt that penalties did not get to the root of the issue, such as a lack of education and income inequality, and companies should instead be rewarded for good behaviour, such as incentives for selling healthy products.

"The thing is, it will have to be like quite big if it's going to deter all these big companies from actually like sticking to the rules because obviously, they can afford to pay a small fine, so it's going to have to be like really significant. Then it can also set a precedent for like future companies to actually deter them from doing so." (E04, aged 17-19) In a departure from the previous wave of the research, several groups believed that marketing of HFSS products is a legitimate enterprise and further restrictions on industry are not merited. These young people felt that as long as information was provided and was accurate, then it was up to the individual whether to purchase and consume the products; companies had a right to advertise their products; and it would be unfair to penalise them if they were following the existing rules.

"It's not fair for the business. That's your job, to be educated into what you're going out and looking at. You should be the one that's looking out for yourself. You can't expect other people to lose money just for you to, just because you're not looking out for yourself and you're getting brainwashed." (E03, aged 14-16)

"I think that's bad because I think it should be us that can make the choice. Why should the council or whoever it is want to make that? It's our bodies and we can make the choice, so why should they have to ban it?" (E03, aged 14-16)

Wider barriers to living healthier lives

Perceptions of a healthy lifestyle

This section explores young people's perceptions of healthy lifestyles, including the broader pressures that impact on young people's HFSS consumption, young people's attitudes to broader health behaviours such as smoking and physical activity, and their perception of the impact of inequalities on living a healthy lifestyle.

The meaning of a healthy lifestyle to young people, which information sources on health young people use and the extent to which they perceive these to be trustworthy, are discussed. Their perceptions of the barriers to and facilitators of a healthy lifestyle are examined, and finally, the ways in which young people think people can be supported to live a healthy lifestyle are explored.

Young people have a holistic view of a healthy lifestyle

Young people identified mental health, exercise, and a healthy diet as the key elements of a healthy lifestyle. Potentially health damaging behaviours such as smoking, taking drugs, and drinking alcohol were not thought to be compatible with a healthy lifestyle. These elements are discussed in more detail below.

Young people generally gave a nuanced and holistic definition of health and described the ways in which different elements of health are interlinked. They described a healthy lifestyle as not conforming to one specific standard across the general public, and rarely discussed health in terms of body size or weight. "I think the basis of being healthy is to have a healthy mind and a healthy body, but that doesn't have to look a certain way. Society makes you think it has to look a certain way, so like you can't be too big, or you can't be too small, but if you're healthy and you're mentally healthy, I think that should count as healthy. You shouldn't have to look one specific way." (E04, aged 17-19)

Mental health was identified to be an important element of health

Across the groups, young people identified mental health as an important element of general health. Additionally, it was also found to interact with other elements of health. Young people related positive mental health to caring for themselves in other ways, such as cooking, eating healthy food and exercising.

"Mental health just interacts with everything like that, so having good wellbeing and mental health probably would help a lot better." (S01, aged 16-19)

"Like, see if you're thinking positively then your actions will be more positive as well. You'll feel a bit better, which means you'll treat yourself a wee bit better, so you'll be out there more, aye. Then, see, even just making yourself your dinner; you're looking after yourself doing that." (S03, aged 17-19)

"You have to have good mental health do you know what I mean, to be in an alright position to be able to eat well and exercise, they kind of all depend on each other." (NIO4, aged 17-19)

Having a balanced diet was identified as an important enabler to living a healthy lifestyle

There was consensus across the groups that eating healthily was an important component of a healthy lifestyle. Eating fruit and vegetables, meat, protein, and drinking water were all identified as part of a healthy diet. Young people spoke about the importance of a balanced diet, of not restricting consumption of any food groups and of still having some HFSS foods as a treat. Examples given by young people of the potential negative impact of an unhealthy diet were lack of energy, weight gain, and health problems.

"Just to have a good, balanced diet so it's not like no sugar or no fat; it's just getting a good balance of things." (S03, aged 17-19) "You need unhealthy food, it's not just, because if you don't have unhealthy food it's just not good for you because you're supposed to have unhealthy and healthy food. If you just stick to healthy food it's not really that good for you because you do need some bad food inside of you, unhealthy food." (E02, aged 11-13)

"If you eat healthy and drink healthy, healthy smoothies and all then it shouldn't really affect you but if you eat fat food like all the time when you're older it might affect you." (NI03, aged 17-19)

"Eating healthier might make you feel more happier but if you eat more unhealthier foods then it might make you feel less like...have less energy and stuff." (NI01, aged 11-13)

Exercise is also an important component to living a healthy lifestyle

There was general agreement that exercise and physical fitness were an important part of a healthy lifestyle. Young people spoke about the benefits of exercising and the role of exercise in supporting their mental health. There was some discussion of exercise counteracting an unhealthy diet, with young people asserting that they could maintain their body shape and fitness through exercise, no matter what they ate.

"It gives off good endorphins, which mentally makes you feel better." (W01, aged 11-13)

"I do think getting physical exercise is part of mentally taking care of yourself a lot of the time, so, yes, physical exercise I think's super important and obviously eating well." (E04, aged 17-19)

"Like I go running a lot and I play a lot of football, so like I'm physically healthy, but I also eat a lot of fatty and sugary foods." (E04, aged 17-19)

"I think exercise is a big key factor in that, like you can eat not whatever you want but you can eat...you need to make sure that you make up for it with exercise at the end of the day." (NI04, aged 17-19)

Maladaptive health behaviours were identified as a barrier to living a healthy lifestyle

Across the groups, there was strong consensus that smoking and taking drugs were not part of a healthy lifestyle. Smoking in particular was described as unhealthy, bad for the lungs and undermining other elements of a healthy lifestyle. Among the younger groups, young people tended to agree that drinking alcohol was also unhealthy. However, there was less consensus among the oldest age group, with some of these participants arguing that drinking occasionally and in moderation could be part of a healthy lifestyle. This is likely to be related to the legal drinking age of 18 and differences in lifestyle between the older and younger groups. "I think there's no point doing a healthy lifestyle if you're going to be doing these bad habits, if you know what I mean. It's terrible, because I know a lot of footballers, they smoke. You're a footballer, come on. You're not supposed to do any of this bad stuff you know what I mean." (W01, aged 11-

13)

"Yes, it's [drinking/drugs] got to be as important as exercising and eating healthy, to be honest." (W04, aged 17-19)

Young people use a range of sources to access health information

There was a wide range of sources from which young people accessed information about health. These included:

- School
- Parents
- Websites and Google
- Social media
- Food packaging (including traffic light labelling)
- Doctors
- Sports coaches and fitness instructors

In general, young people knew of places where they could access information about health but had not accessed it themselves. There were differing opinions as to whether health information was well communicated at school. Some young people recalled having learnt about health, diet and nutrition in school, while others did not. Scepticism was expressed as to the trustworthiness of health information which could be accessed online through websites and social media, with sources such as the NHS website being seen as more reputable.

