

Article

Young people's perspectives on policies to create healthier food environments in England

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Abstract

Food environments are important determinants of healthy diets among young people. This study explored young people's perspectives on their food environment, their recommendations to policymakers and views on youth engagement in policy processes. There is limited research on young people's perspectives on their involvement in developing food environment policies. Youth engagement in policymaking processes can lead to greater policy integrity and inclusivity. Four focus group discussions were conducted with 39 young people (12–21 years) from a town in North West England and a metropolitan area in the English Midlands. Participants were recruited through youth organizations. Data were analysed using inductive thematic analysis. Young people reported concerns about the density of fast food outlets in their local area, the unaffordability of healthier food, and fast food advertisement. These issues were not believed to be prioritized in local and national policymaking. Accordingly, policy recommendations were mainly for structural food environment policies, including restrictions on fast food outlet density and incentives for menu reformulation. Young people did not feel involved in local decisions about the food environment. They expressed a need for more meaningful engagement beyond consultation. Young people have repeatedly shown to have a deep understanding of the social, commercial and political factors that influence diet and health. It is essential that policymakers aiming to improve young people's diets take their unique views and concerns into account to create effective policies that resonate with young people.

Keywords: food environment, youth engagement, public health policy, social determinants of health, diet

Contribution to Health Promotion

- This study explores young people's perspectives on local food environment policy and youth engagement in policymaking processes.
- Young people called for greater prioritization of structural food environment policies and co-production of policies with young people.
- This study adds to literature in other areas of public health that demonstrates young people's understanding of social, commercial and political determinants of health.

BACKGROUND

A quarter of all food outlets in England are fast food outlets, here defined as premises serving energy-dense food that is available quickly (Public Health England, 2017, 2018). This contributes to unhealthy food environments. Food environments are the 'collective physical, economic, policy and sociocultural surroundings, opportunities and conditions that influence people's food and beverage choices and nutritional status' (Swinburn *et al.*, 2013). Unhealthy food environments promote the consumption of foods and meals high in fat, salt and sugar by making these the most widely available, affordable and advertised foods (Caspi *et al.*, 2012; Public Health

England, 2017; Townshend and Lake, 2017). Both objective and perceived measures of unhealthy food environments have been associated with poorer diets (Pitt *et al.*, 2017; Townshend and Lake, 2017; Kelly *et al.*, 2021), which contribute to obesity and a number of non-communicable diseases (Steel *et al.*, 2018). Unhealthy food environments are also associated with greater neighbourhood socioeconomic deprivation (Maguire *et al.*, 2015; Macdonald *et al.*, 2018; Public Health England, 2018). Young people may be more susceptible to the influence of their food environment compared to adults (Townshend and Lake, 2017; Uhlmann *et al.*, 2023). A systematic review by Shaw *et al.* (2023) found that while exposure to unhealthy

food outlets was associated with greater purchase and consumption of such foods among adolescents, the opposite was not true for exposure to healthy food outlets.

Food environments are shaped by political decision-making processes. In England, a range of policies and interventions have been implemented to tackle unhealthy diets and their health impact (Department of Health and Social Care, 2017, 2018; Theis and White, 2021). While some policies address the food environment directly, such as laws restricting foods and drinks high in fat, salt and sugar in retail environments, many focus on encouraging individual behaviour change (Griffin *et al.*, 2021; Theis and White, 2021; McNally, 2023). Behaviour change interventions are typically supported by the food industry as they do not interfere with business practices that shape young people's food choices (Sonntag *et al.*, 2015; Mozaffarian *et al.*, 2018). However, individualistic framing overlooks major barriers children and young people face in adopting healthier lifestyles and risks stigmatizing people living with obesity (Griffin *et al.*, 2021). In addition, 'agentic policies' that rely on individual choice and effort may further exacerbate socioeconomic health inequities, as adopting a healthier lifestyle may be more feasible for those with higher income (Backholer *et al.*, 2014).

In England, local governments (called local authorities) have a mandate for public health (Blackshaw *et al.*, 2019). Within this public health function, there are various measures they can take to prevent and reduce obesity, including modifying food environments by introducing planning regulation to limit the number of new takeaway outlets near schools (Townshend and Lake, 2017; Brown *et al.*, 2022). A study that mapped actions to reduce obesity in ten English local authorities found that 59.3% of interventions addressed individual lifestyle factors (e.g. physical activity and cooking classes). In comparison, of the 16.8% of policies that targeted living and working environments, only one addressed the wider food retail environment (Nobles *et al.*, 2019).

Youth engagement in policymaking

Changing the food environment increasingly involves participation from those affected, including children and young people. Citizen participation increases policy legitimacy and supports community building, empowerment and individual competencies (Michels, 2011; Cardarelli *et al.*, 2021). Since the UN Convention on the Rights of the Child, it is the right of children and adolescents to be involved in national and local decisions that affect them (United Nations, 1989). As a result, many countries have taken steps to create more youth-centred policies (Wills *et al.*, 2008). This represents a shift from seeing young people as target populations, to seeing them as citizens with valuable experience and knowledge on the issues they face (Hart, 1992; Kataria and Cruz, 2017). In the field of public health, there is evidence that young people have strong opinions on health-related issues, understand how health is shaped by social, political and commercial determinants, and can provide unique perspectives to policy design and implementation. This includes evidence in the area of gambling advertising (Thomas *et al.*, 2023; Pitt *et al.*, 2024), commercial and political determinants of planetary health (Arnot *et al.*, 2023a, 2024), health inequalities (Ronzi *et al.*, 2023) and local environments (Sheridan *et al.*, 2014; Kontak *et al.*, 2017; Thompson *et al.*, 2022; Nesrallah *et al.*, 2023). Young people also play an important role in shaping policy through advocacy. In the UK, youth activist movement

BiteBack has organized national campaigns raising awareness for the role of the food industry in influencing young people's diets (BiteBack, n.d.). Their campaigns directly challenge politicians and businesses and call for greater regulation of the food system, including through food advertising restrictions and healthy free school meals (BiteBack, n.d.). Youth advocacy is also common in the climate justice space, where young people are involved in self-organized protests and strikes to influence government policy (Arnot *et al.*, 2023b).

Youth participation in formal policymaking processes can take many forms, including participation in youth councils, advisory committees and deliberative forums (Michels, 2011). It is generally agreed that young people should be considered equal stakeholders with shared power and responsibility, and should receive appropriate training, tools and resources for true participation and successful decision-making (Hart, 1992; Wong *et al.*, 2010; Heffernan *et al.*, 2017; Nesrallah *et al.*, 2023). In practice, this form of youth participation is uncommon. Young people are typically engaged in obesity prevention policy through consultation and are not involved in all stages of decision-making (Wills *et al.*, 2008; Frerichs *et al.*, 2016; Mandoh *et al.*, 2021; Waller *et al.*, 2022; Nesrallah *et al.*, 2023). Though there is some evidence on perspectives and factors associated with young people's use of local food environments (Pitt *et al.*, 2017; Gangemi *et al.*, 2018; Spencer *et al.*, 2019; Kelly *et al.*, 2021), research on young people's experiences of youth engagement in food environment policy, particularly at the local level, is more limited (Macauley *et al.*, 2022).

