

**NIHR PHIRST Insight**  
**Healthier Advertising in Cardiff and Vale of Glamorgan**  
**Proposal v3. 04/03/24**

<b>Funder</b>	NIHR PHIRST
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<b>Timeline</b>	October 2023 – December 2024

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Ethical approval has been granted for this project (SREC/488).

## Background

Cardiff and the Vale of Glamorgan University Health Board (UHB), Cardiff Council and the Vale of the Glamorgan Council are working collaboratively to progress action that restricts the advertising of High Fat Sugar Salt (HFSS) foods and drinks as part their wider work to tackle obesity and improve healthy weight across the region. A key aspect of this work is the development of policies that aim to restrict HFSS advertising and increase space for healthier advertising and marketing across the region. This is part of a 'Healthier advertising and marketing' priority area within the local Healthy Weight Strategic Framework ('Move More, Eat Well'), which has been developed through engagement with strategic stakeholders [1].

A key component within this area of work is that of inequalities, with the population across both areas concerning approximately 494,200 residents [2]. Cardiff and the Vale of Glamorgan UHB, Cardiff Council and the Vale of Glamorgan Council are working collaboratively to reduce health inequalities through focussed collective action, under the umbrella of 'Amplifying Prevention'. As such, a range of stakeholders from the three organisations were brought together for a 'Healthier Advertising' event, which sought to explore the progression of policy development and opportunities to influence contracts associated with advertising on council owned sites. Mapping exercises of council owned and contracted advertising sites have also been undertaken to gain an improved understanding of the HFSS advertising landscape in Cardiff and the Vale of Glamorgan.

These activities have led to the development of policies, produced independently by Cardiff Council and Vale of Glamorgan Council but with a strong alignment and shared learning approach, which aim to restrict the advertising of HFSS foods and drinks on council owned and contracted advertising sites in Cardiff and the Vale of Glamorgan local authority areas. It is expected that the policy changes will be implemented in June 2024 in one or both local authority areas.

## Literature review

Levels of obesity have increased globally, with the United Kingdom (UK) experiencing the fourth highest rate of adult obesity in Europe [3]. In Wales, children (aged 4-5 and 10-11 years) living in the lowest-income areas are twice as likely to be living with obesity compared to peers living in the most affluent areas [3]. Individuals living with obesity experience higher risks of several major health conditions, such as diabetes and heart disease, with annual obesity cost estimates at 3% GDP [4]. Tackling obesity is therefore a national cross-government priority in the UK, with Wales delivering its Healthy Weight Healthy Wales strategy [5]. Within the strategy, advertising is recognised as an influential driver of behaviours and eating patterns. As such, a key strategy concerning the food environment, is a ban on advertising and promotion of HFSS foods on public spaces by 2030.

HFSS food and drink advertisements are present in a variety of media, including television, online and in outdoor settings, such as council owned and contracted advertising sites [6]. Outdoor advertisements have been growing in popularity for companies due to the potential to customise the marketing to factors such as area and location [7]. HFSS advertisements can influence purchasing and dietary habits, with evidence suggesting that those who are more aware of HFSS advertising consume a greater level of HFSS food and drink products [8]. Similarly, unhealthy food advertising can contribute to health inequalities, as people living in areas of higher deprivation are exposed to a greater level of HFSS advertising and consequently are more likely to consume HFSS foods (4). Regulating policies are often utilised to influence and restrict the advertising of unhealthy products, however the

effectiveness of such policies may be undermined by companies adapting their advertisements in response [9, 10].

Research has been undertaken to investigate perceptions of unhealthy, or HFSS advertising. Evidence suggests that younger children may be more susceptible to the effects of HFSS advertising, as they do not yet understand the pervasive intent behind it [11]. Additionally, children may accept that marketing is part of society but do express concerns regarding the negative effects on health [12]. When considering parent perceptions of advertising towards children, parents typically have negative views of unhealthy advertising targeted at children, with concerns about their influence on eating habits and associated health risks [12-16]. Parents have also reported that advertising has led to their children pestering for unhealthy foods, leading to parent-child conflict [12, 17-21].

Research on perceptions of advertising with older children and adolescents indicates that they do recognise the intent behind the advertising, and that the advertising can be misleading [18, 19, 22]. Adolescents reported that they felt resistant to the effect of unhealthy advertising and were instead more likely to purchase food and drink products according to availability and cost [23, 24]. This was emphasised in research within the school environment, which suggested that the food options available were a major factor in influencing dietary choices [24, 25]. Whilst this may indicate that convenience is a greater influence on purchasing decisions, when parents were asked about their perceptions of advertising to adolescents, they still felt that advertisements were highly influential.