"I think the NHS is definitely more reliable, because I remember when I was younger looking up the five a day and stuff like that and the first one that came up was NHS. Then you look at a different website and anyone can make a website, so it's not really trustworthy, so you've got to look at the bigger organisations." (W04, aged 17-19)

"Online, but that's not the best because a lot of people are pushing on unrealistic and unhealthy ways of getting to the goal you want to get to." (S03, aged 17-19)

Barriers and facilitators to living a healthy lifestyle

Young people were asked about what made it easier or more difficult to live healthier lifestyles. Many of the factors which they identified as barriers to living a healthy lifestyle were similar to those identified in the 2019 study as impacting consumption of HFSS foods, particularly price and availability, convenience, and family and peer relationships.

Income inequalities were identified as a barrier to living a healthy lifestyle

Young people tended to speak about inequalities in terms of income inequality and mentioned the impact of low income on access to healthy food options and exercise facilities. However, there was also discussion of the negative impact of low income on health due to the cognitive burden of worrying about money, which could cause stress and prevent families from being able to prioritize health.

"Yes, I think it's not even just they can't afford it. I think there's just like more of a culture in poorer areas that it's normal to - there's just like other things to focus on in life rather than what you eat and stuff like that; there's bigger problems. Whereas, if you're in more affluent areas, maybe you're a bit more carefree about those sort of problems and a bit - you can focus more on yourself and stuff along those lines." (E04, aged 17-19)

"Sometimes like it's not healthy for your mind whenever you don't have enough money because you're always like stressed all the time." (NIO1, aged 11-13)

Healthier food options were identified to be more expensive than HFSS products

In general, young people tended to speak about low income as a barrier to eating a healthy diet as healthy food was considered to be more expensive than HFSS options. This is similar to findings from the previous round of research. There was some disagreement with this, particularly within the younger groups, with examples given of inexpensive healthy food such as vegetables.

> "In the poorer areas you seem to find higher rate of obesity and stuff like that in kids, but it's because their parents don't have enough time because they're busy trying to keep the house afloat. They just don't have enough money to feed their kids the proper nutritional foods they need." (S03, aged 17-19)

> "You can still make food pretty healthy, no matter how much money you have. It doesn't really affect - I mean, if you're really struggling, then maybe it may not help you. In most cases it doesn't affect you at all." (W03, aged 14-16)

Lack of access to healthy food outlets acted as a barrier to eating healthily

Young people also gave the example of access to local shops and food outlets which sold healthy food options as an example of lack of income inequality constituting a barrier to eating

healthily. They drew attention to a high number of take-aways in deprived areas and a lack of access to large supermarkets which allow the purchase of healthy options in bulk.

"It could influence it as you, like, where you are. If there's a McDonald's right next to your workplace, or for example a burger van." (S01, aged 16-19)

"So, when you go out there's probably like 20 different takeaways around you but probably none of them make healthy food." (E01, aged 14-16)

Fees for sports facilities made exercising less accessible for young people

Young people identified income inequality as a barrier to accessing exercise facilities. Fees for gym memberships and sports clubs were described as making exercise less accessible for those on a low income. However, other young people argued that low income was not a barrier to exercise as it is possible to exercise for free at home.

"Also, you have to pay for everything, including like gym memberships and stuff to exercise." (E02, aged 11-13)

"Also, it's kind of linked to income but you could say access to sports because if you've got access to like a range of football clubs, for example, or like a running club, you can get used to doing exercise with people and it'll be a fun thing that you actually look forward to. Whereas, if you don't, then you're not going to be incentivised to actually go outside and like do exercise." (E04, aged 17-19)

"It could also help with exercise, afford like a gym membership or something. It could also do the opposite, because if you can't afford to have and maintain a car, then you walk a lot more." (S01, aged 16-19)

Interpersonal relationships can act as both a barrier and an enabler in living a healthy lifestyle

Young people spoke about the ways in which interpersonal relationships could act as barriers to and facilitators of living a healthy lifestyle, particularly relationships with family and friends. Social pressures such as busy lifestyles and exposure to HFSS advertising and social media were also identified as factors which made living healthily more difficult.

Participants also mentioned the impact of interpersonal relationships on their mental health and wellbeing, highlighting bullying and abusive relationships as a barrier to general wellbeing and as influencing their relationship with food.

"Another way that can affect your health is if you're in a toxic or abusive relationship, then, I don't know. Say that you're with someone who constantly goes on about your weight, whether that be, 'Oh, you look anorexic,' or 'You look obese,' then you're going to struggle with that a lot and then you're probably going to either try and do things that will help that, or you're just going to take a complete wrong turn and just keep going down that same road because of how your partner is making you feel." (S01, aged 16-19)

Parents' and carers' food choices influenced young people's ability to live a healthy lifestyle

Parents' and carer's food choices and the food which was available at home were key factors identified by the young people in influencing their ability to live a healthy lifestyle. Parental food choices and lifestyle were discussed as both a barrier to and a facilitator of living healthily. Young people identified healthy and home-cooked meals provided by parents as supporting a healthy lifestyle. However, if parents provided HFSS foods within the home, this was seen as a barrier to a healthy lifestyle for young people. Family influences were considered to have lifelong consequences in setting the pattern for young people's food choices in later life.

"It really depends on who you're surrounded by. Say you've got a family and they're all about fitness - well, healthy eating - so then they're making healthy dinners and that. So, then you're going to just eat what they're eating kind of thing, whereas if you're not really surrounded by - or if you're surrounded by a few people and you're going to McDonald's and eating takeaways or, I don't know, chocolate, munchies, that kind of stuff..." (S03, aged 17-19)

Friends and peers can have dual effects on an individual's ability to stay healthy

As was the case with family members, the participants identified their friends and peers as both a barrier to and facilitator of a healthy lifestyle. They also described feeling pressure to make the same food choices as their friends, whether these were healthy or unhealthy. Young people also described eating more unhealthy foods when they were out with their friends than when they were at home.

> "I think when I'm at home I eat a lot more healthy because when you're out with your friends you get fast food" (W03, aged 14-16)

"The people around you, like your circle, like all your mates an all they would determine your future, like for example, if they're doing bad stuff then you're going to end up doing that. If they're around good stuff you're going to end up doing that. If they're eating healthy, you're going to want to eat healthy, if they're not eating healthy then you're not going to want to eat healthy so like it all determines on the people you hang around with and what crowds you're in." (NIO2, aged 14-16)

A busy lifestyle limited young people's ability to stay healthy

Having a busy lifestyle was identified by young people as a barrier to a healthy lifestyle, due to the lack of time available to cook meals at home, leading to people buying ready meals, takeaways, or fast food.

"Yeah, you don't have the time to like properly get food that is good for you, you're just picking up anything, like 'I wanna do that', sometimes especially working you don't really have the time to go home but when you do get home you're not going to want to make like a proper dinner. They do say to prep but sometimes you're just too tired and you just eat anything." (NIO4, aged 17-19)

Social media influences young people's perception of a healthy lifestyle

Young people highlighted seeing adverts for HFSS products as a barrier to a healthy lifestyle, as these may influence people to buy HFSS items. In addition, young people identified fitness influencers on social media as having an impact on their motivation to live more healthily. However, they also expressed skepticism regarding the accuracy of claims made on social media and felt that fitness influencers presented unrealistic standards, particularly through the use of photoshop.