This study addresses this gap in the evidence, gathering young people's perspectives on (i) their local food environment; (ii) policies and interventions to improve food environments and young people's diets; and (iii) youth engagement in food environment policymaking. The focus was on two areas in England that have received government funds to invest in childhood obesity prevention.

METHODS

Approach

Four focus group discussions were conducted with young people in two locations in England, a town in North West England and a city (and nearby area) in the Midlands. The London School of Hygiene and Tropical Medicine Research Ethics Committee approved the study [Ref. 28217].

Sample and recruitment

Participants were recruited through four local youth organizations/groups that have previously been involved in public health consultations and other related initiatives with local authorities. This approach was taken to recruit young people that would be able to share their experiences of involvement in local public health decision-making processes. The target age for recruitment was 14–17 years to capture the views of young people who were likely to have experienced their local food environment independently from their parents or guardians. However, there was no strict age limit for recruitment. A representative from each organization was contacted and informed about the study by email, followed by a virtual meeting where considered helpful. Plain language study information sheets were distributed to participants through the youth organization. Young people had varying levels of knowledge about food and health. This allowed us to explore views that may be more representative of the average young

person in the area. Recruitment aimed for six participants per group to allow for meaningful discussion (Krueger and Casey, 2014). However, one focus group was attended by 20 participants. During this session, extra attention was paid to ensure that everyone had the opportunity to share their views. For example, by encouraging and prioritizing contributions from participants that had spoken little and summarizing the main points after each question to gauge general agreement (including verbal agreement and nodding). The focus group was ended with a round of final comments from each participant (allowing participants to skip their turn if they wished to), which worked well in this context because participants were already comfortable with each other.

We recognize that there is an element of privilege involved in youth participation in policymaking processes. We therefore aimed to recruit young people with diverse backgrounds through existing youth groups. This includes young people from different ethnic backgrounds, reflecting the ethnic diversity of the two study areas, and young people from a group for neurodiverse young people. We also strove for a balance in gender and age through our selection of youth organizations.

Data collection

Data were collected between September 2023 and January 2024. Three focus group discussions took place in person at the locations where members of the youth organizations usually meet. One focus group was held virtually through videoconferencing software Zoom. Focus groups were attended by one or more youth organization representatives for safeguarding purposes and to help facilitate discussion (e.g. by providing relevant prompts). Discussions lasted approximately 90 min and were audio-recorded on an encrypted voice recorder.

A topic guide was developed a priori and refined based on feedback from a public research advisor of similar age to the focus group participants, who commented on the clarity and relevance of focus group questions, concept descriptions and the use of prompts (see [Supplementary File A](#)). Focus groups questions focused on young people's views on (i) their local food environment and how it could facilitate healthier lives; (ii) current policy priorities and recommendations to local policymakers; (iii) youth engagement in local policymaking, reflecting the three study aims outlined above. Prompts were used to remind participants of existing local policies and interventions they might be aware of when deemed useful to stimulate further discussion.

Each focus group started with an explanation of the study and ethical considerations, after which participants had the chance to complete an informed consent form. For the online focus group, informed consent forms were signed virtually and collected by a youth organization representative. Participants also completed a form with basic demographic information (place of residence, age, gender and ethnicity). Participants received a shopping voucher to thank them for participation.

Data analysis

Focus group recordings were transcribed and anonymized before being uploaded on NVivo 12 for analysis. Transcripts were coded using Braun and Clarke's thematic analysis, which involves data familiarization, generation of initial codes, searching, reviewing and defining themes (Braun and Clarke, 2006, 2022). This was done inductively and at the semantic level, focusing on codes that are closer to young people's contributions and discussions. This was deemed

most appropriate for a study aiming to centre young people's, often underrepresented, perspectives, as it allowed us to focus on participants' understandings without the need to fit those into preconceived themes of existing frameworks. An initial set of codes was created by C.R. after inductively coding one focus group transcript. Further codes were added as other interviews were coded. E.M. reviewed the final coded data and independently coded two transcripts. Codes addressing connected topics were brought together in themes using an iterative approach and discussed among the research team.

Three focus group participants were involved after coding to ensure our interpretations of the data reflected the issues they considered relevant. This was particularly important as interpretation is subjective and inevitably means emphasizing some explanations over others. Public involvement in health research is recommended to increase the relevance, appropriateness and quality of research outputs, as well as to promote a greater understanding of the research process among participants (Capobianco *et al.*, 2023). Young people were recruited for public involvement activities through youth organization representatives after the focus groups took place, based on interest and availability. During a separate 2-h workshop, they gave feedback on the relevance of the key themes that were created from the data, which helped narrowing down the focus of this paper. Young people were also involved in selecting representative quotes.

RESULTS

Sample characteristics

Thirty-six young people were recruited for this study (Table 1). Participants had an average age of 16 years (ranging from 12 to 21 years). Just over half of the sample (55.5%) identified as male (41.7% female; 2.8% preferred not to say). Most participants (69.4%) lived in a city, compared to 30.6% living in a town in a more rural area.

Unhealthy food environments constrain young people's food choices

Participants' principal concerns were barriers in the physical (and digital) food environment that constrained food choices available to young people. Individual habits and social norms were discussed less, and believed to be shaped by food environments. Participants in both areas almost exclusively highlighted unhealthy aspects of their local food environment, emphasizing the wide availability of fast food takeaway outlets near their homes and schools with limited opportunities to purchase healthier meals. One participant said: *'If something's there, you're likely to say, "let's go for it," [...] so just seeing [fast food] everywhere definitely influences it'* (FG1).

The overconcentration of fast food outlets, which is documented in both study areas, was linked by the young people to the relative affordability of takeaway meals compared to healthier food options, which further supported their idea that *'you don't really have a choice'* (FG1). Participants believed young people to be particularly sensitive to price and *'on a strict budget'* (FG3). The higher prices and limited availability of healthier food were therefore considered the most significant barriers to healthy eating. This was found in both areas, and across ages and gender.