### **Co-production and PPIE activity**

In line with the PHIRST Insight team's ethos of embedded practice and public involvement in all levels of project work, this proposal has been developed and co-produced by the Task and Finish group (TFG). At the start of the Task and Finish group process, the PHIRST team worked with the key contact from Cardiff and the Vale of Glamorgan UHB, to identify relevant stakeholder partners within the health board and local councils to be involved in the evaluation. This identified representatives from Cardiff Council and the Vale of Glamorgan Council. The importance of patient and public involvement (PPI) representatives was also highlighted which led to the involvement of a PPI representative from the PHIRST management board, as well as a local public representative with a background in teaching and nutrition and experience of working with other PHIRST teams. As such, the overall Task and Finish group was composed of members of the PHIRST Insight team, key stakeholders from the Cardiff and Vale University Health Board, Cardiff Council, the Vale of Glamorgan Council and PPI representatives. This group met regularly both in-person and online during the 12-week Task and Finish group process.

During the Task and Finish group, stakeholders within the Cardiff and Vale Public Health team, shared a theory of change document previously developed for the initiative. This document formed the basis for co-producing an intervention logic model, which was developed over a series of interactive meetings and follow-on discussions. The proposed evaluation aims, objectives, research questions and planned evaluation methods were collaboratively developed by the Task and Finish group. The importance of considering a dark logic model was discussed and subsequently an agreed area to explore throughout the evaluation.

Ongoing and meaningful PPI throughout the project has been considered with the TFG and guided by the public representatives. Planned activities include:

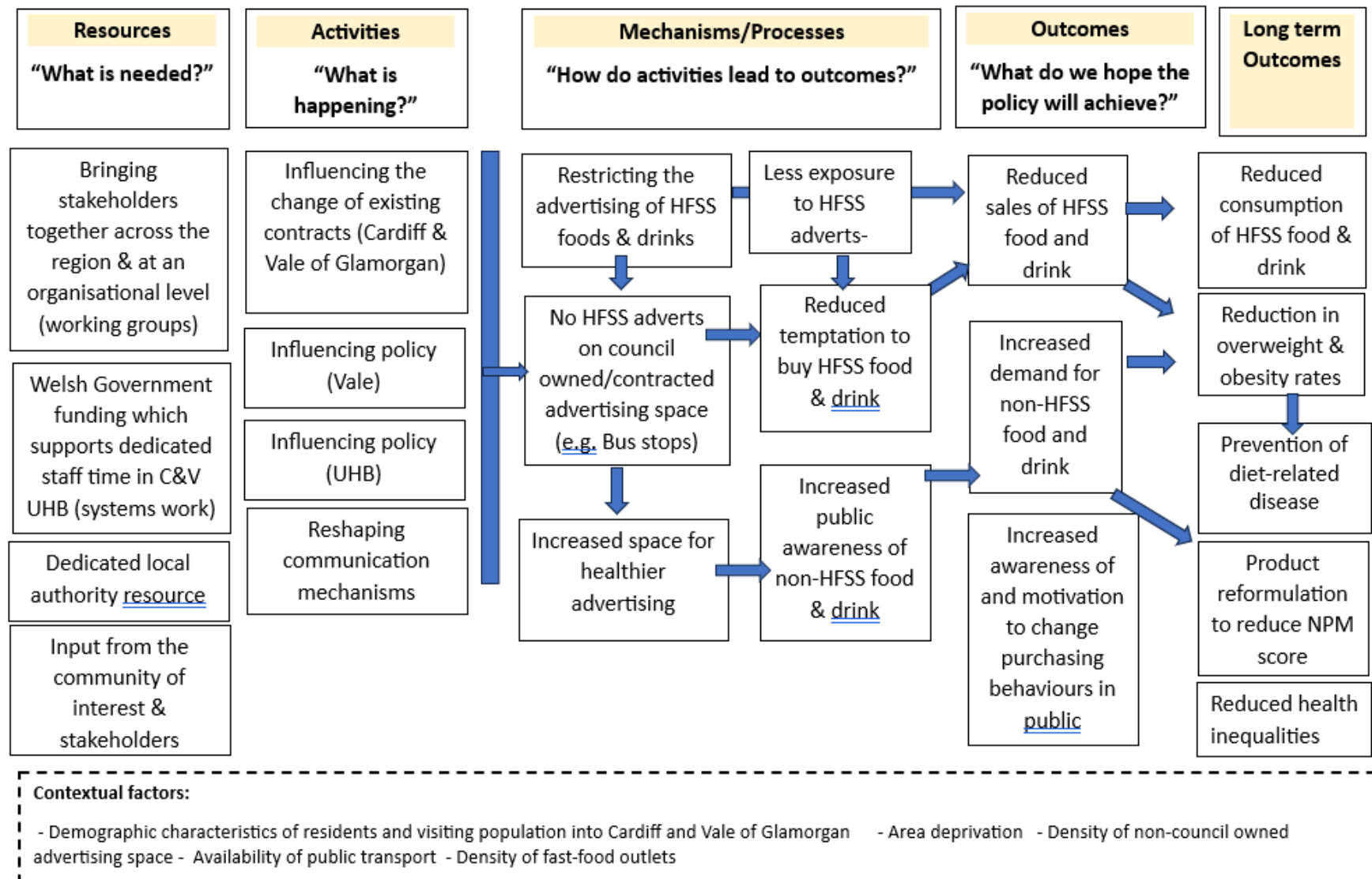
- Public involvement representation within the Study Management Group (SMG) ensuring collaborative decision making throughout the entire study.