"Like how we were saying about the adverts, like, adverts, you can imagine that people would see them all and it would push them to get it and then they're not really staying healthy." (S02, aged 11-13)

"Also, there's a lot of like so-called influencers who try and portray a very unhealthy lifestyle as a healthy lifestyle by like editing pictures and that. Yes, society does play a role in making people almost feel guilty about not looking a certain way, even when in reality they're completely healthy and, yes, the other person isn't." (E04, aged 17-19)

Poor mental health acts as a barrier towards living a healthy lifestyle

Young people spoke about poor mental health as a barrier to living a healthy lifestyle and described the ways in which low mood made living healthily more difficult. These included lack of energy and low motivation for cooking healthy meals, exercising, getting outside, and tidying

up. Poor mental health was described as a vicious circle in which low mood contributed to an unhealthy lifestyle, which in turn contributed to low mood. Young people also spoke about mental health conditions such as disordered eating as a barrier to a healthy relationship with food and a healthy lifestyle overall. In contrast, young people described positive mental health, positive mindset, and motivation as facilitators to healthy living. Personal motivation was identified as an important factor in eating healthily and exercising.

"Like, say, with depression, there's a cycle like that comes with it and it's a negativity cycle. If you're in that, then you're not going to feel motivated to do something like go on a run or go and buy vegetables at the shop or something like that. You might just feel like, oh, I should just order McDonald's; it's easier. I don't have to exert much energy. The cycle just keeps going because obviously that's just how mental health works." (E04, aged 17-19)

"I know this is a wee bit different, but I think another factor in why people might not eat healthier or have healthier diets is: if they've got bad habits with eating or mental health issues, like eating disorders or whatever, it's not just eating less. It can sometimes be binge eating and unhealthy diets that come with eating disorders. So maybe getting out of that mindset and breaking away from old habits and starting a healthy lifestyle can be difficult for mental reasons as well as financial and educational." (S03, aged 17-19)

"I think the mindset thing is like the first step to it all, because if you don't have the mindset to be healthy and you don't have the mindset to want to change your diet, then it's not going to happen, is it?" (S03, aged 17-19)

COVID-19 and lockdown had a negative impact on young people's ability to live a healthy lifestyle

Young people described the COVID-19 lockdown as being detrimental to a healthy lifestyle. They gave examples of the ways in which lockdown had impacted them personally, as well as those around them. These included the development of poor mental health, changes to their eating habits such as increased consumption of snacks due to boredom, being unable to exercise due to gyms and sports facilities being closed, and limits on time spent outside for exercise. However, other young people felt that they had been able to live more healthily during lockdown as they had more time to exercise and cook.

"I think COVID has messed up everyone's mental health completely." (NI03, aged 17-19)

"I agree I think it's not even just gyms but it's like football and group sports and swimming, everything, those leisure activities that people...I suppose not only do for exercise but for the social aspects as well...I think obviously everyone's lives were kind of up and left and of course that goes, exercise and healthy eating and stuff as well and things are closed, and everyone was restricted in every kind of way possible, and it just doesn't become a priority for a lot of people. It was staying safe is their number one priority never mind eating healthy." (NIO4, aged 17-19)

"I would say easier. Just I've been able to exercise a bit more, I'm in the house more so I am like taking more time to make myself healthier I suppose." (NI03, aged 17-19)

Young people require a range of individual and environmental factors to help them live a healthy lifestyle

When young people were asked about how they thought people could be supported to live a healthier lifestyle and who should provide this support, they most commonly spoke about individual factors which would help them personally. These included having a positive mindset, building a routine, having willpower and not giving in to temptation, and motivating themselves and others to resist purchasing of unhealthy products. In general, young people thought that they themselves and, to a lesser extent their parents and carers, were responsible for making these kinds of changes.

"Yeah, I think you can encourage people and you try to educate them, teach people, then it does come down to their own decision and their own choice. You can take a horse to water, but you can't make it drink. So, it's just educating them and teaching them and giving them the proper information and knowledge and equipment but ultimately, it's people's autonomy, it's their decision to do whatever they want." (NI04, aged 17-19)

"I've started to watch what I buy because like if I keep buying fast foods and stuff that's bad for me then my life is on the line, it's my fault. So, you have to watch what you buy." (NI02, aged 14-16)

When speaking about ways that people could be supported to live healthier lifestyles more widely, young people suggested making healthy food options more accessible and attractive through provision of healthier food in schools, price promotions on - or reducing the price of - healthy food options and promoting healthy lifestyles in advertising and social media. In addition, they suggested increasing the accessibility of exercise through subsidised gym memberships and the provision of information on ways to exercise without cost. Finally, young people suggested provision of holistic health education in schools, which focuses not just on diet but also includes nutrition, mental health, resilience, the mental benefits of exercise, and how to recognise the symptoms of eating disorders.

"I think it would be like someone eating a product with a healthy lifestyle and yes, just showing the product and advertising it... I think it is a good idea, because obviously loads of people watch the TV, so I think it's a great way to advertise and to get people to eat more healthy." (W03 aged 14-16)

"Well, I think there should be more like government funding into like sports clubs, for example, especially in like deprived areas, to actually encourage people to go out and like live a healthy lifestyle." (E04, aged 17-19)

"I would say something people need educated on more is that, even though you might eat healthy and have a healthy mind and all that and exercise, it doesn't mean that your body is going to look a certain way. You can be as healthy as you can be and still be bigger. It doesn't mean that because you eat healthier, because you run five days a week that you're going to be like Kendall Jenner." (S03, aged 17-19)

Discussion

This qualitative study explores dietary attitudes and behaviours among young people aged 11-19 across the UK. It builds on previous iterations and highlights the continued importance of marketing in influencing diets and also explores wider environmental barriers and enablers to living healthier lives. While many of the issues raised in this study echo those in previous iterations, key differences and the possible reasons for these have been drawn out in this discussion.

Young people continue to report high exposure to HFSS marketing

On the whole, the views of the young people in relation to HFSS and its marketing were similar to those observed in previous waves of the YOPS scoping work. Young people were exposed to a great deal of HFSS marketing through a variety of media. Despite giving specific examples of the perceived direct influence of HFSS marketing on their own behaviour, participants held the seemingly contradictory opinion that this marketing has little influence on young people.

There were also differences noted in 2021 compared with previous waves, some of which are almost certainly related to the context in which the research was conducted, as well as to specific issues raised in the focus groups. The COVID-19 pandemic constitutes a major change in context and the four UK nations were also subject to differing lockdown restrictions [42]. It is interesting to note that there was no consensus as to whether the amount of HFSS marketing had increased overall during lockdown, with participants arguing that they were exposed to more online advertising; whereas others said that they were exposed to fewer examples of marketing outside of the home environment. In this third iteration, young people came across HFSS marketing through new and emerging online platforms such as TikTok and the active promotion of takeaway foods via delivery apps, such as Just Eat and Uber Eats. Given the importance of online and social media advertising and media and the speed with which it can be adapted to social contexts is concerning.