Most comments that we've said, come down to either accessibility, meaning that around my area there's not

Table 1: Focus group sample demographic characteristics

Focus group	Location	Data collection	Participants	Age (average)	Gender	Ethnicity
1	North West England, town	In-person	N = 6	13–17 years (15.7)	3 female; 3 male	Asian British (n = 5); Mixed/Multiple ethnic groups (n = 1)
2	North West England, town	In-person	N = 5	12–21 years (16.4)	3 female; 1 male; 1 prefer not to say	White British (n = 5)
3	Midlands, city and wider area	Online (Zoom)	N = 5	17–19 years (17.8)	3 female; 2 male	Asian British (n = 2); Mixed/Multiple ethnic groups (n = 1); Black British (n = 1); White British (n = 1)
4	Midlands, city	In-person	N = 20	14–19 years (15.5)	6 female; 14 male	Asian British (n = 6); White British (n = 5); Mixed/Multiple ethnic groups (n = 5); Black British (n = 3); Other: Arab (n = 1)

enough healthy food shops, and affordability as well, that for example for my area, there's healthy food available, but at the same time it's much more expensive than the junk food or the 'not-really-that healthy' food. (FG4)

Participants in both areas discussed inequities in unhealthy food environments and the disproportionate impact this has on people living in more deprived areas: *'It's a postcode lottery in a sense'* (FG4). While both areas experience high levels of income deprivation and inequalities, this theme was more pronounced among young people living in a city with greater diversity in food retail offers.

Food choices were also believed to be subconsciously influenced by food businesses through advertisement for unhealthy food: *'If I see an ad for a chicken burger, then I'm probably going to want to eat the chicken burger. So when you do see so many adverts for unhealthy things, you're going to be prone to eating those kind of things more often'* (FG1). One participant described how advertisement and student price promotions appear to target young people. While participants in both areas discussed advertisement in the physical food environment (e.g. on billboards and in/around food outlets), particularly younger participants believed advertisement on television and social media to have a greater influence over young people: *'I think there's more advertising online. Especially with TikTok and the likes, children might feed on what they see on the internet'* (FG1).

Finally, younger participants recognized that schools had a significant role in supporting young people's diets, as well as their knowledge and attitudes towards healthy food. However, participants at times criticized schools for not fulfilling this role effectively by creating incongruence and unhealthy school food environments:

I think schools need to work on how to create a good relationship with food, because in my school, the food is really good quality, but it's unhealthy food [...]. But then they'll also go ahead and talk about healthy eating, five a day and I'm just like, you're feeding me the complete opposite of what you're telling me to do. (FG4)

In conclusion, participants expressed an underlying feeling that young people have limited power and agency to make healthier food choices in their local areas. One participant explained this as follows:

As a child grows up and is allowed to make their own choices, [they are] not in a situation to know what's healthy

and what's not. [...] And then, as you grow up, you listen to campaigns and stuff, and you see the ads and think, 'oh, I want that, I want that,' and sometimes they're dirt cheap as well. So it's easier to pick up fast food. (FG1)

Food environments are not a political priority

Participants were not aware of many specific local policies or interventions targeting food environments in their area, even when given examples of local interventions and campaigns. Health, and particularly creating healthier food environments, was not believed to be a central political priority in local and national policymaking.

Decisions made by national government were believed to constrain local prioritization of food environment policies, as participants recognized that many policies rely on national action or support: *'I think the government needs to give more authority to local authorities in order to be able to enforce restrictions and create new restrictions'* (FG1). Limited government support was attributed to political beliefs that support the prioritization of economic goals: *'I think a lot of the time money is prioritised over health'* (FG3). This was also reflected in limited budget allocation for health promotion, mentioned by young people in the Midlands: *'I think most councils are unfortunately having to spend the majority of their budgets on basic but essential services, such as housing, education and road maintenance [...] which is the fault of central government's budget allocation, rather than fault of the councils themselves'* (FG3).

At the same time, participants also believed policy to be constrained by expected public backlash and unwillingness of residents to change their diets, particularly in the lead up to a general election. Participants therefore emphasized the importance of challenging any negative perceptions (young people may have of healthy food).

Participants in both areas viewed the power of the food industry as a barrier to effective policy, for example through challenging or circumventing food environment policies: *'A lot of big companies have got very expensive law firms that are hired to find loopholes'* (FG1). Participants were sceptical about food businesses' willingness to support healthy food environment policies and recognized the power they have over policymakers and public opinion.

Support for policies to improve food environments

It was agreed among all participants that more should be done to protect young people's health. Participants suggested

a shift in focus from individualistic solutions to structural regulatory policies aiming to modify the (local) food environment, which reflects their concerns about the food environment:

I do think that they do need to put [healthy food environments] as an issue. Because [otherwise] that's just going to lead to health problems, which at the end of the day just ends up costing the government and the NHS [National Health Service] more money. Obviously, there's multiple issue out there, but this should be one of them. (FG4)

A mix of local and national policy suggestions were made (Table 2). While there was some confusion about the responsible agents for specific policy recommendations, young people were aware of local and national policy levers when prompted.

Urban planning regulation to limit the number of new fast food takeaway outlets, and thus reduce fast food availability, was the most commonly suggested policy in both areas. This included restrictions on the overall density of takeaway outlets in retail areas and targeted restrictions around schools, which were not in place in one of the areas. Local authorities in England can influence the opening of new takeaway outlets through planning permissions but cannot control the number of takeaway outlets that are already present. Many young people believed that such a policy should be implemented, particularly around schools, suggesting a change in national legislation.

A range of fiscal measures were proposed to target concerns around the unaffordability of healthy food, suggesting a clear role for the public sector to interfere in commercial environments. Participants in both areas proposed targeted subsidies to lower prices of healthier food for consumers, including produce and healthy school meals. Some participants suggested more specific financial support for food businesses offering healthier food, for example through tax breaks. This was believed to remove a major barrier businesses face when wanting to offer healthier meals: *'It costs a lot of money to set up a business. So there needs to be that support for local entrepreneurs who want to bring this kind of vision of having a sustainable environment'* (FG4).

On the other side of the spectrum, participants were also in favour of taxation on businesses selling 'unhealthy food' to address imbalances in food prices. These were intended to penalize (mostly large) businesses contributing to unhealthy diets, and to disincentivize the purchase of fast food. Taxation and tax incentives were proposed in both areas, but typically by older participants.

Participants in both areas proposed regulating advertisement of unhealthy food on local advertising space, national television and social media. While banning fast food advertisement was mentioned more frequently, participants also highlighted opportunities to promote healthier food through advertisement (e.g. on local billboards and in food outlets). This was seen as a way to counter the impact of unhealthy food advertisement: *'I think with advertisements, there's a lot of psychology into it and utilising things like colour with*