- Public involvement representation on the Study Advisory Group (SAG) ensuring public involvement oversight across the study. This will include a focus on how PPI is being evaluated.
- Recruitment of a public involvement school from Cardiff or Vale of Glamorgan during study set-up to ensure representation of young people aged 9-11 years. Young people will support the co-development of study recruitment materials and data collection tools. Engagement will involve a series of creative sessions with pupils in Key stage 2 to ensure materials (e.g., information sheet) and tools (topic guide questions and activities) are age appropriate.
- Recruitment of additional PPI members from the Cardiff and Vale of Glamorgan local authorities to inform the development of recruitment materials and strategies to be used with individuals aged 16+.

We will seek to work with PPI members during the project to develop our Dissemination, Impact, Involvement, Communication and Engagement (DIICE) plan that will guide the dissemination of work on the project. This plan will be “co-owned” by all members of the project team and will be reviewed quarterly to ensure that we are conducting and sharing research that meets the needs of all stakeholders.

Members of the Task and Finish group have agreed to explore the use of the Public Involvement in Research Impact Toolkit (PIRIT) (22) to support meaningful PPI and track public contribution throughout the project.

## Logic model



## Evaluation aims and objectives

This evaluation of the Healthier Advertising Policies programme aims to understand public perceptions of HFSS and non-HFSS advertising and of the local HFSS policies and resultant changes in local advertising following any policy implementation. We also aim to explore the barriers and facilitators of implementing the policy changes by local authorities and to evaluate the impact, if applicable, of HFSS policy changes on predetermined outcomes such as purchasing behaviour and consumption of non-HFSS food and drinks.

Research objectives (RO):

1. Explore public perceptions (adults and children) of HFSS and non-HFSS advertising and the perceived influence of advertising on attitudes and consumption of HFSS food and drink.
2. Explore the role of deprivation on people's knowledge of and attitudes towards HFSS and non-HFSS advertising in the local area.
3. Assess if the location of HFSS and non-HFSS advertising and food outlets, as determined by the mapping exercise, influences public perceptions of the advertising and related behaviours.
4. Explore the mechanisms of action or potential mechanisms of action through which the HFSS policies may or may not achieve anticipated outcomes.
5. Explore the barriers and facilitators to policy implementation from the perspectives of key stakeholders (i.e., the delivery team and advertisement agency representatives) across both local authorities.