Recognition of HFSS brands among young people is high

For the first time in 2021, this research included a brand recognition exercise. In this, young people were shown an excerpt of an HFSS brand logo before being asked to name the brand. Across the different age groups, participants were able to identify an average of over 10 out of 12 brands. Indeed, even in instances in which a name could not be given to a brand, it was still possible in some cases for individuals to say what type of product was associated with the brand. This suggests that the pervasive marketing and branding of HFSS products has been successful in producing high levels of brand recognition in young people as young as 11 years old.

'Health washing' influences perceptions of healthiness but has complex impacts on young people

The online groups in 2021 also explored the issue of 'health washing' for the first time. Participants were shown examples of HFSS marketing that use 'health washing' tactics (e.g., use of words such as 'organic', 'natural' and 'vegan') and were able to expand on these to discuss other examples they had seen. Overall, young people recognised that these products appeared to be healthier, but they did not seem to find the marketing examples convincing and perceived the products to be unappealing. However, for the examples of 'health washing' adverts, where the brands were already established as marketing and selling HFSS products, perceived impact was more complex. Young people said that they might be more likely to buy the products as a result of seeing the advert, but it was not always clear if they were referring to the specific product shown or the more famous HFSS products from the brand's portfolio. This underscores the strength of brand recognition amongst young people and raises further questions around how established HFSS brands might switch to advertising healthier products while association to their unhealthy products remains high.

Young people broadly support marketing restrictions while raising some questions

Overall, the young people were supportive of current and forthcoming restrictions related to the marketing and sale of HFSS products, considering the benefits to public health to offer a net positive impact. In line with previous iterations of this study [43], young people expressed concerns about the ubiquity of HFSS marketing and called for a range of changes to be made to restrict the marketing of HFSS products.

However, while supportive of restrictions, some young people were concerned that high levels of brand awareness may limit the restrictions' impact on young people's consumption habits. They also questioned whether restrictions would solve what they considered to be underlying problems, such as income inequality and access to healthier foods. Moreover, some sympathy was expressed for brands being able to promote themselves, particularly online. Here respondents considered responsibility was up to the individual on whether to purchase and consume the products.

However, this is in line with findings from the 2019 iteration [43], in which young people expressed the opinion that advertising did not have an impact on them or their food choices, despite also giving examples of occasions when HFSS marketing clearly influences their purchasing behaviour. This suggests young people might underestimate the impact of advertising on the consumer. Finally, it is likely that as these restrictions become more normalised perceptions might change, in the same way that the Soft Drinks Industry Levy has become increasingly accepted over time.

Young people hold a holistic view of health, and highlighted income inequality and poor mental health as key barriers to being healthier

The participants were also asked about their overall concept of health, what a healthy lifestyle means and how diet and nutrition might form part of such a way of living. They were also asked to describe other contextual factors that might influence health at an individual and societal level.

Participants of all ages demonstrated that they held holistic and relatively sophisticated and nuanced views of health. They tended to state that health had physical, mental and emotional components. The social environment was also identified to have a crucial influence.

It was notable in the 2021 research how many of the participants emphasised the importance of mental health. Although the young people emphasised that the different components are interlinked, it was evident from their responses that a person with poor mental health would experience challenges in living a healthy lifestyle. Similarly, the pandemic itself was thought to have made living healthily a more difficult prospect, with limitations placed on the ability to exercise and socialise with other young people in person.

Diet and nutrition were seen to be an important part of a healthy lifestyle, with potential impacts on physical and mental health. However, obesity was rarely mentioned explicitly and indeed participants tended to state that it was possible for people with a range of different sizes and weights to be healthy and live a healthy lifestyle. It should be noted that weight stigma was not specifically addressed as part of this iteration, though it was cited in a few of the groups.

The young people indicated that social inequalities were one of the major determinants of health. Those living in areas of lower socioeconomic status were thought to have less choice and ability in terms of access to healthy food, opportunities to exercise, might live in less salubrious environments and be subject to income inequalities. A lack of income was perceived to not only limit what might be purchased within a household but also have a longer-term impact on stress levels and mental health. This led some of the young people to question the relative importance of restricting the marketing of unhealthy items such as HFSS products when wider societal factors might have a greater influence. However, it is important to note that research shows increased access to unhealthy items is more commonplace in more deprived environments [44].

The participants in this research thought that initiatives to address a perceived lack of education related to HFSS products and disparities in income would potentially have a greater impact than imposing further restrictions on HFSS companies and their marketing. This was because social inequalities were thought to undermine the ability to lead a healthy lifestyle. The call for improved education was interesting in that the young people also reported that they were aware that they had access to the relevant information, though this did not necessarily equate to seeking it out. It should also be noted that influencers on social media earned the distrust of young people in both the 2016 and 2019 iteration when they were seen to promote certain products or lifestyles [1].

Policy Recommendations

This report builds on previous CRUK research to highlight the number of environmental pressures faced by young people as they try to live healthier lives. In this third iteration, we look not only into the continued role played by the marketing of less healthy food and drink in impacting the wellbeing of young people in the UK, but also into the wider determinants of health.

The importance of good mental health as well as the access to and promotion of healthier foods were highlighted by young people as important facilitators to living a healthier life in this report. This follows recent work by the Obesity Health Alliance (OHA) and by the Institute for Public Policy Research (IPPR), who explored how factors such as mental health, deprivation, inequalities and even school and community environments feed into our nation's health [16, 45]. Moreover, the young people in this study describe the ways in which the COVID-19 lockdown had a detrimental impact on maintaining a healthy lifestyle, including impacting their mental health, snacking more, and limiting exercise. In the face of this complex landscape, it is clear young people need support to reduce the pressures in their food environment and wider determinants of health that push them away from making healthier choices.

The UK Government should prioritise the work of the Cabinet-level Health Promotion Taskforce

This report underscored the complexity of barriers young people face in living healthier lives. Poor mental health, financial insecurity and the density of unhealthy food options were all highlighted as impediments to engaging in healthier behaviours. Moreover, young people reported exposure to the marketing of high in fat, salt or sugar (HFSS) food and drink across a large range of platforms and detailed the impact this had on their purchasing habits.

Important steps have been taken by the UK Government to address these barriers, including restrictions on unhealthy food marketing and a commitment to level up communities across the UK. However, securing these gains and effectively turning the tide on childhood obesity will require cross-governmental action on a continuing basis.

As such CRUK welcomes the newly created Cabinet-level Health Promotion Taskforce and calls for:

1. Continued work by this committee to ensure oversight of the delivery of the UK Government's obesity and prevention commitments and co-ordination of the development of the obesity strategy's next stages.

Proposed legislation must be implemented in full and without further delay

This report adds to the overwhelming body of evidence that shows young people are exposed to and influenced by the marketing of HFSS food and drink across a range of platforms. This advertising shapes their preferences and habits – having tangible effects on their perceptions of and desires to purchase and consume, HFSS products. There is also strong evidence that

HFSS promotions lead families to consume more unhealthy food and spend more money overall, not less [46-48].