Table 2: Young people's recommendations for local and national policy

Policy suggestion	Responsibility	Representative quote
Planning restrictions on fast food outlets	Local	'They should have an area where say there's one takeaway there, there can be another takeaway, but it has to be a certain distance away. They shouldn't be close to each other because then there's too much of a choice'. (FG1) 'Rejecting planning permission of takeaways around areas where young people are influenced to buy too many takeaways'. (FG4)
Fiscal measures (taxation and subsidization)	National and local	'Tax big corporations and heavily in that sense and then relief the tax burden on those new companies that have just been set up, that push a sustainable mindset and offer vegan options, vegetarian options, or more nutritious meals'. (FG4) 'So if the government imposes a tax onto companies [...], because that obviously raises their cost of production, they want to impose that same cost onto consumers, so it would just increase prices for the consumers and then they'd be less inclined to get the food'. (FG1) 'Lower prices for produce, because then that would also tackle the problem of the prices for [...] healthier food'. (FG4)
Food advertisement restrictions	National and local	'Because the council have, in the UK anyway, [...] people have to get planning permission for all signs over a certain size. So they can easily reject planning permission'. (FG1) 'I think on TVs there's like a new law, rule, where you can't advertise fast food places after 9 pm or 10 pm, something like that'. (FG4) 'In the town centre, they've got a big billboard with all advertisements on it. So I think it would be really better if they started advertising healthy options on that big screen'. (FG1)
Healthy school food policies	Local	'A lot of young people, they spend a lot of their time in schools and that's where some people receive their meals daily. So I think they're going to have to push it into the type of food that schools are able to buy and produce'. (FG4) 'So I think teaching us how to create a good relationship with food and what, how to be moderate with your food, I think that's really important'. (FG4)
Menu reformulation incentives and regulation	National and local	'Trying to introduce healthier choices [in] the same places, the same establishments. Especially the ones that are on that local high street, they're not big chain ones'. (FG3) 'I'd say using healthier oil to cook the food [...]. If you use healthy options, you don't necessarily have to advertise it but they'd still have the same customer base, and it would be healthier for everyone'. (FG1) 'I think it's not really about incentives, it's more about regulation [...] from the government to basically say to them, "this is what you have to do, and you have to conform to these laws," then they'll have to listen'. (FG1)

healthier options, that [can] make it look absolutely amazing' (FG1). Social media was mentioned as a useful communication channel to reach young people.

Menu reformulation policies were suggested to increase healthy food offer. One proposed approach was based on incentives to encourage voluntary menu change (e.g. using healthier oils), for example through local award schemes. Others emphasized the need for national regulation to put more pressure on food businesses and create a level playing field. However, participants were aware this could be harder to implement in practice. One participant argued that a different approach may be needed for local food businesses and multinationals: *'The [food outlets] that are on that local high street, they're not big chain ones, they're independent, they're run by local people, so having conversations with them about [their food offer] could help'* (FG3).

Healthy school food policies were predominantly suggested by younger participants who were attending secondary school. They believed rules should be put in place to ensure schools provide students with healthy meals. At the same times, participants also highlighted the need for better education on diet and health in schools.

Young people recognized that public health teams alone were unlikely to bring about real change in food environments and healthy diets. They emphasized the need for action across the system and collaboration with different stakeholders: *'[Healthy food environments] can only be possible, again, with the support of the council and coproduction between communities, business owners, council members and elected officials'* (FG4).

Need for more meaningful youth engagement in policymaking

Most participants (86%) had personal experience of direct engagement with their local Public Health team and/or other decision-makers in local authorities on the topic of food and health. This includes workshops, consultations and involvement in research projects. Despite having been involved in engagement activities, most participants believed young people's views were not taken into account enough in food-related policymaking processes. This reiterated the general feeling that young people have limited power over their food environment. One participant said: *'I don't really think young people are [involved]. I think older people tend to view young people as inexperienced and they don't know much about food at all. So I think that when they are making these policies, the policies are for the young people, but they don't ever ask about the young people's opinions and I think that's reflected on the policies themselves'* (FG4). Unsatisfactory engagement with local policymakers led to disappointment and loss of trust among some participants despite awareness of the barriers local authorities face in implementing food environment policies. Participants in both areas wished they were more meaningfully engaged in decisions about their food environment.

While opportunities for consultation and representation (e.g. through elected Youth Members of Parliament) are available, they were not perceived to be accessible to all young people. Young people did not always know how and where to share their views. *'I don't think I would actually go to [the local youth council], just because I don't necessarily know someone on there, with these councils it's very much, if your school engages with them or you know someone, then you*

would know' (FG3). Participants in the Midlands discussed the need to increase diversity in youth consultations and involve young people beyond those already active in youth councils and organizations:

If you're part of a youth council or a youth organisation, you're much more likely in the sense of working with local councils, policymakers, because that's the only chance you can get. [...] It's only exclusive to a particular set of young people, [...] I wouldn't say it's effective in that sense, or fair. (FG4)

Participants differentiated between consultation and co-production. Consultation alone was not considered enough and sometimes perceived as *'a tick box exercise'* without real intentions to integrate youth views in policy decisions. When asked about their ideal form of youth participation, many participants in this group believed young people should be involved over a longer period and at various stages of decision-making:

The only way to find an effective solution is to deal with the root cause of the problem and the only people who experience that problem daily is the youth. So co-design and co-production is really important, so we can channel our voice and hence a solution can be formed and implemented from that. Because we lie with their root problem, so we know what needs to be changed. (FG4)

The group concluded that multiple concurrent engagement methods (including regular meetings, positions in advisory boards with adults, consultation surveys and direct feedback platforms) should be used to involve as many young people as possible in the ways that are most accessible to them.

Participants also believed it is important for local authorities to share the outcomes of consultations and other engagement activities, to feel that their opinions were considered: *'I would want to know whether they act upon it, because a couple of people just taking a survey just for the sake of it, that's good [but] I would want to know what they've done, otherwise there would be no point'* (FG4).

DISCUSSION

Young people's knowledge on food environments and related policies

This study aimed to understand young people's perspectives on local food environment policies and youth engagement in local policymaking. Participants in both areas had negative perceptions of their local food environments, including their school food environment, and highlighted how unhealthy food environments restrict choice. The availability and relative affordability of fast food takeaway outlets were seen as the main barrier to healthy diets and a key priority for policy action.

Negative perceptions of food environments, and local physical environments more generally, appear to be common among young people (Ott et al., 2011; Cameron et al., 2017; Fairbrother et al., 2022; Thompson et al., 2022). Availability, affordability and marketing of unhealthy food were previously found to be considered important factors shaping young people's food choices (Bibeau et al., 2012; Watts et al., 2015; Pitt et al., 2017; Spencer et al., 2019; Kelly et al., 2021;

Ziegler *et al.*, 2021; Fairbrother *et al.*, 2022). Many of these studies analysed perceptions of the school food environment in particular (Pitt *et al.*, 2017; Gangemi *et al.*, 2018; Spencer *et al.*, 2019; Kelly *et al.*, 2021), which was also mentioned as a concern by participants in this study.

Our findings fit with previous evidence suggesting that children and young people are valuable and informed contributors to social and health policy. Other examples in the literature include studies in the fields of mental health (Thompson *et al.*, 2022; McCabe *et al.*, 2023), health inequalities (Fairbrother *et al.*, 2022; Ronzi *et al.*, 2023) and planetary health (Arnot *et al.*, 2023, 2023a, 2024). As in these studies, our findings demonstrate that young people understand how their food choices and norms are influenced by factors described as the social, commercial and political determinants of health (Arnot *et al.*, 2023; Ronzi *et al.*, 2023). Knowledge about food environment policy and factors contributing to its prioritization and implementation appeared to be higher in older participants, and those that had been more extensively involved in food environment-related consultations and workshops. This suggests that while young people did not believe they were fully engaged in policymaking processes about food environments, local authorities have been able to effectively convey messages on the topic. There were no notable differences between genders and areas, although participants living in a city spoke more about geographic differences in food environments related to area deprivation.