## Research questions

1. What are the public perceptions around HFSS and non-HFSS advertising in the local area? (RO1)
2. What are the public perceptions around the HFSS policies and its perceived/potential impact? (RO1)
3. How do perceptions and self-reported HFSS consumption vary by local authority and participant demographics (age, deprivation, ethnicity etc.)? (RO2)
4. How do public perceptions vary by proximity to HFSS and non-HFSS advertising and to food outlets? (RO3)
5. Do self-reported purchasing and consumption rates of HFSS foods differ following the implementation of policies, and if so how? (RO4)
6. What are the barriers and facilitators to policy implementation from the perspective of key stakeholders (i.e., the delivery team and advertisement agency representatives) (RO5)

## Methods

This will be a mixed-methods project that will include the following methods to address each Research Objective :

- 1) Online survey conducted with residents (aged 16+) both pre- and post- policy implementation (RO1,RO2,RO3,RO4).
- 2) Qualitative interviews with residents (aged 16+) (RO1,RO2,RO3,RO4).
- 3) Focus groups with children aged 9-11 years and young people aged 12-15 years (RO1,RO2).
- 4) Secondary analyses of mapping data of HFSS advertising and food outlets collected by the local authority team (RO3).
- 5) Qualitative interviews with the delivery team representatives and advertisement agency representatives (RO5).

## **Participant recruitment**

### *Resident survey*

A survey will be administered at two-time points; baseline (January-March 2024, which will be pre-policy implementation) and follow-up (September-November 2024, which will be post-policy implementation if applicable). Individuals aged 16+ years residing in the Cardiff and Vale of Glamorgan local authorities will be recruited through multiple avenues including advertisements on social media, posters in community areas, word of mouth and emails to secondary schools within both areas. To facilitate completion of the potential follow-up survey, the baseline survey will offer participants the option to provide contact details (i.e., contact email address) for the research team to contact them directly. Survey completion will be optional, and submission of a survey will be taken as consent for the individual's data to be used for research purposes. At the start of the survey, participants will be notified of this and presented with information on the purpose of the survey and how their data will be used (i.e., for the purpose of policy review and evidence generation). Participants taking part in the survey will be offered entry into a prize draw to win one of five £50 shopping vouchers.

### *One-to-one interviews with residents*

Individuals completing the baseline survey will be given the opportunity to provide contact details to receive further information regarding participation in a follow-up one-to-one interview. In total, we will seek to recruit 10 individuals per local authority, purposively sampling individuals to ensure representation across ages, deprivation and reported HFSS consumption. Verbal consent will be obtained using a consent script.

### *Focus groups with children and young people*

Within each local authority, five primary schools and five secondary schools will be purposively recruited to participate in the study. Sampling criteria will include: local authority, proximity to advertising density and percentage of children eligible for free school meals. Within each school, a sample of 6-8 pupils aged 9-11 years or 12-15 years will be invited to participate in a focus group. Teachers will be provided with guidance on recruiting pupils and parents will be given the opportunity to opt their child out of the study. These focus groups will have similar numbers of boys and girls.

### *One-to-one interviews with stakeholders*

Stakeholders involved in the development or implementation of the Healthier Advertising policy will be invited to take part in a one-to-one interview. Invitations to the stakeholders in the implementation

team will be sent by email via key contacts in the delivery team. Participants will be emailed a Participant Information Sheet and verbal consent will be obtained using a consent script.

## **Data collection**

### *Resident survey*

An online survey will be programmed using Qualtrics survey software. Informed by similar work conducted previously in the Bristol area [26], questions will include measures of demographics (e.g., age, ethnicity, household income, employment and education), perceptions on local HFSS advertising, purchasing behaviours, consumption of HFSS food and drinks, perceived impact of the HFSS policies. Additional questions may be added to the follow-up survey to explore areas specifically related to the new policy, if applicable. Paper copies of the survey will be made available on request.

### *One-to-one interviews with residents*

Interviews (lasting approximately 45 minutes) will take place at a convenient time via telephone or videocall, according to participant preference. Participants will be provided with a £25 voucher as a thank you for taking part in the interviews. The interviews will be semi-structured and interview schedules will be co-developed by the whole project team, with input from the PPI members. Briefly, participant interviews will seek to explore; views on local advertising and the HFSS policies; exposure and awareness of HFSS advertising; perceived impacts of the policy change on themselves and their children (if applicable); unintended consequences of the policy change.

### *Focus groups with children and young people*

The classroom teacher will be provided with a script to explain the purpose of the focus group and the voluntary nature of participating. For any child who declines to participate, the teacher will invite an additional pupil whose parent/carer has provided consent. Focus groups will take place in person at the school at a time agreed which minimises disruption to pupil learning. The focus group will last no longer than 1-hour.

A topic guide will be developed that explores the following areas: views on local advertising and the potential impact of the HFSS policies; exposure and awareness of HFSS and non-HFSS advertising including locations of adverts; perceived impacts of the policy change on themselves if applicable; and unintended consequences, or potential consequences, of the policy change.

### *One-to-one interviews with stakeholders*

Interviews (lasting approximately 45 minutes) will take place at a convenient time via telephone or videocall, according to participant preference. Stakeholders will be offered a £25 voucher as a thank you for taking part in the interviews. The interviews will be semi-structured and interview schedules will be co-developed by the study management team, with input from the PPI members. Briefly, interviews will seek to explore barriers and facilitators to implementing the policy; and potential impacts or unintended consequences of the policy changes.

### *Mapping exercise*

The local authority team have undertaken a mapping exercise to collate information on the number, nature (e.g., Nutrient Profile Model score) and location of adverts (including proximity to schools, fast food outlets and convenience stores) on council owned and contracted advertising sites. Further



analysis will include the number of food and drink adverts in relation to area of deprivation using Welsh Index of Multiple Deprivation. Data include all council owned sites such as bus stop shelters both static and digital, in addition billboards. Two rounds of mapping have been undertaken (Oct 2022 and May 2023), with a minimum of two further exercises planned (est. Nov 2023 and April 2024). All mapping data will be shared with the PHIRST project team to inform sampling techniques of schools and to help with the contextualisation and interpretation of the research findings.

## **Analysis**

### *Quantitative*

Online surveys will predominantly comprise quantitative data, with a small possibility of including open-ended questions (to be confirmed following PPI consultation). Quantitative data will be descriptive in nature and data will be split into two samples according to resident area (i.e., Cardiff and Vale of Glamorgan). Continuous data will be reported as means and standard deviations, or medians and interquartile ranges, as appropriate. Categorical data will be reported as frequencies and proportions. Chi-squared tests will be used to calculate p-values for the differences between advertising exposure in different demographic groups.

Mapping data will be largely descriptive in nature and include accompanying visualisations of advert location and density using local maps. Numbers and percentages of variables will be reported across each of the areas.

### *Qualitative*

Qualitative data will be transcribed verbatim and analysed using NVivo 12 (QSR International Pty Ltd) software. Data will be analysed using the inductive thematic analysis approach of Braun and Clarke [27] beginning with an initial review of the transcripts. For each set of data (residents and primary school children,) we will produce a conceptual framework that includes initial key themes and sub-themes. As part of this process, the research team will read and open code a small number of transcripts for each set of data to discuss and amend the frameworks so that they fit the data. The frameworks will also need to fit the study objectives and research questions. Once the initial codes and frameworks have been agreed, the research team will adopt a systematic approach to data management, coding the transcripts into the framework using NVivo software. Once all transcripts have been coded, the team will have a detailed and accessible overview of the data populating each theme and sub-theme from every respondent. Records of the coding process and analysis will be kept throughout the study, and debriefing sessions will be held between the research team members. We will ensure transparency of the study process by maintaining clear documentation to support reflexivity.

A triangulation exercise will be conducted combining all the qualitative results with the quantitative data analysis results including an assessment of views regarding HFSS advertising and the HFSS policies gathered from all data sources.

## **Research team**

The core project team (SMG) will consist of PHIRST Insight team members and key stakeholders. The PHIRST Insight team members include Dr Kelly Morgan, Dr Elinor Coulman, Dr Samantha Garay from Cardiff University and Professor Frank de Vocht from the University of Bristol. The key stakeholders

include Rebecca Stewart, Chloe Barrell, Sam Chettleburgh and Andreas Peiris-Plumley and public involvement representative Sian Harding. The core team will meet monthly.

The wider study advisory group, with representation from stakeholders and the public who were involved in the Task and Finish process, will meet at least 3 times at key stages of the project. The members include:

- Dr Jemma Hawkins, Cardiff University.
- Jacob Choudry-Ball, Cardiff Council.
- Andreas Pieris-Plumley, Vale Council.

### **Data management plan**

Cardiff University will be the Data Controller for this study. All processes for data collection, storage and processing will be compliant with the Data Protection Act (2018) and the General Data Protection Regulation (2016).

Interviews and focus groups will be audio recorded using Dictaphones. Where data collection occurs by videocall, we will not use the inbuilt recording function and instead will capture audio via Dictaphone across the researcher's computer speakers. Audio recordings will be sent via secure file transfer to an approved transcription company who will transcribe the recording verbatim according to our anonymisation instructions and confidentiality agreement. On receipt of the transcripts, the research team will check the anonymisation and store these on the University network.