Measures that would help reduce these unhealthy nudges by restricting the advertising of HFSS are included within the Health and Care Bill. These UK-wide measures – expected to be passed by Parliament in the coming months for implementation at the start of 2023 - would include a ban on paid-for online advertising of HFSS adverts and a 9 p.m. watershed for such adverts on TV. Restrictions on price and location-based promotions of HFSS products in stores and online are also due to come into force for England in late 2022; while similar legislation is due to be put before the Scottish Parliament and Senedd Cymru within the next couple of years.

These regulations are an essential next step to address the food pressures facing young people and support them to live healthier lives. It is essential that they are implemented in full and without further delay. These measures should also help incentivise companies to shift the spotlight onto healthier products by ensuring these are made more affordable and visible – something the young people in this report repeatedly stated the importance of.

As such, CRUK calls:

- 2. The UK Government to introduce planned restrictions on the advertising and promotions of unhealthy food and drink in full and without further delay.
- 3. The Governments of Scotland, Wales and Northern Ireland to take forward similar measures to tackle the advertising and promotions of unhealthy food and drink.

Address potential loopholes and displacement from proposed regulation

This research highlights the ways in which young people could remain vulnerable to pressures that are either not currently set to be covered by the upcoming regulations or might increase as marketers shift their strategies following their implementation.

Brand advertising is not within the scope of the proposed measures. However, young people demonstrated high levels of brand recognition and in instances where brands could not be recalled, they could often still associate them with HFSS products. Young people even expressed concerns around the impact of years of HFSS advertising on building their brand awareness and questioned whether the upcoming marketing regulations would fully protect them from the long-lasting effects of this.

In addition, the digital landscape is fast-changing. In the time since the last wave of this research was undertaken, new pressures have emerged. Social media platform TikTok and food delivery apps have experienced a huge rise in popularity – with young people identifying these as new sources of HFSS advertising to which they are exposed to.

Interestingly when asked where they see advertising, the young people in this study also pointed to other users' posts of HFSS products. This reflects what previous research has shown, that young people struggle to differentiate between paid for and non-paid for advertising. As young people are impacted by both these types of online advertising, this leaves them vulnerable to non-paid for promotional techniques, such as online viral trends started by brands' own social media profiles.

Given this insight, it will be essential for the UK Government to continue to monitor the impact of proposed regulatory measures after their implementation to ensure they remain fit for purpose and continue to effectively protect young people as the marketing landscape evolves. It will also be essential to monitor whether the new measures lead to displacement towards these less regulated types of marketing.

CRUK calls for the UK Government to task Ofcom, as the regulatory backstop, to undertake an annual review to monitor:

- a. The use of brands' own social media profiles in exposing children and young people to HFSS products; and keep under review whether new advertising regulations will meet this challenge.
- b. The prevalence of and impact that brand advertising has on children and young people's attitudes and behaviours towards HFSS products. And as OHA proposes consider extending all existing and new advertising restrictions to brand adverts for food and drink brands that are associated with predominantly unhealthy products.
- c. The impact of food delivery apps on young people's purchasing behaviours of unhealthy food and drink and consider whether further policy is needed to facilitate the purchase of healthier options on these platforms.
- d. The emergence of new platforms and their impact on exposing young people to HFSS advertising.

Address other packaging and promotional techniques that target young people

This study indicates that young people find packaging used by HFSS products appealing and can recognise when packaging is directed at them and when it is not. This echoes what the wider literature shows: that 'child friendly' packaging influences young people's preferences around unhealthy food and drink [16]. The OHA's Healthy Weight Strategy directly explores the impact of these promotional techniques on unhealthy food and drink product packaging on young people, including the use of cartoons, brand equity and licensed characters along with celebrities and sports stars.

4. CRUK supports the Obesity Health Alliance's calls to address packaging of HFSS food targeted at children – including the use of cartoons, brand equity and licensed characters, along with celebrities and sports stars – to provide an important avenue of protection for young people.

Address the wider barriers that prevent young people from living healthier lives

In this study young people identified the barriers that they face in living healthier lives.

Mental health was an important theme, which could both impede or support young people's ability to engage in healthier behaviours. For the young people in this study, health was

interlinked - with healthy diets and exercise supporting good mental health as well as good mental health supporting wider health behaviours. This is supported by research [45] which highlights the ways in which obesity and mental health hold a mutually reinforcing relationship, with mental health acting as a driver of obesity in itself.

Systemic barriers to living well were also highlighted, with young people perceiving low income as a barrier to affording healthier foods, as well as the greater density of unhealthy options and HFSS advertising in deprived areas. In England, we know that obesity in young people from more deprived backgrounds is more than twice as prevalent as in the least deprived [7]. Moreover, deprivation and mental health are also interlinked, with those from more deprived backgrounds at greater risk of poor long term mental health [49].

Both the IPPR and the OHA have put forward measures to address these wider barriers to healthy behaviours [16, 45]. These proposals which should be considered further, include fiscal measures to support access to healthier foods for the most deprived families, measures to improve the built environment in reducing health inequalities and greater investment in mental health support for young people in a range of settings.

Many of the locally available services that can support young people's wellbeing – both mental and physical – rely on public health funding. However, in England, since assuming responsibility for public health and prevention services, councils have had to operate within an increasingly challenging funding environment. Local authorities in England have experienced a sustained programme of cuts in recent years, which severely compromises their ability to provide the vital functions and services that prevent ill health. These cuts have been greatest in more deprived local authorities – which risks exacerbating existing health inequalities [50].

If the UK Government wishes to deliver on its pledge to level up for all groups in society, young people need support to remove these barriers to living healthy lives.

In support of this CRUK calls for:

- 5. The UK Government to restore the public health grant to its pre-2015/16 real terms percapita value and increase it to meet future pressure. An estimated £1.4 billion per year is needed by 2024/25 to address cost pressures and demand levels. This will ensure young people across England have access to the services they need to support their mental and physical health. This is needed to level up health inequalities by channelling funding directly into local communities that need it most.
- 6. Further research including by governments across the UK to better understand policy measures to tackle deprivation and mental health and their relationship to childhood obesity.

Strengths and Limitations

Strengths:

- The 2021 study involved 96 participants (54 female and 42 male) aged 11-19 years in sixteen focus groups. This was the largest sample size for this demographic ever conducted as part of the YOPS scoping work and the first to involve fieldwork in Northern Ireland.
- It is important to emphasise, given the necessary change of research format design to online groups as a result of the pandemic, that the sixteen groups conducted with those aged 11-19 across the UK yielded very rich qualitative data.
- Using the Framework method provides many advantages: It ensures that each participant's own subjective perspectives are used when describing the data and ensures that the summarised data is kept within the wider context for each theme. Overall, this ensures that the data has been processed and interpreted accurately [51].
- The topic guide was based on previous iterations of this qualitative study and was amended after discussion with Cancer Research UK and wider stakeholders. As a result, issues such as brand recognition and 'health washing' were addressed explicitly for the first time.
- Most of the groups were recruited through the help of a specialist agency, which has great experience and expertise in involving those from 'hard to reach' groups, including those from more deprived backgrounds. Three groups in Scotland were conducted with members of youth organisations, who were comfortable in each other's company.