Knowledge on specific policies and interventions in the local area was more limited. Both local authorities have been part of a programme to tackle childhood obesity, which included interventions and campaigns targeted at increasing awareness about unhealthy food environments among children and young people. This suggests a need for wider communication of interventions beyond those directly involved.

Proposed policy solutions

Young people had strong policy recommendations for both local and national government. The policies proposed in both areas were largely structural or agento-structural in nature, requiring little individual choice and effort from (young) people to be effective. These include restrictions on the advertising of unhealthy food and regulations to limit fast food outlets near schools (Backholer *et al.*, 2014). This is in contrast with the tendency of UK obesity prevention policies to focus on agentic interventions to solve problems with significant structural root causes (Williams and Fullagar, 2019; Griffin *et al.*, 2021; Theis and White, 2021; Fisman *et al.*, 2023). In a Photovoice study in Poland, young people similarly recognized a need for better policies to create healthier retail environments, which were identified as 'missing' in their local environment (Banik *et al.*, 2023). Interventions focused on education were proposed in addition to structural interventions, to change perceptions of healthy food and give young people a better chance at consuming a healthy diet. There is no clear evidence that access to healthy food outlets alone leads to healthier diets among adolescents (Shaw *et al.*, 2023), something that was recognized by some focus group participants. Complementary policies targeting perceptions and social influences are therefore also necessary (Shaw *et al.*, 2023).

The importance of structural intervention in obesity prevention is recognized among local public health practitioners and policymakers (Grant *et al.*, 2010; Nobles *et al.*, 2019). However, the implementation of such policies is often hin-

dered by external barriers, many of which were also identified by the young people in this study. While participants did not believe health to be prioritized enough by local and national government in England, they were aware of challenges faced by policymakers (Grant *et al.*, 2010). Limited prioritization and implementation of food environment policies was attributed to political choices, resistance to 'nanny state' policies, barriers to local action due to national legislation, funding challenges and influence from the food industry. Interestingly, young people were more likely to understand and justify inaction at local level compared to the national level. This could suggest a greater understanding of their local (policy) context, possibly through their previous engagement with local authorities or familiarity with local neighbourhoods and communities. Attitudes could also be explained by political beliefs. Young people recognized that both local and national government prioritized 'money over health'. However, at local level this was seen as a way to support the local economy, while at national level it was often considered ideological. The idea that governments prioritize commercial interests was also expressed by young people in other studies in relation to planetary health (Thompson *et al.*, 2022; Arnot *et al.*, 2023a, 2024).

Youth engagement in food environment policy

Despite having been involved in consultation workshops about local food environments, young people in both areas did not feel meaningfully engaged in local decision-making processes. Many studies analysing youth engagement in food environment and obesity prevention policymaking do not include perspectives from young people themselves. Limited feedback from young people was also reported in a scoping review of youth engagement in other health-related policy processes in the UK (Macauley *et al.*, 2022). Previous research supports our findings that youth engagement typically takes the form of consultation rather than more collaborative approaches (Larsson *et al.*, 2018; Mandoh *et al.*, 2021, 2023; Macauley *et al.*, 2022; Nesrallah *et al.*, 2023). While consultation can be a useful tool to better understand youth perspectives, it is often limited to certain (initial) stages of policy development, and can—as also suggested by our research participants—be experienced as tokenistic if young people do not feel that their efforts are valued and will make a difference (Cardarelli *et al.*, 2021; Mandoh *et al.*, 2021). What is generally believed to be the difference between consultation and youth participation is shared decision-making and a degree of youth control over the policy agenda (Hart, 1992; Wills *et al.*, 2008; Wong *et al.*, 2010; Heffernan *et al.*, 2017). Falling short of this, local authorities miss opportunities to create more inclusive and innovative policies and interventions that centre young people (Michels and De Graaf, 2010, 2017). At the same time, young people miss out on valuable knowledge, civic participation skills and opportunities to drive change. Clear communication about the purpose and (possible) impacts of engagement activities could increase trust and avoid disappointment and feelings of powerlessness described by some participants. It also highlights the need to include an evaluation component in youth engagement activities (Villa-Torres and Svanemyr, 2015; Frerichs *et al.*, 2016; Jenkins *et al.*, 2020; Cardarelli *et al.*, 2021).

The findings of this study do not necessarily mean that the local authorities of interest do not involve local residents in their policy decisions. Both the areas have strategies for citizen

engagement, including a strategy on the engagement of children and young people. In addition, both areas have engagement structures in place, such as youth groups and branches of the UK Youth Parliament to which young people are democratically elected (Smith *et al.*, 2023). This provides an avenue for young people to discuss issues with ministers and civil servants at both local and national level. The food environment did not appear to be a principal topic of discussion within the Youth Parliament, suggesting it may not be among the most important policy priorities for young people. However, young people that were not involved in the Youth Parliament felt that its activities were not accessible to everyone equally. This reflects wider concerns about ensuring diverse representation in the young people that are engaged in local decisions. Youth councils have potential to meaningfully engage young people (Astraea Augsberger and Whitney, 2018). However, their effectiveness is context-specific, depending on among others how youth-centric the councils are, their position within local government and available funding. In the UK, experiences, support and opportunities offered to Members of Youth Parliaments were found to differ by local authority (Smith *et al.*, 2023), possibly mirroring inequalities in other services available to young people in those areas.

Local authorities, governments and other organizations have a duty to involve underrepresented groups in their engagement activities under the UN Convention on the Rights of the Child. Attention should therefore be paid to ensure young people are afforded the same engagement opportunities and decision-making power across the country. Young people in this study emphasized the importance of providing multiple different avenues for youth participation, to ensure as many young people as possible are represented (Macauley *et al.*, 2022). This requires additional attention and resources, and may involve different ways of recruiting young people, beyond a selected number of youth organizations (Astraea Augsberger and Whitney, 2018). The resources, including time, skills and budget, required for meaningful and prolonged youth participation are likely a barrier for local authorities in England in the context of significant funding cuts to local government (Haves, 2024). Another challenge to operationalizing the UN Convention is that embedding co-production and shared decision-making in policy processes requires a shift in institutional values and structures, which take time to achieve and may be met with resistance (Zeldin *et al.*, 2008). There is an important role for national government to provide local authorities with greater resources, mandates and incentives for meaningful youth engagement in (public health) policymaking processes. Local authorities can also learn from each other through the dissemination of good practice, including through national and international public health networks. These learning spaces can be useful in addition to existing resources that provide guidance on youth engagement (Local Government Association, n.d.; UNICEF, 2017). Rather than creating new engagement structures, local authorities can harness existing resources and partnerships, including with schools, youth groups and voluntary, community and faith organizations dedicated to promoting youth participation. Work with schools can focus on enhancing the education curriculum to place a greater emphasis on civic participation. Online platforms and interactive applications could be used in addition to offline methods to connect with a wider range of young people, and require relatively little resource (Crowley and Moxon, 2018).

Ultimately, it is important that young people are part of discussions about the design of participation mechanisms. The public health community has a key role in changing understandings of meaningful youth engagement by actively involving young people in policy and research debates as competent individuals with valuable experience that can improve policy formulation, implementation and outcomes. Centring young people is particularly relevant for food environment policy, which is often considered within the wider policy goal of reducing childhood obesity (Theis and White, 2021).

Strengths and limitations

Our study adds to the existing literature by exploring young people's understanding of local food environment policies and their recommendations for future action. In addition, analysing young people's perspectives on their own involvement in policymaking processes allows us to understand the ways in which young people want to be engaged.

While our data analysis was inductive, focusing on the perspectives and suggestions mentioned by the young people, concepts central to our research aims were reflected in the findings. As the focus of this research is on food environment policies, this will, for example, have influenced the policy recommendations given by young people, which were predominantly structural and agento-structural in nature. Future research could focus on young people's perspectives on policies and interventions targeting other determinants of childhood obesity, including the home and family environment, and influences from peers.

The study focused on two areas in England. While the areas are diverse in geography and size, they are not representative for the whole of England. Young people were recruited through four youth organizations that have previously been involved in consultation and activities with local authorities (including on food and public health), which allowed us to better understand local authorities' engagement with young people. We spoke to a diverse group of adolescents and young adults, but our recruitment missed young people not connected to those organizations, which may include more underrepresented groups with less knowledge on food environment policy. At the same time, we may not have recruited young people who were more extensively involved in interventions and policy processes. While our overall sample was diverse, recruitment was influenced by pragmatic factors, which reduced within-focus group ethnic diversity in some cases. Discerning individual opinions from those shared by the group as a whole can be difficult when conducting focus groups. While we encouraged each participant to share their perspectives, some participants spoke more than others, which means some perspectives may be overrepresented in the findings. This may particularly be the case for the larger focus group and the focus group conducted online.

CONCLUSION

This study adds to previous literature on young people's perspectives of food environments by exploring their views on current policy prioritization, recommendations for future action and their engagement in policymaking. Our findings show a deep understanding of the social, political and commercial factors that influence young people's diets. Young people's policy

priorities were predominantly structural in nature, targeting availability, affordability and advertising of unhealthy food in their local area. Young people want to be more meaningfully engaged in policy deliberations that directly affect them. It is essential that policymakers aiming to improve young people's diets take their unique views and concerns into account to create effective policies that resonate with young people.

SUPPLEMENTARY MATERIAL

Supplementary material is available at *Health Promotion International* online.

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CONFLICT OF INTEREST STATEMENT

NA.

ETHICS INFORMATION

Ethical approval was granted by the London School of Hygiene & Tropical Medicine Research Ethics Committee [Ref. 28217].

DATA AVAILABILITY

The data underlying this article cannot be shared publicly for the privacy of individuals that participated in the study.

REFERENCES

- Arnot, G., Pitt, H., McCarthy, S., Collin, P. and Thomas, S. (2023) Supporting young people as genuine political actors in climate decision-making. *Health Promotion International*, **38**, daad148.
- Arnot, G., Thomas, S., Pitt, H. and Warner, E. (2023a) Australian young people's perceptions of the commercial determinants of the climate crisis. *Health Promotion International*, **38**, daad058.
- Arnot, G., Thomas, S., Pitt, H. and Warner, E. (2023b) 'It shows we are serious': young people in Australia discuss climate justice protests as a mechanism for climate change advocacy and action. *Australian and New Zealand Journal of Public Health*, **47**, 100048.
- Arnot, G., Thomas, S., Pitt, H. and Warner, E. (2024) Australian young people's perspectives about the political determinants of the climate crisis. *Health Promotion Journal of Australia*, **35**, 196–206.
- Astraea Augsberger, M. E. C. and Whitney, G. (2018) Engaging youth in municipal government: moving toward a youth-centric practice. *Journal of Community Practice*, **26**, 41–62.
- Backholer, K., Beauchamp, A., Ball, K., Turrell, G., Martin, J., Woods, J. et al. (2014) A framework for evaluating the impact of obesity prevention strategies on socioeconomic inequalities in weight. *American Journal of Public Health*, **104**, e43–e50.
- Banik, A., Knai, C., Klepp, K. -I., Rutter, H., Rito, A., Lien, N. et al. (2023) What policies are there and what policies are missing? A Photovoice study of adolescents' perspectives on obesity-prevention policies in their local environment. *Obesity Reviews*, **24**, e13617.
- Bibeau, W. S., Saksvig, B. I., Gittelsohn, J., Williams, S., Jones, L. and Young, D. R. (2012) Perceptions of the food marketing environment among African American teen girls and adults. *Appetite*, **58**, 396–399.
- BiteBack. (n.d.) *Our Journey to Cut the Junk*. <https://www.biteback2030.com/our-activists/our-journey/> (last accessed 26 June 2024).
- Blackshaw, J., Ewins, M. and Chang, M. (2019) *Health Matters: Addressing the Food Environment as Part of a Local Whole Systems Approach to Obesity*. UK Health Security Agency. <https://ukhsa.blog.gov.uk/2019/08/08/health-matters-addressing-the-food-environment-as-part-of-a-local-whole-systems-approach-to-obesity/> (last accessed June 2023).
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**, 77–101.
- Braun, V. and Clarke, V. (2022) *Thematic Analysis: A Practical Guide*. London, United Kingdom: Sage Publications.
- Brown, H., Xiang, H., Albani, V., Goffe, L., Akhter, N., Lake, A. et al. (2022) No new fast-food outlets allowed! Evaluating the effect of planning policy on the local food environment in the North East of England. *Social Science & Medicine*, **306**, 115126.
- Cameron, C., Comans, T., Gallegos, D., Pitt, E. and Thornton, L. (2017) Exploring the influence of local food environments on food behaviours: a systematic review of qualitative literature. *Public Health Nutrition*, **20**, 2393–2405.
- Capobianco, L., Faija, C., Cooper, B., Brown, L., McPhillips, R., Shields, G. et al. (2023) A framework for implementing Patient and Public Involvement in mental health research: the PATHWAY research programme benchmarked against NIHR standards. *Health Expectations*, **26**, 640–650.
- Cardarelli, K. M., Ickes, M., Huntington-Moskos, L., Wilmhoff, C., Larck, A., Pinney, S. M. et al. (2021) Authentic youth engagement in environmental health research and advocacy. *International Journal of Environmental Research and Public Health*, **18**, 2154.
- Caspi, C. E., Sorensen, G., Subramanian, S. V. and Kawachi, I. (2012) The local food environment and diet: a systematic review. *Health & Place*, **18**, 1172–1187.
- Crowley, A. and Moxon, D. (2018) *New and Innovative Forms of Youth Participation in Decision-Making Processes*. <https://edoc.coe.int/en/youth-in-europe/7625-new-and-innovative-forms-of-youth-participation-in-decision-making-processes.html>
- Department of Health and Social Care. (2017) *Childhood Obesity: A Plan for Action*. <https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action> (last accessed 21 March 2024).
- Department of Health and Social Care. (2018) *Childhood Obesity: A Plan for Action*, Chapter 2. <https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action-chapter-2> (last accessed 21 March 2024).
- Fairbrother, H., Woodrow, N., Crowder, M., Holding, E., Griffin, N., Er, V. et al. (2022) 'It All Kind of Links Really': young people's perspectives on the relationship between socioeconomic circumstances and health. *International Journal of Environmental Research and Public Health*, **19**, 3679, <https://www.mdpi.com/1660-4601/19/6/3679>
- Fismen, A. -S., Mathisen, J. R., Vlad, I., Oldridge-Turner, K., O'Mara, J., Klepp, K. -I. et al. (2023) Pilot test of the NOURISHING policy index—assessing governmental nutrition policies in five European countries. *Obesity Reviews*, **24**, e13532.

- Frerichs, L., Ataga, O., Corbie-Smith, G. and Tessler Lindau, S. (2016) Child and youth participatory interventions for addressing lifestyle-related childhood obesity: a systematic review. *Obesity Reviews*, 17, 1276–1286.
- Gangemi, K., Dupuis, R., FitzGerald, E., Frasso, R., Solomon, S. and Cannuscio, C. C. (2018) Youth speak out on school food environments. *The Journal of School Nursing*, 36, 193–202.
- Grant, J. L., MacKay, K. C., Manuel, P. M. and McHugh, T. L. (2010) Barriers to optimizing investments in the built environment to reduce youth obesity: policy-maker perspectives. *Canadian Journal of Public Health*, 101, 237–240.
- Griffin, N., Phillips, S. M., Hillier-Brown, F., Wistow, J., Fairbrother, H., Holding, E. et al. (2021) A critique of the English national policy from a social determinants of health perspective using a realist and problem representation approach: the ‘Childhood Obesity: a plan for action’ (2016, 2018, 2019). *BMC Public Health*, 21, 2284.
- Hart, R. (1992) *Children’s Participation: From Tokenism to Citizenship*. Florence, Italy: UNICEF International Child Development Centre.
- Haves, E. (2024) *In Focus: Local Government Finances: Impact on communities*. UK Parliament. <https://lordslibrary.parliament.uk/local-government-finances-impact-on-communities/#:~:text=According%20to%20the%20NAO%2C%20total,%2F11%20and%202020%2F21> (last accessed 24 June).
- Heffernan, O. S., Herzog, T. M., Schiralli, J. E., Hawke, L. D., Chaim, G. and Henderson, J. L. (2017) Implementation of a youth-adult partnership model in youth mental health systems research: challenges and successes. *Health Expectations*, 20, 1183–1188.
- Jenkins, E., McGuinness, L., Haines-Saah, R., Andres, C., Ziemann, M. J., Morris, J. et al. (2020) Equipping youth for meaningful policy engagement: an environmental scan. *Health Promotion International*, 35, 852–865.
- Kataria, I. and Cruz, J. L. (2017) Youth engagement for NCD prevention policies: rising NCD in India and youth as change enablers. *Global Heart*, 12, 245–246.
- Kelly, C., Callaghan, M. and Gabhainn, S. N. (2021) ‘It’s Hard to Make Good Choices and It Costs More’: adolescents’ perception of the external school food environment. *Nutrients*, 13, 1043, <https://www.mdpi.com/2072-6643/13/4/1043>
- Kontak, J. C. H., McIsaac, J. -L. D., Penney, T. L., Kuhle, S. and Kirk, S. F. L. (2017) The picture of health: examining school-based health environments through photographs. *Health Promotion International*, 32, 322–330.
- Krueger, R. A. and Casey, M. A. (2014) *Focus Groups: A Practical Guide for Applied Research*, 5th edition. Thousand Oaks, CA, United States: Sage Publications.
- Larsson, I., Staland-Nyman, C., Svedberg, P., Nygren, J. M. and Carlsson, I. -M. (2018) Children and young people’s participation in developing interventions in health and well-being: a scoping review. *BMC Health Services Research*, 18, 507.
- Local Government Association. (n.d.) *Engaging Young People in Policy Development*. <https://www.local.gov.uk/topics/children-and-young-people/engaging-young-people-policy-development> (last accessed 26 March 2024).
- Macauley, T., Rolker, H. B., Scherer, M., Brock, J., Savona, N., Helleve, A. et al. (2022) Youth participation in policy-making processes in the United Kingdom: a scoping review of the literature. *Journal of Community Practice*, 30, 203–224.
- Macdonald, L., Olsen, J. R., Shortt, N. K. and Ellaway, A. (2018) Do ‘environmental bads’ such as alcohol, fast food, tobacco, and gambling outlets cluster and co-locate in more deprived areas in Glasgow City, Scotland? *Health & Place*, 51, 224–231.
- Maguire, E. R., Burgoine, T. and Monsivais, P. (2015) 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* (1873–2054), 33, 142–147.
- Mandoh, M., Redfern, J., Mihrshahi, S., Cheng, H. L., Phongsavan, P. and Partridge, S. R. (2021) Shifting from tokenism to meaningful adolescent participation in research for obesity prevention: a systematic scoping review [Review]. *Frontiers in Public Health*, 9, 789535.
- Mandoh, M., Redfern, J., Mihrshahi, S., Cheng, H. L., Phongsavan, P. and Partridge, S. R. (2023) How are adolescents engaged in obesity and chronic disease prevention policy and guideline development? A scoping review. *Global Health Research and Policy*, 8, 9.
- McCabe, E., Amarbayan, M., Rabi, S., Mendoza, J., Naqvi, S. F., Thapa Bajgain, K. et al. (2023) Youth engagement in mental health research: a systematic review. *Health Expectations*, 26, 30–50.
- McNally, S. (2023) Scarlett McNally: obesity is a community issue, not just an individual one. *British Medical Journal*, 380, p702.
- Michels, A. (2011) Innovations in democratic governance: how does citizen participation contribute to a better democracy? *International Review of Administrative Sciences*, 77, 275–293.
- Michels, A. and De Graaf, L. (2010) Examining citizen participation: local participatory policy making and democracy. *Local Government Studies*, 36, 477–491.
- Michels, A. and De Graaf, L. (2017) Examining citizen participation: local participatory policymaking and democracy revisited. *Local Government Studies*, 43, 875–881.
- Mozaffarian, D., Angell, S. Y., Lang, T. and Rivera, J. A. (2018) Role of government policy in nutrition—barriers to and opportunities for healthier eating. *British Medical Journal*, 361, k2426.
- Nesrallah, S., Klepp, K. -I., Budin-Ljosne, I., Luszczynska, A., Brinsden, H., Rutter, H. et al. (2023) Youth engagement in research and policy: the CO-CREATE framework to optimize power balance and mitigate risks of conflicts of interest. *Obesity Reviews*, 24, e13549.
- Nobles, J., Christensen, A., Butler, M., Radley, D., Pickering, K., Saunders, J. et al. (2019) Understanding how local authorities in England address obesity: a wider determinants of health perspective. *Health Policy*, 123, 998–1003.
- Ott, M. A., Rosenberger, J. G., McBride, K. R. and Woodcox, S. G. (2011) How do adolescents view health? Implications for state health policy. *The Journal of Adolescent Health*, 48, 398–403.
- Pitt, E., Gallegos, D., Comans, T., Cameron, C. and Thornton, L. (2017) Exploring the influence of local food environments on food behaviours: a systematic review of qualitative literature. *Public Health Nutrition*, 20, 2393–2405.
- Pitt, H., McCarthy, S., Randle, M., Daube, M. and Thomas, S. L. (2024) Young people’s views about the use of celebrities and social media influencers in gambling marketing. *Health Promotion International*, 39, daae012.
- Public Health England. (2017) *Health Matters: Obesity and the Food Environment*. <https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment-2> (last accessed 27 February).
- Public Health England. (2018) *Fast Food Outlets: Density by Local Authority in England*. <https://www.gov.uk/government/publications/fast-food-outlets-density-by-local-authority-in-england> (last accessed 21 March 2024).
- Ronzi, S., Gravenhorst, K., Rinaldi, C., Villarroel-Williams, N., Ejegi-Memeh, S., McGowan, V. J. et al. (2023) Intersectionality and public understandings of health inequity in England: learning from the views and experiences of young adults. *Public Health*, 222, 147–153.
- Shaw, S., Barrett, M., Shand, C., Cooper, C., Crozier, S., Smith, D. et al. (2023) Influences of the community and consumer nutrition environment on the food purchases and dietary behaviors of adolescents: a systematic review. *Obesity Reviews*, 24, e13569.
- Sheridan, S. A., Brolan, C. E., Fitzgerald, L., Tasserei, J., Maleb, M. -F., Rory, J. -J. et al. (2014) Facilitating health and wellbeing is ‘everybody’s role’: youth perspectives from Vanuatu on health and the post-2015 sustainable development goal agenda. *International Journal for Equity in Health*, 13, 80.
- Smith, J., Fischer, F., Freitas, G., Williams, J., Manuch, M., Dixey, A. et al. (2023) *Youth Engagement Impact Study*. <https://www.gov.uk/government/publications/youth-engagement-impact-study/youth-engagement-impact-study-youth-summary> (last accessed 21 March 2024).
- Sonntag, D., Schneider, S., Mdege, N., Ali, S. and Schmidt, B. (2015) Beyond food promotion: a systematic review on the influence of the

- food industry on obesity-related dietary behaviour among children. *Nutrients*, *7*, 8565–8576.
- Spencer, R. A., McIsaac, J. -L. D., Stewart, M., Brushett, S. and Kirk, S. F. L. (2019) Food in focus: youth exploring food in schools using photo-voice. *Journal of Nutrition Education and Behavior*, *51*, 1011–1019.
- Steel, N., Ford, J. A., Newton, J. N., Davis, A. C. J., Vos, T., Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*, *392*, 1647–1661.
- Swinburn, B., Sacks, G., Vandevijvere, S., Kumanyika, S., Lobstein, T., Neal, B. et al.; INFORMAS. (2013) INFORMAS (International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support): overview and key principles. *Obesity Reviews*, *14*, 1–12.
- Theis, D. R. Z. and White, M. (2021) Is obesity policy in England fit for purpose? Analysis of government strategies and policies, 1992–2020. *The Milbank Quarterly*, *99*, 126–170.
- Thomas, S., McCarthy, S., Pitt, H., Marko, S., Cowlshaw, S., Randle, M. et al. (2023) 'It is always there in your face'. Australian young people discuss exposure to gambling activities and promotions. *SSM - Qualitative Research in Health*, *3*, 100220.
- Thompson, R., Fisher, H. L., Dewa, L. H., Hussain, T., Kabba, Z. and Toledano, M. B. (2022) Adolescents' thoughts and feelings about the local and global environment: a qualitative interview study. *Child and Adolescent Mental Health*, *27*, 4–13.
- Townshend, T. and Lake, A. (2017) Obesogenic environments: current evidence of the built and food environments. *Perspectives in Public Health*, *137*, 38–44.
- Uhlmann, K., Ross, H., Buckley, L. and Lin, B. B. (2023) Food in my life: how Australian adolescents perceive and experience their food-scape. *Appetite*, *190*, 107034.
- UNICEF. (2017) *Child Participation in Local Governance*. <https://www.childfriendlycities.org/documents/child-participation-local-governance> (last accessed 26 June 2024).
- United Nations. (1989) *Convention on the Rights of the Child*. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child> (last accessed 21 March 2024).
- Villa-Torres, L. and Svanemyr, J. (2015) Ensuring youth's right to participation and promotion of youth leadership in the development of sexual and reproductive health policies and programs. *The Journal of Adolescent Health*, *56*, S51–S57.
- Waller, D., Robards, F., Schneider, C. H., Sanci, L., Steinbeck, K., Gibson, S. et al. (2022) Building evidence into youth health policy: a case study of the Access 3 knowledge translation forum. *Health Research Policy And Systems*, *20*, 44.
- Watts, A. W., Lovato, C. Y., Barr, S. I., Hanning, R. M. and Mâsse, L. C. (2015) A qualitative study exploring how school and community environments shape the food choices of adolescents with overweight/obesity. *Appetite*, *95*, 360–367.
- Williams, O. and Fullagar, S. (2019) Lifestyle drift and the phenomenon of 'citizen shift' in contemporary UK health policy. *Sociology of Health & Illness*, *41*, 20–35.
- Wills, W. J., Appleton, J. V., Magnusson, J. and Brooks, F. (2008) Exploring the limitations of an adult-led agenda for understanding the health behaviours of young people. *Health & Social Care in the Community*, *16*, 244–252.
- Wong, N. T., Zimmerman, M. A. and Parker, E. A. (2010) A typology of youth participation and empowerment for child and adolescent health promotion. *American Journal of Community Psychology*, *46*, 100–114.
- Zeldin, S., Petrokubi, J. and MacNeil, C. (2008) Youth-adult partnerships in decision making: disseminating and implementing an innovative idea into established organizations and communities. *American Journal of Community Psychology*, *41*, 262–277.
- Ziegler, A. M., Kasprzak, C. M., Mansouri, T. H., Gregory, A. M., 2nd, Barich, R. A., Hatzinger, L. A. et al. (2021) An ecological perspective of food choice and eating autonomy among adolescents. *Frontiers in Psychology*, *12*, 654139.