Online survey data will be generated in the form of online surveys and collected via a secure, Cardiff University approved platform. Responses will be downloaded from the survey platform for analysis, with all electronic data stored on the University network on password protected University laptops, accessible only by authorised individuals.

A data sharing agreement will be set up between Cardiff University and the implementation team to enable the transfer of the mapping exercise data. All data will be transferred over secure, encrypted connections. In accordance with Research Councils UK guidance, all consent forms will be stored securely in electronic format or as locked paper copies for a period of 10 years. After 10 years, electronic documentation, and data will be destroyed via deletion from devices/servers; hard copies of study documentation will be destroyed by shredding and confidential waste disposal.

### **Ethics and governance**

The study will be registered with the research governance team at Cardiff University. The study will also apply for approval from Cardiff University School of Social Sciences Research Ethics Committee. This ethics application will ensure that issues of confidentiality, consent, anonymity, safeguarding and data management are appropriately addressed across all aspects of the research process including recruitment, data collection, analysis and dissemination. In addition to scrutiny from the ethics committee, we will involve local stakeholders as co-producers of our research tools to help ensure the suitability for participants. As the research involves data collections with young people below the age of 16 all core members of the team will have an enhanced DBS check.

## Timelines and milestones

- Sept 23 - Proposal submission to NIHR.
- Sept 23 (4 months) - Development of research tools and materials and ethics submission.
- Oct 23 (3 months) - Ethics approval.
- Nov/Dec 23 - Local authority mapping exercise
- Jan 24 (3 months) - Baseline survey data collection
- Jan 24 (2 months) - Primary and secondary school recruitment
- Feb 24 (3 months) - Interviews with residents
- Feb 24 (3 months) - Focus groups with children and young people
- April/May 24 - Local authority mapping exercise
- April 24 (3 months) - Interviews with stakeholders
- April 24 (4 months) - Analysis of baseline survey data and qualitative (focus group and resident interview) data
- June 24 - Policy implementation.
- July 24 (2 months) - Analysis of stakeholder interview data
- Sept 24 (3 months) - Follow-up survey data collection
- Sept 24 (4 months) - Write up
- Nov 24 (1 month) - Analysis of follow-up survey data
- Dec 24 - Final report
- Post project - Dissemination to wider stakeholders and the public

## Outputs

The following outputs were identified as most pertinent throughout the Task and Finish group:

- A final report for the local authority teams
- A slide deck of main findings
- Infographic for schools
- The presentation of findings at a Public Health conference.
- At least one academic paper of findings related to perceptions and impacts of the Healthier Advertising intervention.

04.03.24

	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Draft and submit ethics application	X															
Proposal submission and sign off from NIHR	X															
Public Involvement (School & Youth Group)		X	X		X		X				X				X	
Develop research tools	X	X	X	X												
Ethical approval	X	X	X	X												
Devise project Advisory Group		X														
Recruit schools					X	X										
Local authority mapping exercise			X					X								
Resident survey					X	X	X						X	X	X	
Resident interviews						X	X	X								
Focus groups						X	X	X								
Stakeholder interviews								X	X	X						
Quantitative analyses								X	X	X	X				X	
Qualitative analyses								X	X	X	X	X				
Write-up													X	X	X	X
Final report																X

## References

1. Cardiff and Vale University, *Eat more eat well. Cardiff and the Vale of Glamorgan*. Accessed at: <https://movemoreeatwell.co.uk/>. 2023.
2. Office for National Statistics, *How the population changed in the Vale of Glamorgan: Census 2021*. Accessed at: <https://www.ons.gov.uk/visualisations/censuspopulationchange/W06000014/>. 2022.
3. World Health Organization. Regional Office for Europe, *WHO European Regional Obesity Report 2022*. World Health Organization. Regional Office for Europe. Accessed at: <https://apps.who.int/iris/handle/10665/353747>. 2022.
4. Frontier Economics, *Estimating the full costs of obesity. A report for Novo Nordisk*. Accessed at: <https://www.frontier-economics.com/media/hqwd4e4a/the-full-cost-of-obesity-in-the-uk.pdf>. 2022.
5. Welsh Government, *Healthy weight strategy (Healthy Weight Healthy Wales)*. Accessed at: <https://www.gov.wales/healthy-weight-strategy-healthy-weight-healthy-wales>. 2019.
6. Cairns, G., et al., *Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary*. *Appetite*, 2013. **62**: p. 209-215.
7. Roux, A. and D. Van der Waltdt, *Out-of-home advertising media: theoretical and industry perspectives*. *Communitas*, 2014. **19**: p. 95-115.
8. Critchlow, N., et al., *Awareness of marketing for high fat, salt or sugar foods, and the association with higher weekly consumption among adolescents: a rejoinder to the UK government's consultations on marketing regulation*. *Public health nutrition*, 2020. **23**(14): p. 2637-2646.
9. White, M., et al., *What role should the commercial food system play in promoting health through better diet?* *Bmj*, 2020. **368**.
10. Forde, H., et al., *The conceptualisation and operationalisation of 'marketing' in public health research: a review of reviews focused on food marketing using principles from critical interpretive synthesis*. *BMC Public Health*, 2023. **23**(1): p. 1-12.
11. Carter, O.B., et al., *Children's understanding of the selling versus persuasive intent of junk food advertising: Implications for regulation*. *Social science & medicine*, 2011. **72**(6): p. 962-968.
12. Mehta, K.P., et al., *Parents' and children's perceptions of the ethics of marketing energy-dense nutrient-poor foods on the internet: implications for policy to restrict children's exposure*. *Public Health Ethics*, 2014. **7**(1): p. 21-34.
13. Mehta, K.P., J.D. Coveney, and J. Ip, *Exploring parents' perceptions of television food advertising directed at children: a South Australian study*. 2007.
14. Harris, J.L., et al., *Food marketing to children and adolescents: What do parents think*. Rudd Center for Food Policy and Obesity, Yale University. Retrieved from [http://www.yaleruddcenter.org/resources/upload/docs/what/reports/Rudd\\_Report\\_Parents\\_Survey\\_Food\\_Marketing\\_2012.pdf](http://www.yaleruddcenter.org/resources/upload/docs/what/reports/Rudd_Report_Parents_Survey_Food_Marketing_2012.pdf), 2012.
15. Anaf, J., F. Baum, and M. Fisher, *A citizens' jury on regulation of McDonald's products and operations in Australia in response to a corporate health impact assessment*. *Australian and New Zealand Journal of Public Health*, 2018. **42**(2): p. 133-139.
16. Pettigrew, S., et al., *A conceptual classification of parents' attributions of the role of food advertising in children's diets*. *BMC Obesity*, 2014. **1**: p. 1-12.
17. Waller, D.S. and E.V. Lanasier, *Attitudes of Indonesian mothers toward food advertising directed to children*. *Journal of Food Products Marketing*, 2015. **21**(4): p. 397-412.
18. Hesketh, K., et al., *Healthy eating, activity and obesity prevention: a qualitative study of parent and child perceptions in Australia*. *Health promotion international*, 2005. **20**(1): p. 19-26.

19. Pettigrew, S., et al. *Failing to Engage: Parents' Acceptance of the Promotion of Unhealthy Foods to Children*. in *Australian and New Zealand Marketing Conference*. 2011. -.
20. Kelly, B., et al., *Parental awareness and attitudes of food marketing to children: a community attitudes survey of parents in New South Wales, Australia*. *Journal of paediatrics and child health*, 2009. **45**(9): p. 493-497.
21. Dens, N., P. De Pelsmacker, and L. Eagle, *Parental attitudes towards advertising to children and restrictive mediation of children's television viewing in Belgium*. *Young Consumers*, 2007. **8**(1): p. 7-18.
22. Mehta, K., et al., *Australian children's views about food advertising on television*. *Appetite*, 2010. **55**(1): p. 49-55.
23. Chan, K., et al., *Adolescents' perceptions of healthy eating and communication about healthy eating*. *Health Education*, 2009. **109**(6): p. 474-490.
24. Bibeau, W.S., et al., *Perceptions of the food marketing environment among African American teen girls and adults*. *Appetite*, 2012. **58**(1): p. 396-399.
25. Trübswasser, U., et al., *Factors influencing adolescents' dietary behaviors in the school and home environment in Addis Ababa, Ethiopia*. *Frontiers in public health*, 2022. **10**: p. 861463.
26. Scott, L.J., et al., *Advertisement of unhealthy commodities in Bristol and South Gloucestershire and rationale for a new advertisement policy*. *BMC Public Health*, 2023. **23**(1): p. 1078.
27. Braun, V. and V. Clarke, *Using thematic analysis in psychology*. *Qual Res Psychol*, 2006. **3**: p. 77-101.