Limitations:

- The results of this study cannot be generalised based on this qualitative sample; participants were recruited from the most accessible streams; this is indicative of possible researcher bias in the sampling method.
- Although most online groups appeared to work well, there were occasional issues that arose, such as participants having temporary problems with the internet connection. It is also possible that it is more difficult to get everyone to contribute equally when the groups are convened on a remote basis.
- The adverts used in this iteration favoured the video format as these were seen to work best for the online groups.
- In thirteen of the online groups, the young people did not know one another, which may have made them feel less comfortable speaking out in front of the other participants. Of course, it might also be the case that it is easier to express disagreement if the participant does not know the other members of the group.

Future research

The findings for the YOPS 3 qualitative scoping work will inform the questionnaire design for the next wave of the YOPS survey, that took place in late 2021.

The research also identified areas that may benefit from further research:

- 1. This study highlights that 'health washing' has complex effects on young people's health behaviours. Young people indicate that packaging of HFSS foods with additional health claims and even the use of certain imagery can influence the perception of these products. However, they also perceive that these products are not aimed at them. Moreover, where the brand of a 'health washing' product is more frequently associated with other HFSS products, young people report that they are likely to think of the other HFSS products upon viewing these advertisements. As a result, more research must be done to:
 - i. Understand what mechanisms brands with a large range of HFSS products use to advertise their healthier products to young people.
 - ii. Understand the impact of 'health washing' on adults. This study indicates young people feel these products are aimed at older people and those with specific health needs. Since adults are likely to be the primary provider of food in the home, understanding the impact of 'health washing' on adult buying powers could help understand what food ends up on young people's plates at home.
- 2. There is currently a large body of evidence that points to the negative physical and mental impact of weight stigma on those who are overweight or obese, including increased consumption of high calorie foods and avoidance of physical exercise. While stigma was not addressed directly in this research, it was raised in a number of different contexts. As such, the issue of weight stigma, and specifically approaches to reduce stigma, should be explored as the focus of an entire research project rather than a subsidiary aim of another project.
- 3. Better understand the ways delivery apps platforms may influence young people's behaviours and how they might be able to better support healthier choices.
- 4. Understand how packaging might be used to make healthier products more appealing to young people. Addressing deprivation and other disparities will take targeted action to reduce gaps across the cancer pathway including in prevention risk factors such as overweight and obesity. There are still notable gaps in our understanding and a lack of comprehensive evidence on which interventions are best placed to reduce the barriers for young people to live healthier lives.

References

- 1. MacGregor, A., et al., *Still Under Pressure; But Pressing For Change*. 2019: Cancer Research UK. p. 44.
- 2. UK Government. Introducing a total online advertising restriction for products high in fat, sugar and salt (HFSS). 2021 [cited 2021 12]; Available from: <u>https://www.gov.uk/government/consultations/total-restriction-of-online-advertising-for-products-high-in-fat-sugar-and-salt-hfss/introducing-a-total-online-advertising-restriction-for-products-high-in-fat-sugar-and-salt-hfss.</u>
- 3. Association for Young People's Health, *Summarising what we know so far about the impact of COVID-19 on young people*. 2021. p. 5-11.
- 4. Cancer Research UK. *Does obesity cause cancer*. 2021 18/01/2021 [cited 2021 05/01/2022]; Available from: <u>https://www.cancerresearchuk.org/about-cancer/causes-of-cancer/obesity-weight-and-cancer/does-obesity-cause-cancer</u>.
- 5. UK Government. *New pilot to help people exercise more and eat better*. 2021 [cited 2021 12]; Available from: <u>https://www.gov.uk/government/news/new-pilot-to-help-people-exercise-more-and-eat-better</u>.
- 6. Government, H., *Levelling Up the United Kingdom*. 2022: GOV.UK. p. 17.
- NHS Digital. National Child Measurement Programme, England 2020/21 School Year. 2021 [cited 2021 24/02/2022]; Available from: <u>https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year</u>.
- 8. Simmonds, M., et al., *Predicting adult obesity from childhood obesity: a systematic review and meta-analysis.* Obesity reviews, 2016. **17**(2): p. 95-107.
- 9. Department For Health & Social Care. *Childhood obesity: a plan for action, Chapter 2*. 2018 [cited 2021 02/12/2021]; Available from:
 - https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action-chapter-2.
- 10. Public Health England. *Health Matters: Obesity and the food environment*. 2017 [cited 2021 02/12/2021]; Available from: <u>https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2</u>.
- 11. Batterham, R. *Health Inequalities and Obesity*. 2020 [cited 2021 02/12/2021]; Available from: <u>https://www.rcplondon.ac.uk/news/health-inequalities-and-obesity</u>.
- 12. The Food Foundation. *Food Insecurity Tracking*. 2022 [cited 2022 24/02/2022]; Available from: <u>https://foodfoundation.org.uk/initiatives/food-insecurity-tracking</u>.
- 13. Courtney, S., S. Jennifer, and T. Anna, *Affordability of the UK's Eatwell Guide*. 2018: The Food Foundation. p. 1-16.
- 14. YouGov. Global survey: the UK has the highest rate of pandemic savers among 17 countries and regions. 2021 [cited 2022 24/02/2022]; Available from: <u>https://yougov.co.uk/topics/finance/articles-reports/2021/06/22/global-survey-uk-has-highest-rate-pandemic-savers-</u>.
- 15. Whalen, R., et al., *The Health Halo Trend in UK Television Food Advertising Viewed by Children: The Rise of Implicit and Explicit Health Messaging in the Promotion of Unhealthy Foods.* MDPI, 2018.
- 16. Obesity Health Alliance, *Turning the Tide: A 10-year Healthy Weight Strategy*. 2021.
- 17. NHS. *Overview: Obesity*. 2019 [cited 2022 24/02/2022]; Available from: https://www.nhs.uk/conditions/obesity/.
- Brown, K.F., et al., *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, 2018. 118: p. 1130-1141.
- 19. The King's Fund. New analysis reveals stark inequalities in obesity rates across England. 2021

[cited 2021 02/12/2021]; Available from: <u>https://www.kingsfund.org.uk/press/press-</u>releases/new-analysis-stark-inequalities-obesity-england.

- 20. NHS Digital. *National Child Measurement Programme, Results from the 2006 2007 school year*. 2008 02/11/2018 [cited 2022 24/02/2022]; Available from: <u>https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2006-07-school-year</u>.
- 21. Boyland, E.J., et al., *Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults.* American Journal of Clinical Nutrition, 2016. **103**(2): p. 519-533.
- 22. Thomas, C., et al., 10 years on: new evidence on TV marketing and junk food eating amongst 11-19 year olds 10 years after broadcast regulations. 2018: Cancer Research UK.
- 23. MacGregor, A., et al., "It's just there to trick you": A qualitative study of 11-19 year olds' perceptions of food and drink marketing. 2016: Cancer Research UK.
- 24. Public Health England. *Childhood obesity: applying All Our Health*. 2020 [cited 2021 02/12/2021]; Available from: <u>https://www.gov.uk/government/publications/childhood-obesity-applying-all-our-health/childhood-obesity-applying-all-our-health</u>.
- 25. Ofcom, *Children and parents: media use and attitudes report 2020/21*. 2021: Ofcom.
- 26. Ofcom, Online Nation 2021. 2021.
- 27. The Insights Family, *Question: Have you bought any of the following which relate to your favourite YouTuber?* 2020: Ofcom.
- 28. Besson, T., H. Bouxom, and T. Jaubert, *Halo It's Meat! the Effect of the Vegetarian Label on Calorie Perception and Food Choices.* Ecology of Food and Nutrition, 2020. **59**(1): p. 3-20.
- 29. Ellison, B., et al., *Putting the organic label in context: Examining the interactions between the organic label, product type, and retail outlet.* Food Quality and Preference, 2016(49): p. 140-150.
- Fernan, C., J.P. Schuldt, and J. Niederdeppe, *Health Halo Effects from Product Titles and Nutrient Content Claims in the Context of "Protein" Bars.* Health Communication, 2018. 33(12): p. 1425-1433.
- 31. Garcia, A.L., et al., *Confused health and nutrition claims in food marketing to children could adversely affect food choice and increase risk of obesity.* Archives of disease in childhood, 2019. **104**(6): p. 541-546.
- 32. Girlguiding, Girlguiding Research Brief. Early findings on the impact of COVID-19 on girls and young women. 2020.
- Martellozzo, E. Life is digital by default what's the impact on young people's mental health? 2020 [cited 2021 02/08/2021]; Available from: <u>https://blogs.lse.ac.uk/medialse/2020/12/21/life-is-digital-by-default-so-whats-the-impact-on-young-peoples-mental-health/</u>.
- 34. SHINE/Generation Scotland, *TeenCovidLife Survey 1: General report: Health and well-being of young people in Lockdown*. 2020.
- 35. UK Government. *Tackling obesity: empowering adults and children to live healthier lives* 2020 [cited 2021 08/01/2021]; Available from: <u>https://www.gov.uk/government/publications/tackling-obesity-government-</u> <u>strategy/tackling-obesity-empowering-adults-and-children-to-live-healthier-lives</u>.
- 36. BBC. Junk food promotion ban 'paused' by coronavirus. 2020 [cited 2022 24/02/2022]; Available from: https://www.bbc.co.uk/news/uk-scotland-53008968.
- 37. Government, T.S., *A healthier future: Scotland's diet and healthy weight delivery plan.* 2018: Scottish Government p. 41.
- Welsh Government. *Healthy Weight Health Wales delivery plan 2020-2022*. 2020 [cited 2021 08/01/2021]; Available from: <u>https://gov.wales/sites/default/files/publications/2020-02/healthy-weight-delivery-plan-2020-22.pdf</u>
- 39. Letter from Food Active and Health Equalities Group. *Letter from Food Active and Health Equalities Group* 2020 [cited 2021 11/01/2021]; Available from: <u>https://foodactive.org.uk/wp-</u>

content/uploads/2020/09/Food-Active-Letter-to-PM-21.7.201.pdf.

- 40. Savage, M. *Boris Johnson's drive to cut obesity rates 'largely ineffective'*. 2020 [cited 2021 11/01/2021]; Available from: <u>https://www.theguardian.com/world/2020/dec/12/boris-johnsons-drive-to-cut-obesity-rates-largely-ineffective</u>.
- 41. Ritche, J., et al., *Qualitative Research Practice: A Guide for Social Science Students and Researchers.* 2013: NatCen.
- 42. Institute For Government. *Coronavirus lockdown rules in each part of the UK*. 2021 [cited 2021 02/12/2021]; Available from: <u>https://www.instituteforgovernment.org.uk/explainers/coronavirus-lockdown-rules-four-nations-uk</u>.
- 43. Newman, A., et al., *The HFSS beat goes on*. 2020: Cancer Research UK. p. 38.
- 44. Maguire, E.R., T. Burgoine, and P. Monsivais, *Area deprivation and the food environment over time: A repeated cross-sectional study on takeaway outlet density and supermarket presence in Norfolk, UK, 1990-2008.* Health & Place, 2015. **33**: p. 142-147.
- 45. Institute for Public Policy Research, *The Whole Society Approach*. 2020.
- 46. Martin, L., L. Bauld, and K. Angus, *Rapid evidence review: The impact of promotions on high fat, sugar and salt (HFSS) food and drink on consumer purchasing and consumption behaviour and the effectiveness of retail environment interventions.* 2017: NHS Scotland. p. 34.
- 47. Public Health England, *Sugar Reduction: The Evidence For Action, Annex 4, analysis of price promotions*. 2015: Public Health England. p. 48.
- 48. Money Advice Service. *Shopping offers make us spend £1,300 more per year* 2016 [cited 2022 24/02/2022]; Available from: <u>https://maps.org.uk/#_edn1</u>.
- 49. Marmot, M., et al., *Page 65 on Health Equity in England: The Marmot Review 10 Years On*. 2020: The Health Foundation. p. 172.
- 50. The Health Foundation. *Why greater investment in the public health grant should be a priority*. 2021 [cited 2022 24/02/2022]; Available from: <u>https://www.health.org.uk/news-and-comment/charts-and-infographics/why-greater-investment-in-the-public-health-grant-should-be-a-</u>

priority?utm_source=The%20King%27s%20Fund%20newsletters%20%28main%20account%29 &utm_medium=email&utm_campaign=12702492_NEWSL_HMP%202021-10-08&dm_i=21A8,7K9B0,5M5YAW,USIST,1

51. Gale, N.K., et al., Using the framework method for the analysis of qualitative data in multidisciplinary health research. BMC Medical Research Methodology, 2013.

Appendices

Appendix A: Topic Guide

1. Introduction (5 mins)

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

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 what you think about it. To help me to do that, I have some images and film to show you. We have an hour 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.

If you would like to take a break at any time, you can turn off your camera and microphone. You may also leave the discussion at any time if you wish. If you are fasting during Ramadan and find discussion of food and watching adverts for food difficult, please do take a break whenever you need. The co-moderator may contact you using the chat function or via email to offer support.

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 that anything shared today stays in this room.

Provide opportunity to ask questions

Does anyone have any questions?

Collect verbal consent.

2. Brand exercise (10 mins)

Aim: Explore awareness of HFSS item branding and perceptions of how they are aware of branding

Introduce brand activity

I'm going to show you some snippets of brands on the screen. Shout out what they are if you recognise them.

[show brand snippets on screen share]

1. How many did you recognise?

PROMPT:

- Did you expect to recognise so many? Which ones were more/less familiar?
- What sort of items do these brands advertise? (healthy/unhealthy)
- How often do you see advertising for these sorts of brands?
- Can you think of any other brands that advertise these kinds of items?
- How often/why they purchase these items?
- Has the way you purchase these items changed in lockdown? (More or less frequently? Who is in charge of shopping?)
- 2. Where do you see these brands? PROMPT:
 - On which media? (TV, social media, in store promotions, on street advertising)
 - How often do you see them?
 - Has the way you see marketing for these brands changed in lockdown? (also probe on: use of devices, has use social media changed during lockdown (e.g., frequency, sites visited, etc.?)
 - What effect, if any, do you think seeing these brands has on young people?

3. HFSS marketing examples (10 mins)

Aim: Use a selection of two 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

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.

The marketing we will show you is for HFSS foods/drinks. 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.

- 3. What do you think of the advert? PROMPT:
 - Have 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?
- 4. IF SEEN AD BEFORE: What impact, if any, did this advert have on you? On your friends or other people in your family? Can you think of other adverts like this that did have an effect on you/friends/family?

IF NOT SEEEN AD BEFORE: What impact do you think this advert would have on someone who saw it? On their friends or other people in their family? Can you think of other adverts like this that did have an effect on you/friends/family?

4. Health halo marketing example (10 mins)

Aim: Use a health halo advertising creative for discussion (use one long advert OR two short adverts OR packaging examples per group). Examples of marketing may include:

- Different platforms (television, YouTube, social media platforms, pop-up ads)
- Examples of packaging

Explore differences in young people's attitudes and perceptions of this item versus the previously shown creatives, including perceptions of healthiness of item.

5. What do you think of this advert(/packaging/marketing)? PROMPT:

- Have you seen it before?
- Do you think it is the same as the other examples?
- Why it is the same? Why is it different?
- Do you think this item is healthier/less healthy?
- What is it about the marketing that makes you think that?
- What information in the marketing tells you how healthy/unhealthy the item is?
- 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 SEEN AD BEFORE: What impact, if any, did this advert have on you? On your friends or other people in your family?
- IF NOT SEEEN AD BEFORE: What impact do you think this advert would have on someone who saw it? On their friends or other people in their family?

5. Barriers and facilitators to a healthy lifestyle (20 mins)

Aim: Explore perceptions of health and a healthy lifestyle, and barriers and facilitators to a healthy lifestyle.

- What does it mean to you to live a healthy lifestyle? PROMPT
 - Physical health
 - Mental health
 - Whether health means the same thing to different people
 - Societal pressures (e.g., busy, what peers eat/drink etc.)
 - Broader health behaviours (smoking, drinking, drugs, exercise)
- 7. Where do food and drinks come into a healthy lifestyle? PROMPT:

- Food choice in and out of home
- Inequalities (income, poverty, food choice)
- 8. We are interested in what you think might influence whether someone is able to live a healthy lifestyle or not.

a. What, if anything, would help people live a healthy lifestyle/eat healthy food?

b. What, if anything, prevents people living a healthy lifestyle/eating healthy food?

PROMPT FOR BOTH:

c. Do you think that <PROMPT> makes it more easy or more difficult for people to live a healthy lifestyle? Why/why not?

- Mental health
- Broader health behaviours (smoking, drinking, drugs, exercise)
- Covid
- Inequalities (income, poverty, food choice)
- Societal pressures e.g., busy, what peers eat/drink etc.
- Food choice in and out of home
- Weight-related stigma
- 9. How, if at all, can people be supported to have a healthy lifestyle? PROMPT:
 - Whose job is it to provide support?
 - Healthy diet and relationship with food
 - Prompt around specific barriers and facilitators mentioned in question 8
- 10. Where do you/other young people get information about what is/isn't healthy? PROMPT:
 - Which information sources do you/they use?
 - Are some sources more reliable/trustworthy than others?
 - Is information about health easy to find? Easy to understand?

6. 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 proposed ban on junk food advertising on all channels before 9pm, restrictions to price promotions etc.

11. What do you think about how HFSS foods are marketed?

As a reminder, 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.

- 12. Do you have any concerns about the way that high fat-salt-sugar foods are marketed?
- 13. Are there any changes that you would like to make to the way that foods are marketed and promoted? 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?
- 14. Whose job it is to set the rules on how and where HFSS items can be marketed? PROMPT:
 - What is the role of industry (companies which make and sell HFSS items)?
 - What should happen to companies that don't follow the rules? What penalties would they suggest?
- 15. The UK government has proposed some new restrictions to the way that HFSS items can be advertised. These are:
 - Banning TV and online adverts for food high in fat, sugar and salt before 9pm
 - End of deals like 'buy one get one free' on unhealthy food high in salt, sugar and fat
 - Calories to be displayed on menus to help people make healthier choices when eating out – while alcoholic drinks could soon have to list hidden 'liquid calories'
 PROMPT:
 - What do they think of the proposed restrictions?
 - What difference do they think the restrictions will make?
 - Will they help people to be live healthier lives?
 - What else, if anything, could be changed to make HFSS food and drink less popular?
- 16. Do you have any other comments about what we've talked about today?

7. Thank and close

Appendix B: Creatives

The creatives used in the focus groups are listed below.

Logos for brands: (Participants asked to name brand from snippet of logo)



HFSS advertisements:

- Coca Cola: <u>https://www.bestadsontv.com/ad/122652/Coca-Cola-Open-That-Coca-Cola</u>
- McCoys: <u>https://www.bestadsontv.com/ad/122384/McCoys-McCoys-unleashes-The-Beast-in-new-ENGINE-Creative-campaign-for-KP-Snacks</u>
- Pringles: <u>https://www.bestadsontv.com/ad/121975/Pringles-Zombie-Frank-Escapes-</u> <u>Twitch-To-Enter-The-Real-World</u>
- Jaffa Cakes: <u>https://www.youtube.com/watch?v=OB9sp0Tzq-M</u>
- Terry's Chocolate Orange: <u>https://www.bestadsontv.com/ad/119781/Terrys-</u> Chocolate-Orange-Deliciously-Unsquare
- KFC: <u>https://www.bestadsontv.com/ad/115670/KFC-Well-Take-It-From-Here</u>
- Haribo: <u>https://www.youtube.com/watch?v=78_vOtgdBzk</u>
- Twirl Orange: https://www.bestadsontv.com/ad/118380/Twirl-Orange-Precious-Cargo

'Health washing' advertisements:

- McDonald's (essential ingredients): <u>https://www.youtube.com/watch?v=aoA6xaMY4E8</u>
- Green & Blacks (organic): <u>https://www.bestadsontv.com/ad/122466/Green-Blacks-</u> <u>Wildly-Deliciously-Organic</u>
- Domino's (vegan): https://twitter.com/i/status/1346048732853317633
- Ben & Jerry's (low calorie): <u>https://www.youtube.com/watch?v=OVOrqlf3s70</u>
- Magnum (vegan): <u>https://www.youtube.com/watch?v=5ov78_ebhbc</u>

'Health washing' packaging examples:







