

THE BROKEN PLATE 2025

The State of the
Nation's Food System

**Our food environment: its vital signs,
its impact on our lives and what needs
to change to support us all to eat
healthily and sustainably**



**The Food
Foundation**

ABOUT THE FOOD FOUNDATION



The Food Foundation is an independent charity working to address challenges in the food system in the interests of the UK public.

Working at the interface between academia and policymakers (parliamentarians, civil servants, local authorities, business leaders) we use a wide range of approaches to make change happen including events, publications, media stories, social media campaigns and multi-stakeholder partnerships. We also receive extensive direct input from the public to ensure their lived experience is reflected in our policy proposals. We collaborate with many partners on a range of different thematic areas, liaising with academics to generate evidence and campaigners who can drive change. We are independent of all political parties and businesses, and are not limited by a single issue or special interest.

Visit: foodfoundation.org.uk

DESIGN

whitecreativecompany.co.uk

ONS CROWN COPYRIGHT INFORMATION This work contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

WITH THANKS TO

Action on Salt and Sugar: Zoe Davies, Sonia Pombo, Jessica Hayman

Green Alliance: Lydia Collas

LSHTM: Genevieve Hadida

Nielsen: Debbie Bremner, Barney Farmer

Questionmark: Dore de Jong, Willem van Engen

University of Cambridge: Jody Hoenink, Jean Adams, Thomas Burgoine, Thomas Ball

The Food Foundation's Expert Advisory Group

Food Foundation Contributors:

Metrics: Ana Maria Narvaez, Rachel Claydon, Shona Goudie, Hannah Brinsden

Ambassador Photo Stories: Lucy Heyderman, Ke Yih Lim, Katina-Leigh Taylor

Introduction and Conclusion: Shona Goudie



WITH THANKS TO OUR FUNDER



The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in Education, Welfare, and Justice. The Nuffield Foundation is the founder and co-founder of the Nuffield Council on Bioethics, the Ada Lovelace Institute and the Nuffield Family Justice Observatory. The Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation.

Visit www.nuffieldfoundation.org

Introduction	4	ENVIRONMENT OUTCOMES	
About The Food Foundation Ambassadors' photo stories	5	Metric 10: Greenhouse gas emissions from the food system	40
At a glance: Key findings	6	Commentary	42
FOOD ENVIRONMENT METRICS		HEALTH OUTCOMES	
APPEAL		Metric 11: Children's weight	44
Metric 1: Food promotions	10	Metric 12: Diabetes-related amputations	46
Metric 2: Advertising expenditure on food	12	Metric 13: Dental decay	47
Metric 3: Marketing of infant foods	16	Commentary	48
Commentary	18	Conclusion	50
AVAILABILITY		Appendix: Methods in short	51
Metric 4: Sugar in children's food products	20	References	53
Metric 5: Places to buy food	21		
Commentary	22		
PRICE AND AFFORDABILITY			
Metric 6: Cost of more sustainable options	26		
Metric 7: Cost of healthy food	28		
Metric 8: Affordability of a healthy diet	30		
Commentary	32		
OUTCOME METRICS	35		
DIET QUALITY			
Metric 9: Nutritious food consumption	36		
Commentary	38		



Introduction

Recent years, marked by the pandemic and cost-of-living crisis, have been very tough for very many. And many people have stepped into the breach - food bank volunteers securing food parcels for those in need; school teachers keeping stores of emergency rations for hungry pupils; parents skipping meals so children can be fed. This can't go on. The gaping holes left by policies which fail to protect everyone's basic right to be nourished have been laid bare. And while food insecurity is often hidden behind the stigma of asking for help, other problems caused by the food system are now in plain sight of politicians: climate change and geopolitical shocks are becoming increasingly worrisome threats to our food supply, and the health of our nation has never been worse. Today's problems result from a food system which remains stuck in the past, no longer robust in the face of present day threats and no longer meeting our physical needs.

But a turning point is within reach – if decisive and bold action is taken by government. A future is possible where people across the country no longer have to live in fear of food prices outstripping their means, or being unable to provide nourishing food for their children, or their loved ones becoming sick due to the barrage of junk food, or their grandchildren living in a world destroyed by climate change.

Visionary leadership with ambition to not merely tweak around the edges with token gestures, but to create transformative change can bring us back from the brink. Our food system must change to ensure a sustainable and secure food supply that can support public health, environmental protection and

economic growth. Critical to this is making it fairer – where producers and workers receive fair pay; empowering local communities to produce their own food; making sure farmers can make a good living through sustainable farming methods that have reduced impact on nature and biodiversity; building resilience to climate and geopolitical shocks; incentivising industry to make and promote healthier options; and guaranteeing a nutritional safety net to protect the most deprived. Surging interest from politicians across all political parties to help solve these issues for their constituents and recognition by the new government that there is an inescapable need to meaningfully transform our food system is bringing renewed optimism.

But real change requires shared goals and agreed outcomes by which progress can be measured. This year's Broken Plate report assesses eight key metrics which describe the

state of our food environment, demonstrating just how difficult it is to eat healthily and sustainably when the affordability, availability and appeal of unhealthy and unsustainable foods point us in the opposite direction. Further metrics clearly show the negative impact this has on the quality of our diets, and the impact on our health and environment. Most metrics in this report show no improvement, or worse, show deterioration. Together these metrics paint a picture of where this government begins their term in office, providing critical insight into the problems to be addressed, and providing a benchmark by which progress will be seen in future annual Broken Plate reports.

Let's all commit to make this the turning point.



About The Food Foundation Ambassadors' photo stories

Citizens' voices are a powerful part of The Food Foundation's work. Our Food Ambassador programme consists of a community of citizens from across the UK who are passionate about changing the food system. Crucially, the programme aims to amplify the voices of people with lived experience in decision-making processes, research and the media.

Building on a tradition of including citizens' experiences in our annual *Broken Plate* report, this year The Food Foundation has been working with eight Food Ambassadors on a Photo-Storytelling Project to bring light to the realities behind the statistics in the report. Inspired by the work of PhotoVoice, they have used the medium of photography to describe their food environments.

We provided support and training; however, central to the project has been the Ambassadors' agency over the images they choose and the stories they share. These photographs carry messages for politicians, policymakers and businesses. The Ambassadors have used captioning to underline their experiences and call for change.

Across these pieces, the theme of food insecurity is consistent, intertwining with fuel poverty, housing, parenthood, culture, disability, nutrition and health.



At a glance

FOOD ENVIRONMENT METRICS

APPEAL



Food promotions P10

Over a third (37%) of supermarket promotions on food and non-alcoholic drinks are for unhealthy food.



Advertising expenditure on food P12

Over a third (36%) of food and soft drink advertising spend is on confectionery, snacks, desserts and soft drinks, compared to just 2% on fruit and veg.



Marketing of infant foods P16

Three-quarters (74%) of the baby and toddler snacks that have front-of-pack promotional claims contain high or medium levels of sugar.

WHAT NEEDS TO HAPPEN:

- Restrict promotions on less healthy foods and increase promotions on core staples and more healthy foods.
- Increase advertising spend on healthy foods, particularly fruit and veg, and decrease advertising spend on less healthy foods.
- Regulate marketing and composition of toddler and baby foods, and restrict nutrition and health claims on front of packaging.

AVAILABILITY



Sugar in children's food products P20

Only 3% of breakfast cereals and 5% of yogurts marketed to children are low in sugar.



Places to buy food P21

A quarter (26%) of places to buy food in England are fast-food outlets, remaining unchanged for six years.

WHAT NEEDS TO HAPPEN:

- Create better incentives for reformulation to help shift the balance towards more healthy food.
- Use local authority planning powers to prevent further proliferation of unhealthy fast-food outlets.
- Increase transparency around the types of food businesses sell, with mandatory targets for boosting sales of healthy and sustainable foods.

PRICE AND AFFORDABILITY



Cost of more sustainable options P26

More sustainable, plant-based milk alternatives in supermarkets are on average 55% more expensive than dairy milk.



Cost of healthy food P28

On average, healthier foods are more than twice as expensive per calorie as less healthy foods, with healthier food increasing in price at twice the rate in the past two years.



Affordability of a healthy diet P30

To afford the government-recommended healthy diet, the most deprived fifth of the population would need to spend 45% of their disposable income on food, rising to 70% for those households with children.

WHAT NEEDS TO HAPPEN

- Ensure everyone has sufficient income to afford to eat a healthy and sustainable diet.
- Rebalance the cost of food so healthy and sustainable options are the most affordable.

OUTCOME METRICS

DIET QUALITY



Nutritious food consumption
P36

On average, children consume less than half the recommended amount of fruit and veg but twice the recommended amount of sugar.

ENVIRONMENT OUTCOMES



Greenhouse gas emissions from the food system P40

While UK emissions for the whole economy fell by 38% between 2008 and 2022, emissions from the food system fell by just 17% over the same period of time.

HEALTH OUTCOMES



Children's weight P44

Children in the most deprived fifth of the population are nearly twice as likely to be living with obesity as those in the least deprived fifth by their first year of school.



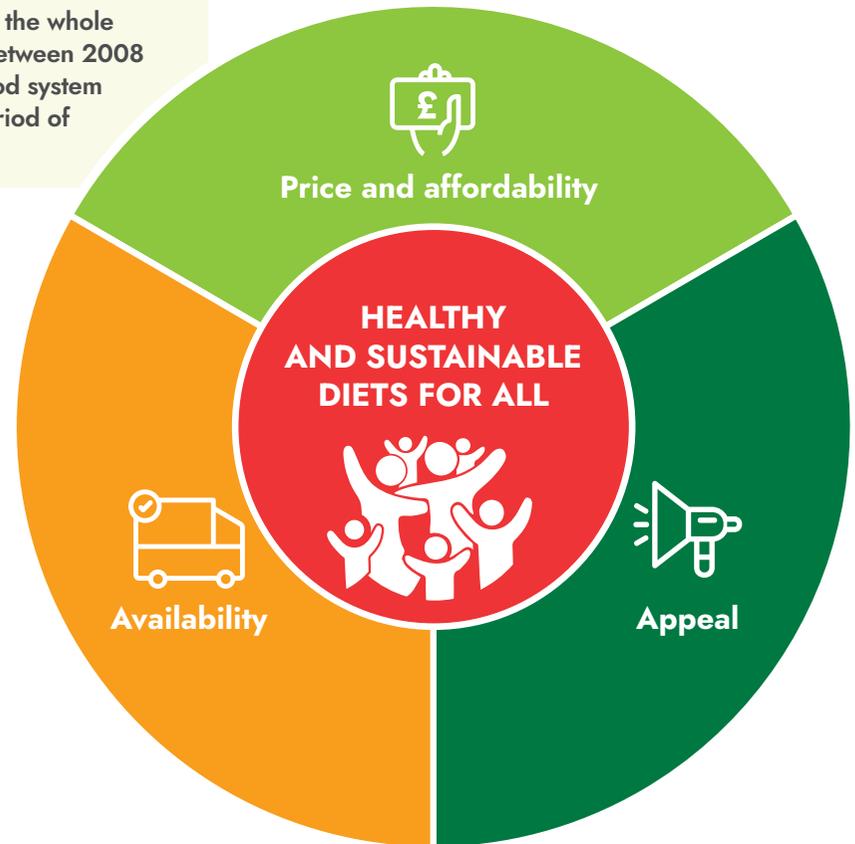
Diabetes-related amputations P46

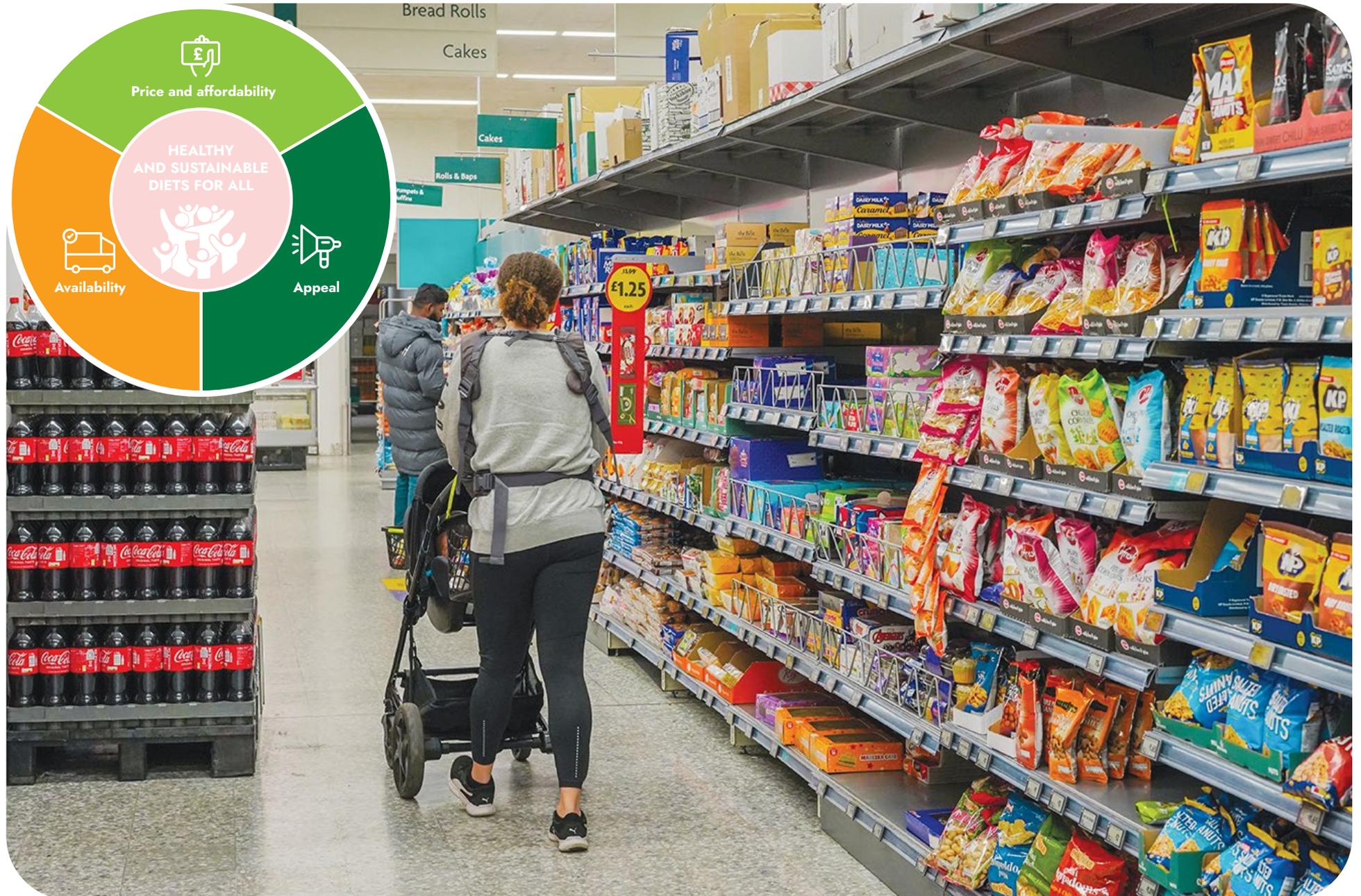
The number of diabetes-related lower-limb amputations increased by 68% since 2009.



Dental decay P47

Children in the most deprived fifth of the population are more than twice as likely to have tooth decay in their permanent teeth compared to those in the least deprived fifth by their last year of primary school.





FOOD ENVIRONMENT METRICS



Appeal



P10
Food
promotions



P12
Advertising
expenditure
on food



P16
Marketing
of infant
foods



Availability



P20
Sugar in
children's
food
products



P21
Places to
buy food



Price and Affordability



P26
Cost of
more
sustainable
options



P28
Cost of
healthy
food



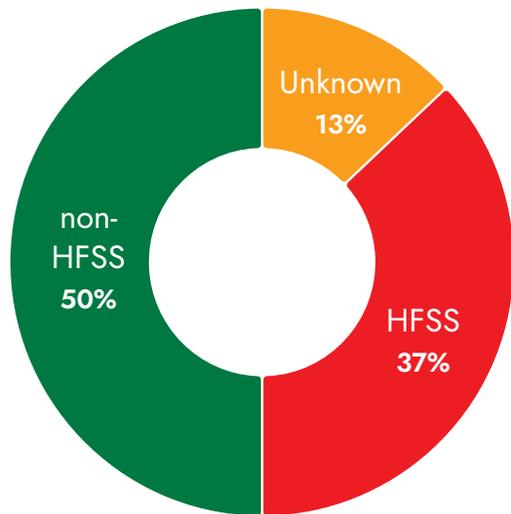
P30
Affordability
of a healthy
diet



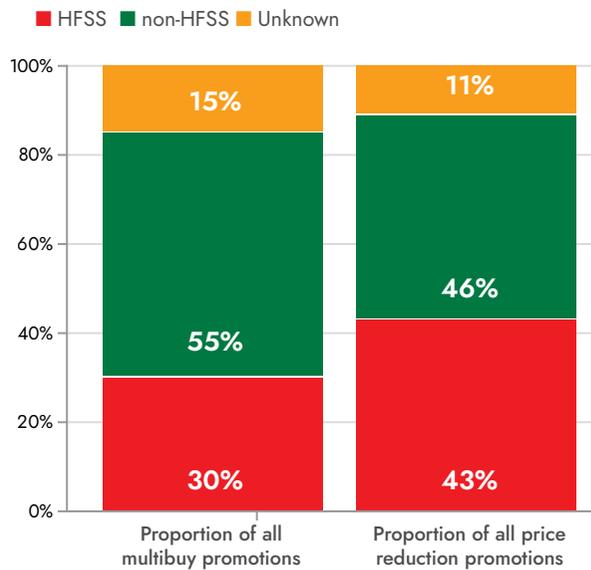
Food promotions

Over a **third** (37%) of supermarket promotions on food and non-alcoholic drinks are for unhealthy food.

Unhealthy (HFSS) vs Healthy (non-HFSS) promotions on food and non-alcoholic drinks



Breakdown of HFSS vs non-HFSS promotions on food and non-alcoholic drinks by type of promotion



Source: Data collected by Questionmark Foundation from Tesco, Sainsburys, Asda, Morrisons, Aldi, and Iceland (4-6 March 2024), and analysed by The Food Foundation.

Over a third (37%) of all promotions on food and non-alcoholic drinks are for unhealthy food products (i.e. ones that are high in fat, salt and/or sugar (HFSS) as defined by the UK's Nutrient Profiling Model) according to data gathered by Questionmark Foundation across six retailers (Tesco, Sainsburys, Asda, Morrisons, Aldi and Iceland) in March 2024.

Unhealthy foods account for 43% of all price reduction promotions, such as discounted and loyalty card prices. These products also account for 30% of multibuy promotions, such as buy one get one free, or three for £5.



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.

BEYOND HFSS: IS THERE SCOPE FOR STRENGTHENING HOW WE DEFINE UNHEALTHY FOOD IN POLICY?

Many existing nutrition policies in the UK, particularly those focused on advertising and promotions, define unhealthy foods as those that are high in fat, salt and/or sugar (HFSS). This is done using the UK Nutrient Profiling Model (NPM)¹ which scores food and drinks according to their nutritional composition.

In recent years, there have been increasing concerns about ultra-processed foods (UPFs), that is, foods which have been heavily processed and have ingredients such as sweeteners, emulsifiers, flavours and artificial colours. There is growing evidence that high consumption of foods which are classed as UPFs is associated with multiple negative health outcomes, including overweight and obesity and all-cause mortality². The exact causal mechanism responsible for these outcomes are not yet clear, including the extent to which it relates to the presence of certain ingredients, the processing, or a combination of factors. There is heightened public awareness of the issue with three-quarters of British adults concerned about the proportion of foods that are ultra-processed or the over-processing of food³.

In response to this, there has been increasing research on the overlap between HFSS and UPFs to ascertain the extent to which existing policies do or do not capture UPFs. One analysis found that 16% of all foods consumed are UPF but non-HFSS, and thus fall outside of existing policies⁴.

To explore this and how it translates into policy coverage in more detail, we undertook further analysis on the Questionmark Foundation promotions data, to look at the extent to which the HFSS definition used in volume promotion restrictions also covers foods which have attributes of UPFs. We focused this analysis on three specific categories which are often perceived as healthy – yogurts, cereal bars and breakfast cereals – using sweeteners and emulsifiers as two such indicators of UPFs (recognising these are only two indicators of UPFs, and the exact mechanisms for UPF health outcomes are still not clear).

Looking at promoted foods classified as non-HFSS, we found artificial sweeteners were contained in:

- 40% of sweetened yoghurts
- 69% of cereal bars
- 4% of breakfast cereal

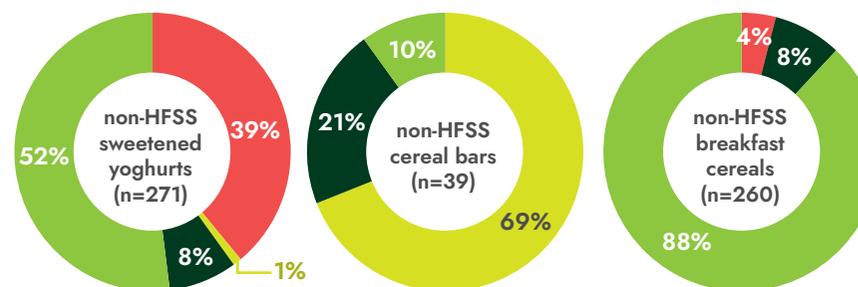
And emulsifiers were found in:

- 9% of sweetened yoghurts
- 90% of cereal bars
- 8% of breakfast cereals

(As shown in the charts, some foods contain both artificial sweeteners and emulsifiers.)

Proportion of promoted non-HFSS sweetened yoghurts, cereal bars and breakfast cereals that contain sweeteners and emulsifiers

■ Contain sweeteners ■ Contain sweeteners AND emulsifiers ■ Contain emulsifiers ■ Does not contain sweeteners or emulsifiers



These findings demonstrate that there are opportunities to strengthen existing definitions of unhealthy foods, to make sure that policies protect citizens from all the potential health impacts of food which could be harmful. One such way would be to consider strengthening the nutrient profiling model to take into consideration additional ingredients, such as sweeteners, and to ensure the NPM is regularly reviewed to take into consideration evolving evidence. Furthermore, it highlights the need for government to implement a package of policies to improve the healthiness of diets, including ensuring access to affordable, minimally processed foods - such as fruit, vegetables and staples - alongside reformulation and marketing policies. For more on ultra-processed foods, please see our investor briefing⁵.



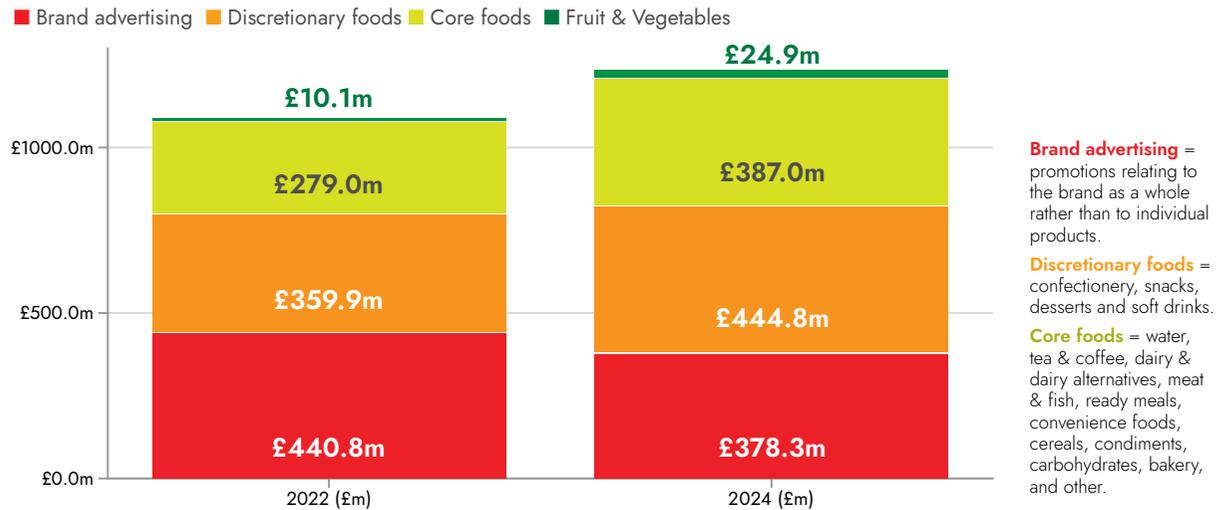
Advertising expenditure on food

Over a **third (36%)** of food and non-alcoholic drink advertising spend is on confectionery, snacks, desserts and soft drinks, compared to just **2%** on fruit and vegetables.

© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.

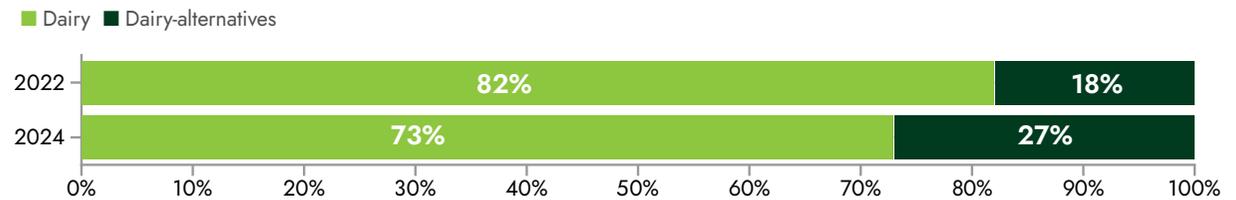


Traditional media advertising spend on different food categories



Source: Nielsen Ad Intel

Proportion of advertising spend on dairy and dairy-alternatives



Source: Nielsen Ad Intel

Food advertising in the UK remains dominated by discretionary foods (confectionery, snacks, desserts and soft drinks) that are not necessary for the body's intake of nutrients, and which are typically high in fat, salt and/or sugar. Nielsen data shows that these foods account for over a third (36%) of traditional advertising spend on food and non-alcoholic drinks (TV, outdoor, radio, cinema, direct mail and door drops). This is an increase in proportion of spend from 2022 (up from 33%) and represents an additional spend of £85 million on discretionary food and drink advertising per year, given the overall growth in food advertising spend.

Meanwhile, food and drink brand advertising (advertising that promotes a company's brand identity and values rather than an individual product) previously accounted for the greatest proportion of total spend (40% in 2022), but has fallen, now accounting for 31% of total spend.

Encouragingly, total advertising spend on fruit and vegetables has more than doubled, from £10 million in 2022 to £25 million in 2024. However, the amount spent advertising fruit and vegetables remains a tiny fraction of spend on other categories (2% of total spend in 2024 compared to 1% in 2022).

There has also been an increase in spend on advertising plant-based food and drink alternatives: 27% of traditional media spend in the dairy and alternative-dairy category was on dairy alternatives in 2024, up from 18% of the category in 2022.

While these proportions represent advertising spend on traditional media, a huge amount of food and drink advertising budgets are spent on digital and social media advertising. Indicative data on these channels from Nielsen shows a greater proportion of digital and social media food and soft drink advertising is devoted to brand advertising (37%) compared to in traditional media (31%), and a smaller proportion on discretionary foods (29% vs 36%).



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.



MAGDA RECHNIO, LIVERPOOL



Images on this page © Magda Rechnio

Hungry?

The healthier option costs nearly £1 more than 'pizza happiness' or a 'rise and shine' bacon bap. It costs £1.46 more than the double cheeseburger! Choosing the healthier "budget" option on every work day for a year could end up being anywhere from roughly £200 to £350 more.

In 21st century Britain: we should not be bombarded with junk food advertising on

the streets, in stores, on TV, online and on our phones – especially not our children.

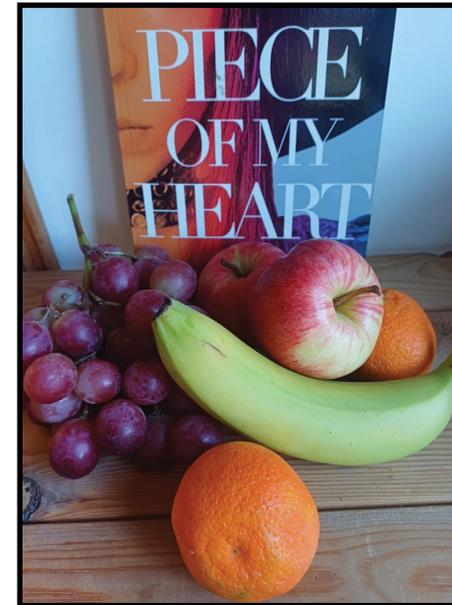
Get rid of the gap in healthy life expectancy between the richest and poorest regions by investing in healthier food for all.

Invest in Britain: help us afford and access nutritious food, alleviate pressure on the NHS and **build a better food future** for all.



CAROLINE WOOLLAM, STOCKPORT

Food Foundation Ambassador Photo Story



Packaging made so colourful and bright
 Made to look like a special delight
 This grabs your attention and the children's too
 But the sugar inside is hidden, that's true
 This really isn't affordable food
 And the sugars inside aren't good for the brood
 Where are the real healthy snacks?
 The food that's good isn't in colourful packs

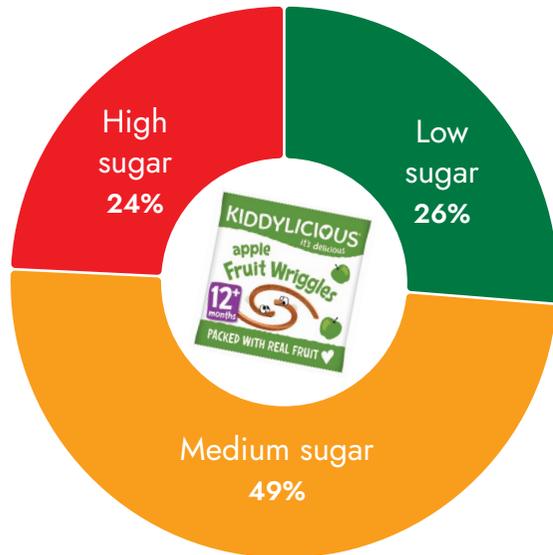
Images on this page © Caroline Woollam



Marketing of infant foods

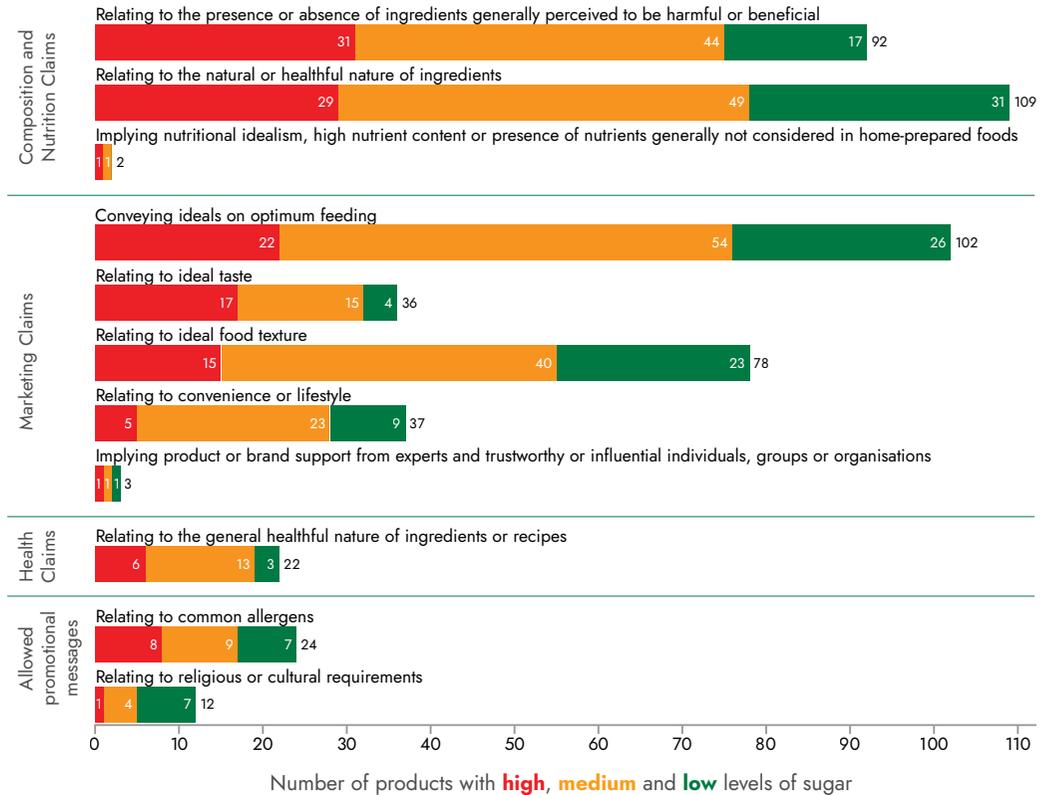
Three-quarters (74%) of the baby and toddler snacks that have front-of-pack promotional claims contain high or medium levels of sugar.

Percentage of baby and toddler snacks with a front-of-pack claim by sugar content



Source: Analysis by Action on Salt and Sugar

Types of promotional claim (according to WHO) and sugar levels in the product



A survey of snack products marketed for babies and toddlers in the UK, carried out by Action on Salt and Sugar for *Broken Plate*, identified 759 promotional claims on the front of packaging across 136 products, averaging almost six claims per product, aimed at influencing parents' purchasing decisions. According to Action on Sugar's assessment using traffic light labelling thresholds for total sugars, 24% of these products were high in sugar, 49% medium in sugar, and only 26% were low in sugar (based on adult recommendations).

Based on the World Health Organisation's (WHO) classifications of the different categories of claims on baby and toddler food products (see box), the survey identified 119 products with nutritional claims, 125 with marketing claims and 22 with health claims. (Please note: Many products display multiple claims on the front of pack and therefore the individual claims do not add up to the total). In addition, 36 of the products had 'allowed promotional messages'. WHO allows certain claims related to allergens and dietary claims. Of those identified, only 31% of those products are low in sugar.

It is significant that, 94% of all the claims on baby and toddler snacks sold in the UK would not be permitted if WHO guidance was followed, and every product analysed had at least one non-permitted claim.

WORLD HEALTH ORGANISATION (WHO) GUIDANCE ON BABY AND TODDLER FOODS

The WHO's Nutrient and Promotion Profile Model for promoting products for infants and young children aged 6–36 months states that nutrition, health and marketing claims on commercial baby and toddler foods should not be permitted, to avoid such claims undermining public health messages or confidence in home-prepared foods. WHO only allows front-of-pack claims on foods marketed to children when they relate to common allergens (such as containing or being free from gluten, dairy, nuts) or cultural and religious dietary needs (such as vegetarian, Kosher, Halal).

According to the WHO:

- **Nutrition claim** means any representation which states, suggests or implies that a food has particular nutritional properties, including but not limited to the energy value and the content of protein, fat and carbohydrates, as well as the content of vitamins and minerals.
- **Marketing claim** is defined as product promotion, distribution, selling, advertising, product public relations and information services.
- **Health claim** means any representation that states, suggests or implies that a relationship exists between a food (or a constituent of that food) and health.

Promotion is broadly interpreted to include the communication of messages that are designed to persuade or encourage the purchase or consumption of a product or raise awareness of a brand.



Commentary

A key area where government must take action to support healthy and sustainable diets is by regulating the advertising and marketing of unhealthy and less sustainable food. The metrics in this report demonstrate that the promotional environment continues to be heavily skewed towards unhealthy foods across advertising, promotions and packaging.

People’s perceptions of food are heavily influenced by the wide range of promotional strategies used by manufacturers, retailers and out-of-home businesses to make their products more appealing. While it is natural that businesses should seek higher sales by promoting their products in this way, the problem arises when their strategies push people towards less healthy and sustainable options. This advertising wall paper - in our high streets and on our screens - makes us feel that these foods are what we all eat. They help create norms, and children and young people can be disproportionately targeted and impacted. Expectations to simply exercise more self-control in the face of this promotional environment, which is designed to manipulate people’s decisions, place an unfair burden of responsibility on individuals.



given that higher exposure to advertising of foods that are high in fat, salt and/or sugar (HFSS) is associated with greater household purchases of calories and sugar⁶. The government has committed to bring in previously delayed restrictions on the promotion of HFSS foods on TV before 9pm and online⁷ in October 2025, in a move that could help in part to shift the dial towards healthier diets by curbing people’s exposure to advertising of unhealthy food and drinks.

However, a number of forms of advertising of unhealthy food and drinks would still be permitted nationally, including outdoor advertising, sports-based advertising and brand advertising, pointing to the need for an extension of national restrictions. Some progress is being seen at a local level nevertheless, with nine metropolitan

mayors recently committing to banning junk food advertising on public transport in their areas⁸, following London’s leadership on this⁹.

In contrast to the advertising of unhealthy food, **only 2% of traditional media advertising spend on food and non-alcoholic drink is on fruit and vegetables** (Metric 2, p12). While this has encouragingly risen since 2022, it remains a fraction of the amount spent promoting unhealthy products. Therefore, in parallel to restricting the promotion of unhealthy foods, greater investment is needed in boosting the promotion of healthy and more sustainable food. Veg Power’s multi-award winning vegetable marketing campaign “Eat Them To Defeat Them” has shown it works.

Secondly, price promotions by retailers continue to be skewed towards unhealthy products with our analysis finding that **over a third (37%) of supermarket promotions on food and non-alcoholic drinks are for products that are high in fat, salt and/or sugar (HFSS)** (Metric 2, p12). This onslaught of promotions for unhealthy foods is a huge challenge for citizens and has been shown to increase the calorie content of shopping baskets¹⁰. While the previous government finally enacted restrictions on the location of HFSS products in stores in 2022, restrictions on volume-based promotions (e.g. multibuys) on HFSS foods have yet to come into force (due October



Firstly, our analysis finding that **over a third (36%) of food and non-alcoholic drink advertising spend is on confectionery, snacks, deserts and soft drinks** (Metric 1, p10) is concerning



2025). Our analysis highlights the need to broaden these restrictions to also include price reduction promotions in addition to multibuy, which are currently not covered by the forthcoming restrictions.

Furthermore, there is a need to strengthen plans to monitor compliance, which has been identified as a challenge for the location restrictions already enacted¹¹ – as well as to increase promotions on core staples and more healthy foods, to encourage greater purchases of these foods.

Moreover, our State of the Food Industry Report 2024¹² found that promotions on less sustainable foods are highly prevalent: 18% of multibuy offers are on meat and dairy products compared to just 5% on fruit and vegetables.

Finally, another way that businesses make their products more appealing is by using marketing tactics that use promotional claims or greenwashing to make products appear healthier and more sustainable than they are. Therefore, greater regulation is needed to avoid misleading citizens.

This is a particularly problem in baby food, where **three-quarters (74%) of the baby and toddler snacks that have front-of-pack promotional claims contain high or medium levels of sugar.** (Metric 3, p16), despite evidence that high sugar foods can



be particularly harmful to the health of this age group¹³. Nutritional, health and marketing claims can create a misleading 'health halo' around products, potentially confusing parents when many of these foods products contain high levels of sugar¹⁴. The WHO discourages promotional claims on foods for infants and young children, as these claims idealise commercial products over unprocessed foods. The NHS advises that babies under 12 months do not need snacks. Once children reach 1 year old, healthy snacks such as vegetable sticks or slices of fruit (among others) can be introduced between meals¹⁵.

The government is due to publish voluntary guidance on the marketing, labelling and composition of commercial baby food and drink, but there are widespread calls for these to be strengthened in line with WHO recommendations and made mandatory to ensure maximum protection for families.

Overall, the combination of extensive advertising and promotions on unhealthy foods coupled with misleading health claims on commercial baby foods creates an impossible environment for individuals to navigate. Government must step in to regulate industry's influence over our decisions, implementing measures to take unhealthy foods out of the limelight and elevate healthy foods.

WHAT NEEDS TO HAPPEN

- Restrict promotions on less healthy foods and increase promotions on core staples and more healthy foods.
- Increase advertising spend on healthy foods, particularly fruit and vegetables, and decrease advertising spend on less healthy foods.
- Regulate marketing and composition of toddler and baby foods, and restrict nutrition and health claims on front of packaging.

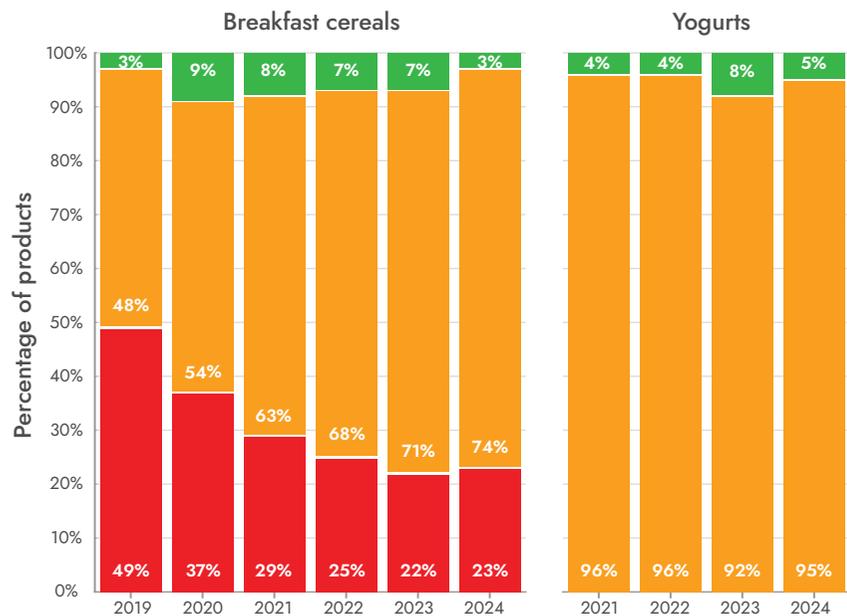




Sugar in children's food products

Only **3%** of breakfast cereals and **5%** of yogurts marketed to children are low in sugar.

Percentage of breakfast cereals and yogurts marketed to children categorised as **high**, **medium** and **low** in sugar



Source: Analysis by Action on Salt and Sugar

Analysis of Action on Salt and Sugar's latest annual survey for *Broken Plate* reveals a decline in the availability of healthy breakfast cereals and yogurts marketed to children. Only 3% of breakfast cereals (just four products) and 5% of yogurts (only three products) are classified as low in sugar, down from 7% and 8% respectively the previous year.

The availability of low sugar breakfast cereals has deteriorated year on year since 2020, showing the situation is progressing in the wrong direction.

After what looked like a positive improvement last year, the proportion of surveyed yogurts low in sugar has disappointingly deteriorated. More positively, the proportion of high sugar yogurts remains at 0%.



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.



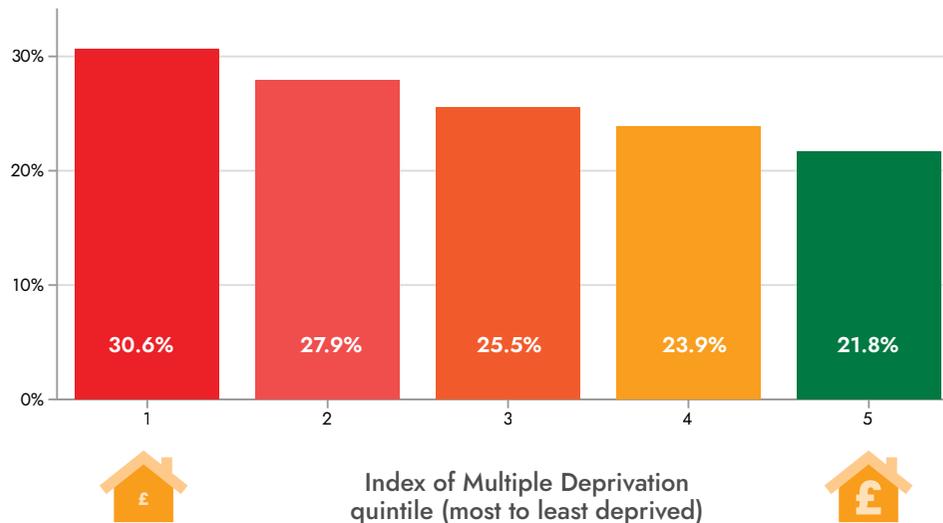
Places to buy food

A quarter (26%) of places to buy food in England are fast-food outlets, remaining unchanged for six years.

Proportion of all food outlets in England that are fast-food outlets



Percentage of all food outlets in England that are fast-food outlets by deprivation quintile



Source: Data from Ordnance Survey and analysed in collaboration with the MRC Epidemiology Unit at the University of Cambridge. © Crown copyright and database rights 2024 Ordnance Survey (100025252). This product includes data licensed from PointX © Database Right/Copyright (2024) and OS © Crown Copyright (2024). All rights reserved.

High streets and town centres continue to be dominated by typically unhealthy fast-food outlets. Our updated analysis shows a quarter of places to buy food in England were fast-food outlets in June 2024, a figure that has remained largely unchanged since *Broken Plate* began monitoring in 2018.

At the local authority level, 26 out of 326 local authorities (8%) saw an increase (defined as greater than 5%) in proportion of fast-food outlets between 2023 and 2024. A mere six local authorities (2%) saw a decrease during the period.

The proportion of fast-food outlets also remains much higher in more deprived areas. 31% of places to buy food are fast-food outlets in the most deprived fifth of areas, compared to 22% proportion in the least deprived fifth of areas.



Commentary

Improving the balance between availability of healthy and unhealthy food options is another crucial aspect of our food environments that government must address to enhance the health of the nation. The ease with which a person can access food influences what they eat. As such, ensuring that healthy options are readily available in settings where people purchase and eat food – whether on high streets, in supermarkets, or in school or work canteens – has profound implications for both public health and social equity.

A clear example of the high availability of unhealthy food is the overwhelming presence of fast-food outlets in many neighbourhoods. Our analysis shows that **a quarter (26%) of all food outlets in England are fast-food outlets, rising to nearly a third in the most deprived areas (Metric 5, p21)**. The convenience of fast food, coupled with its widespread availability, often makes it the default choice for busy families with limited time and resources. The proportion of food consumed out of home accounted for by takeaways and fast-food outlets increased from around a third (31%) before the pandemic in 2019, to almost half (47%) in 2021¹⁶. This is important because fast food has been directly linked to rising rates of food-related ill-health, including diabetes and cardiovascular disease¹⁷. Furthermore, the out of home sector typically features a high proportion of foods with



high environmental footprint on their menus. Our *State of the Food Industry 2024* report found that across the 63 businesses included in the analysis, only 33% didn't contain meat or fish.

Despite local authorities having the power to restrict the opening of new unhealthy food outlets on public health grounds, only half in England and Wales use planning guidance to limit the proliferation of fast-food establishments¹⁸. Even when such restrictions exist, they are often ineffective as some major fast-food chains are classified as restaurants and therefore exempt from these policies. The lack of progress in the past six years highlights that strong government intervention is needed.

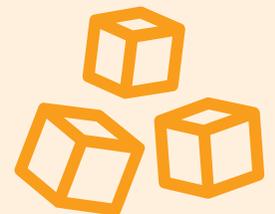
A recent analysis of the impact of Gateshead Council's policy to restrict new fast-food outlets¹⁹ revealed that in the areas with the highest concentration of fast-food outlets there was a statistically significant 4.8% reduction in the prevalence of childhood overweight and obesity. This suggests that restricting fast-food outlets may help reduce the prevalence of childhood obesity in highly affected communities.

Positively, a recent update to the National Planning Policy Framework now requires local planning authorities to refuse applications for hot food takeaways and fast-food outlets within walking distance of schools and other

places where children congregate²⁰. This offers an opportunity to shift the default to *refusing* approval for opening new fast-food takeaways near schools or in areas of high deprivation, and to give clearer guidance to local authorities about using their planning powers to increase the number of healthy food options and decrease the number of unhealthy ones, with public health at the centre of all decisions.

At the same time, greater attention is urgently needed around the rapidly rising use of takeaway food delivery apps, given that around a quarter of calories accounted for by fast food were ordered online in 2021²¹. These apps involve highly predatory marketing strategies²², and their use is positively associated with living with obesity²³.

Another serious concern regarding availability is the healthiness of the food on the supermarket shelves, particularly products which are targeting children. For instance, we found **only 3% of breakfast cereals and 5% of yogurts marketed to children are low in sugar (Metric 4, p22)**, leaving very few healthy options available to parents, regardless of their desire to feed their children well. This is particularly troubling given that many parents purchase these products under the false assumption that they are healthy, not expecting the high hidden sugar content in these everyday foods.



Government intervention to help incentivise businesses to improve their product portfolios is critical to making healthier and more sustainable options more readily available. A starting point would be greater transparency from food businesses regarding the nutritional quality and sustainability of their product portfolio. Manufacturers and retailers must be more transparent about their sales of food which is unhealthy, or carries a large environmental footprint, particularly those marketed to children. The Food Data Transparency Partnership²⁴ provides an opportunity for businesses to demonstrate commitment to improve their practices in this area and should require mandatory reporting of agreed metrics for all businesses. Furthermore, by building on the success of the Soft Drinks Industry Levy and extending the levy to other food categories, there would be a clear fiscal incentive for businesses to reformulate less healthy foods and make healthier options more readily available, while simultaneously raising revenue that can be invested back into programmes for children's health.

These two metrics represent a broader trend seen across a range of settings and products that create our food environments: unhealthy options are too readily available, while healthier choices often require extra effort to find. To reverse this pattern, food environments need to be reshaped so that healthy and more sustainable choices are the easiest and most accessible options, making them the default rather than something people must actively seek out.



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license

WHAT NEEDS TO HAPPEN

- Use local authority planning powers to prevent further proliferation of unhealthy fast-food outlets.
- Create better incentives for reformulation to help shift the balance towards more healthy food.
- Increase transparency around the types of food businesses sell, with mandatory targets for boosting sales of healthy and sustainable foods.





MAGDA RECHNIO, LIVERPOOL

Food Foundation Ambassador Photo Story



Images on this page © Magda Rechnio

In 21st century Liverpool: affordable fresh fruit and vegetables in shops should not be an **exception**.

In 21st century Liverpool: **spoiled** and **mouldy** fruit and vegetables in shops shouldn't be a norm (they are near me).

In 21st century Liverpool: the closest greengrocers shouldn't be 2.2 miles away from home.

In 21st century Liverpool: everyone should be able to afford to buy vegetables and fruit from **the greengrocers**.

In 21st century Liverpool: we should not be teased with **junk food advertising** 'delicious new choices' and free junk food (buy one get one free) which are high in fat, sugar and salt.

In 21st century Liverpool: **junk food** should not be cheaper and easier to obtain than nutritious food.

Make healthier options more appealing, and ban junk food advertising in physical and online environments.



DOMINIC WATTERS, KENT

Food Foundation Ambassador Photo Story

The Four Pillars of Food Insecurity...
...by Dominic Watters, Kent

'We live in the most deprived blocks of this council estate, where our access to nutrition is overlooked.'



'The shop on the estate only sells the lowest quality of ultra-processed food, making this a food desert in the Garden of England.'



'This is what fuel poverty looks like – regularly we don't have enough gas or electric to cook with raw ingredients.'



'This is where the bus never shows up. It's hard to make it out of here.'



Images on this page © Dominic Watters



Cost of more sustainable options

More sustainable, plant-based milk alternatives in supermarkets are on average **55%** more expensive than dairy milk.



Average price per litre of **dairy** and **plant-based milk** alternative products



Breakdown of average price per litre of dairy milk and plant-based milk alternative products



Source: Data collected from Aldi, Tesco and Waitrose (May 2022 and September 2024). Dairy milk price per litre is based on 2-pint bottles of fresh semi-skimmed cow's milk. Plant-based alternative milk price is an average of all 1 litre almond, oat, rice and soya milk alternatives.

The Food Foundation analysis of plant-based milk alternative products found that on average they are 55% more expensive than fresh dairy milk (£1.92/litre versus £1.24/ litre). Soya remains the cheapest alternative milk but is still on average 26% more expensive than dairy milk.

Plant-based milk alternatives have increased on average by 31p per litre since last assessed in *The Broken Plate 2022*, compared to dairy milk which has increased by 24p per litre. However, the percentage increase for dairy milk over the two-year period was higher (23% compared to 19% for alternative milks), meaning that the average price gap between plant-based milks and dairy milk has decreased slightly (from alternatives costing 60% more than dairy in 2022). The alternative milk type with the greatest increase in average price between 2022 and 2024 was almond, increasing by 35%. Soya and oat milk alternatives, meanwhile, increased by 19% and 12% respectively.

While plant-based milk alternatives are on average more expensive than dairy milk, the whole category has grown – with over a quarter of all UK households buying a plant-based milk product more than once in 2023²⁵ – which means that there is now a greater range of products available at different price points. Encouragingly, in addition to more premium brands, there are also a growing number of more affordable own-brand product lines. Our survey found that own-brand alternative milks can be comparable in price or even cheaper than dairy milk. The cheapest 25% of plant-based milks are on average £1.18 per litre which is 6p cheaper than the average price of fresh dairy.

Overall, all plant-based alternatives are more environmentally sustainable than dairy milk. However, if not fortified, they lack key micronutrients found in dairy milk; in particular, cow's milk is currently an important contributor to intakes of iodine and calcium in UK diets. Concerns have been raised about inconsistent levels of micronutrient fortification between individual products²⁶, discussed further in our deep-dive into plant-based milk alternatives²⁷.





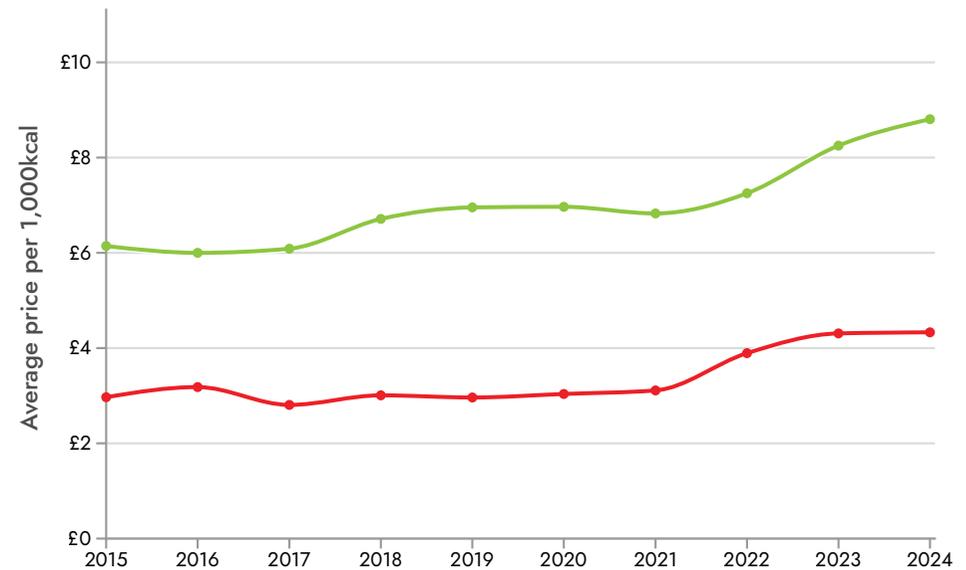
Cost of healthy food

On average, healthier foods are more than **twice** as expensive per calorie as less healthy foods, with healthier food increasing in price at **twice** the rate in the past two years.



Average price of food and drink by Nutrient Profile Modelling score category

■ More healthy
■ Less healthy



Source: MRC Epidemiology Unit (University of Cambridge) analysis of the Consumer Price Index, ONS

Please note: due to methodological changes, findings are not directly comparable to previous reports.

Analysis of the Office for National Statistics' Consumer Price Index conducted by the University of Cambridge shows a stark disparity in the cost of healthy and less healthy foods, as defined by the government's Nutrient Profile Model. In 2024, more healthy foods cost more than twice as much as less healthy options, averaging £8.80 per 1,000 kcal compared to £4.30 for less healthy foods.

While this pattern has persisted for at least the past decade, the gap has widened in the past two years with the price of more healthy foods rising by 21% between 2022 and 2024, while less healthy foods saw an increase of 11%.



DAN WHITE, FAREHAM

Food Foundation Ambassador Photo Story

Poverty is nothing new for the Disabled community. Poverty has always been a constant for many who have a disability. Stereotypes, low benefits, societal neglect, political disdain, discrimination – poverty is nothing new.

And food poverty is part of this. Right now, many Disabled people are skipping meals because households with a Disabled person are more likely to experience food insecurity than those without.

Food insecurity for Disabled people means being unable to afford food and as a result having smaller meals than usual or skipping meals; being hungry but not eating because of food costs; or not eating for a whole day. For someone with complex health needs, this can be catastrophic. Pushing people back to low paid, precarious work is not a route out of poverty.

Confidence and pride are finally broken when the only option is the foodbank.

For Disabled people, foodbanks are often not able to meet their needs at all despite their

best efforts. There can be physical barriers to access, where they cannot travel to a foodbank, or even barriers to physically access the foodbank. Foodbanks are often unable to cater to specific dietary requirements which are more common among Disabled people, often resulting in a worsening of people's health.

So, the circle of poverty around food, of access to food, of financial ability to buy food, goes around and around.

Foodbanks are not the solution. Targeted support and co-operation with the community is. The alternative is a humanitarian crisis on our doorstep.

'This image shows the brutal reality of disability food poverty. It shows that poverty has always been a constant for the Disabled community. The broken chair represents broken spirit, broken promises from the political system to improve their lives for the better. The shelves are stacked, but for someone with a physical disability, always too high, too far out of reach, much like the better life always promised... but never delivered. Never, ever, ever delivered.'



Image on this page © Dan White



Affordability of a healthy diet

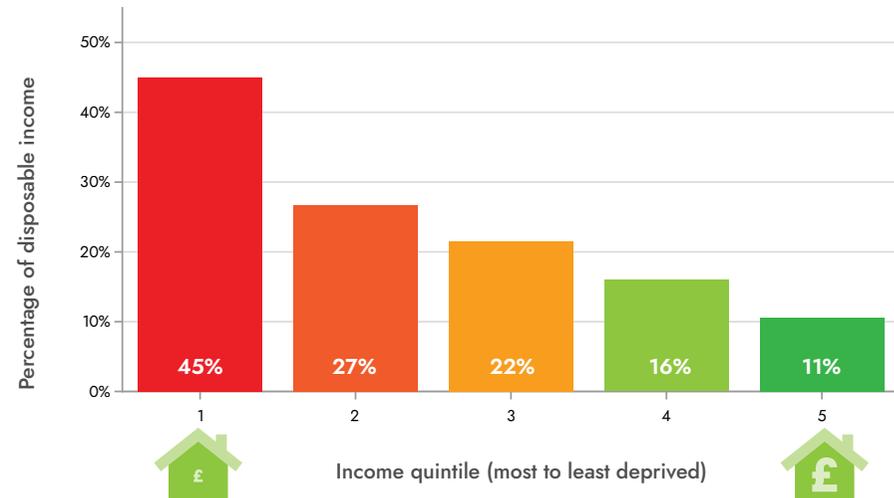
In order to afford the government-recommended healthy diet, the most deprived fifth of the population would need to spend **45%** of their disposable income on food, rising to **70%** for those households with children.

This metric highlights that for many people a healthy diet is financially out of reach. The most deprived fifth of UK households would need to spend an unrealistic 45% of their disposable income (after housing costs) to afford the Eatwell Guide – the government’s official guidance on the types and proportions of food needed for a healthy, nutritious diet. While this has decreased from the peak of the cost-of-living crisis (50% in 2021–22), it remains higher than the previous year’s figure of 43% (2020–21).

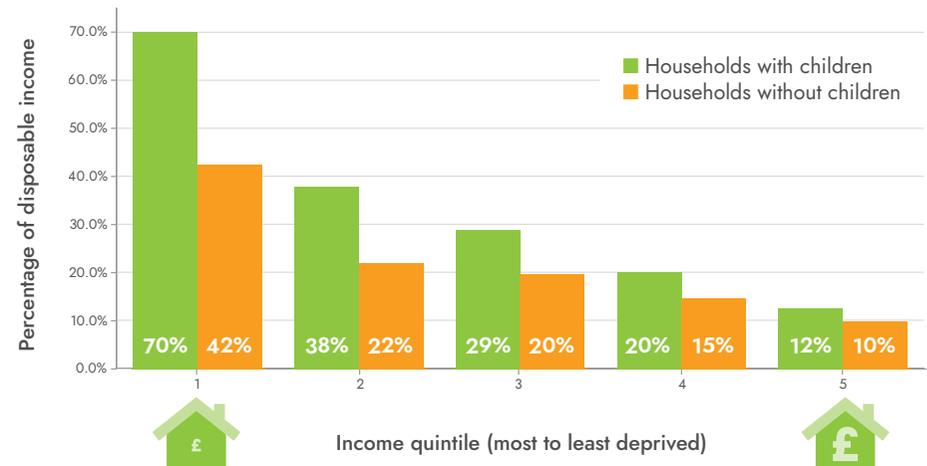
There is a stark disparity in the proportion of disposable income that different income groups must spend to afford the Eatwell Guide, with the least deprived fifth of households only needing to spend 11%.

Furthermore, the heightened struggle for families with children is also evident: for households with children in the poorest fifth of the population, 70% of their disposable income would be needed to achieve a healthy diet. For more, read our blog²⁷.

Percentage of disposable income required to afford the Eatwell Guide by income quintile



Percentage of disposable income needed to afford the Eatwell Guide for households with and without children

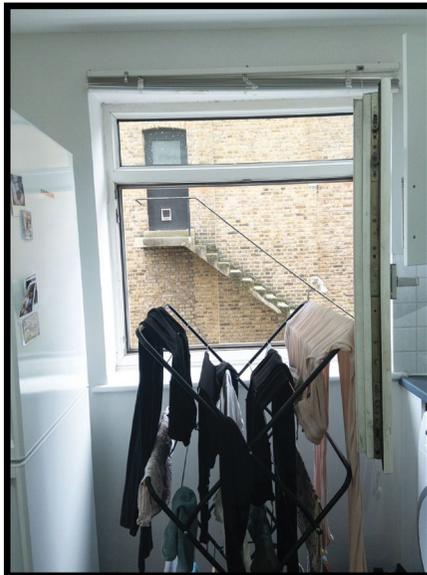


Source: FoodDB, University of Oxford; London School of Hygiene & Tropical Medicine secondary analysis of the Family Resources Survey 2022-23.



EMMA LOFFLER, LONDON

Food Foundation Ambassador Photo Story



Images on this page © Emma Loffler

Food issues intersect with poverty issues, which relate to housing, space and the complete non-recognition of unpaid domestic labour. This government and former governments have put an emphasis on 'work' above all else, whilst completely failing to recognise the time and energy that goes into preparing healthy food. Forcing single parents back to work has a detrimental effect on their ability to provide for their children.

Unpaid domestic labour is the backbone of society and provides for us all. If we want to move towards a healthy and sustainable diet and future for our children, we need to recognise this and ensure that mothers are adequately provided for when it comes to money and housing. At the moment, the housing crisis and the complete stigmatisation of the benefits system means providing adequately for our children is a pipe dream.

Commentary

These metrics clearly demonstrate that the affordability of healthy and sustainable food persists as being one of the most significant factors which government needs to address to improve what people across the nation eat, particularly for those with limited budgets.

Food insecurity remains highly prevalent in the UK. The Food Foundation's Food Insecurity Tracker²⁹ shows that 1 in 7 households are food insecure, affecting approximately 7 million adults and 3 million children across the UK. The demand for emergency food support has substantially risen in recent years, with Trussell recording a 94% increase in the need for food bank parcels over the last five years³⁰ and nearly three-quarters of IFAN (Independent Food Aid Network) food banks have seen an increase in need comparing November 2023–January 2024 to the same period a year before³¹. The serious need to address this was recognised by Labour, committing to 'end mass dependence on emergency food parcels' in their manifesto.

Addressing the affordability of a healthy diet is pivotal to achieving this ambition. Affordability is influenced by families' income and the price of food, as well as the cost of other essentials. Through the crisis, many household incomes failed to keep pace with the rapidly rising cost of essentials³², with families often sacrificing food to cope with meeting other financial demands. While inflation has fallen sharply since the peak of the cost-of-living crisis, this does not mean that prices are falling, merely that they are rising less quickly³³.

For many, the crisis is far from over. Indeed, the analysis in this report finds **the most deprived households would need to spend 45% of their disposable income on food to afford the government-recommended healthy diet (Metric 8, p30)**. This illustrates that the living and minimum wage, as well as social security, are not providing people in the lowest income brackets with sufficient income to afford an adequate diet, exposing them to poor quality diets and the health consequences that brings. Moreover, the data shows a significantly worse picture for families with children (almost 1 in 5 experiencing food insecurity, and the most deprived households needing to allocate 70% of their disposable income to afford the Eatwell Guide). Therefore, the government's ministerial Child Poverty Taskforce must consider what measures are specifically needed to improve access to affordable, healthy food for low income families to protect children from the harms of inadequate nutrition.

Food insecurity has significant consequences for health and, therefore, addressing affordability barriers to a healthy diet is also essential for Labour to deliver on their ambition to 'create the healthiest generation of children ever'. Our analysis finds that **healthier food options are on average**



twice as expensive per calorie as less healthy options (Metric 7, p28), putting them financially out of reach for many low income families and making them a less appealing option for those with more means.

Moreover, the price of healthier foods has increased more quickly – by 21% over the past two years compared to a 11% increase for less healthy foods. This sharp rise exacerbates the struggles of families already grappling with financial insecurity, making it increasingly harder for them to afford an adequate diet. The impact of this was seen in a Food Foundation survey revealing that 60% of households experiencing food insecurity reported reducing their purchases of fruit, 44% cut back on vegetables, and 59% on fish³⁴.

A similar issue is seen with the price of more sustainable options. Given the importance of price in driving food choice, the price premium for many more sustainable products is an obstacle to their consumption. While diets can be changed to reduce climate impacts³⁵, more sustainable alternatives to meat and dairy often come with a higher price tag, creating a barrier to wider use. For example, plant-based dairy alternatives typically generate fewer greenhouse gases, use less water and require considerably less land than dairy milk³⁶. However, **more sustainable, plant-based milk alternatives for home consumption are on average 55% more expensive than dairy milk (Metric 6, p26)** (£1.92/litre versus £1.24/litre). In the out-of-home sector, citizens are often



charged extra to swap dairy for plant-based milk alternatives in their drinks. Encouragingly, the gap between average prices for plant-based milks and dairy milk has fallen slightly, and more affordable alternative milks are available for home consumption.



Yet, some affordable alternative milks are generally less widely available, and do not currently receive the visibility of more expensive, heavily branded product lines. It is important to ensure that both the availability and visibility of these more affordable sustainable alternatives increase, so that people can access them in shops of all sizes.

While all plant-based milk alternatives have a lower environmental impact compared to dairy milk, not all are nutritionally comparable. Minimum nutritional composition requirements are needed to ensure that these more sustainable alternatives consistently deliver on health as well as on the environment.

All these challenges must be solved to ensure that everyone in the UK, regardless of their background, can afford a healthy and sustainable diet. Key steps towards this include adjusting wages and benefit levels to reflect the cost of healthy and sustainable diets, as well as developing fiscal policies to rebalance the cost of healthy and sustainable options.



WHAT NEEDS TO HAPPEN

- Ensure everyone has sufficient income to afford to eat a healthy and sustainable diet.
- Rebalance the cost of food so healthy and sustainable options are the most affordable.





© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.

OUTCOME METRICS



Diet quality



P36
Nutritious
food consumption



Environment Outcomes



P40
Greenhouse gas
emissions from
the food system



Health Outcomes



P44
Children's
weight



P46
Diabetes-
related
amputations



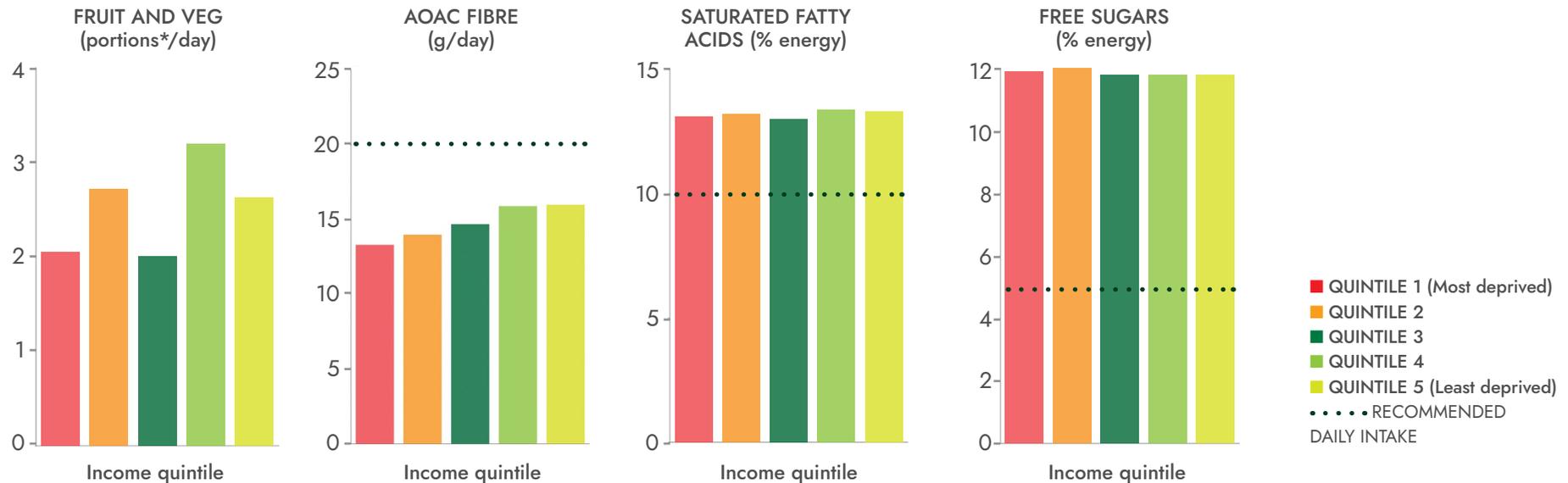
P47
Dental
decay



Nutritious food consumption

On average, children consume **less than half** the recommended amount of fruit and vegetables but **over twice** the recommended amount of sugar.

Nutritional intake among children by quintile of deprivation



Source: Analysis of the National Diet and Nutrition Survey (Year 9 to 11)
 Data on fruit and veg are for children aged 12-18 years old. All other data are for children aged 1.5-18 years old.

*1 portion = 80g. Data for fruit and veg consumption is for children aged 12-18 years old.

Analysis of the latest National Diet and Nutrition Survey shows children across all income groups are consuming significantly lower amounts of healthy foods, and significantly more unhealthy foods than recommended for good health. On average, children aged 12-18 years old consume less than half of the recommended five portions of fruit and vegetables per day (2.4 portions/day based on a portion size of 80g) and more than double the recommended daily allowance of free sugars, accounting for 11.8% of total daily calorie intake on average compared to the recommended maximum of 5%. The percentage of calories from saturated fat also exceeds the recommended daily maximum of 10%, with an average intake across all children of 13.1%.

There is a strong income gradient to the underconsumption of healthy foods. Children from the most deprived income quintile consume 20% less fruit and vegetables than the least deprived income quintile (2.1 portions/day compared to 2.6 portions/day respectively, based on adult portion sizes of 80g). While consumption of fibre is also well below the recommended daily intake for all groups, the most deprived income quintile consumes 17% less than the least deprived quintile.



Commentary

The poor nutritional quality of children’s diets in the UK should be a major concern for the government. Our analysis indicates that children are consuming less than the recommended daily amount of many healthy food groups, while at the same time overconsuming nutrients such as free sugars and saturated fat. Indeed, **on average, children consume less than half the recommended amount of fruit and veg but over twice the recommended amount of sugar (Metric 9, p36).**



There is a stark income gradient for several healthy food groups and nutrients, including fruit and vegetables and fibre consumption, which are all significantly lower in the most deprived groups. This is concerning as fruit and vegetables contain important vitamins and minerals and dietary fibre. Dietary fibre has multiple health benefits including improving digestion and increasing feelings of satiety after eating, as well as reducing the risk of chronic conditions such as heart disease, stroke, type 2 diabetes and bowel cancer in adulthood³⁸.

Dietary patterns established in childhood typically continue into adulthood, and also increase the risk of early precursors to these diseases – for example, adverse blood lipids, hypertension and hyperglycaemia. While the poorest children have the lowest quality diets, it is worth noting that all income groups consume significantly less

of these important healthy food groups and nutrients than is recommended.

Children across the income spectrum also consume significantly more unhealthy nutrients like sugar and saturated fat than recommended. High saturated fat intake is linked to heart disease, stroke and certain cancers in adults³⁹. Excessive sugar intake is associated with obesity and type 2 diabetes, and is the leading cause of dental cavities in the UK⁴⁰.

The affordability, availability and appeal dimensions of the food environment discussed in this report illustrate some of the key factors which ultimately shape the quality of diets. As the metrics have shown, healthy and sustainable foods are typically less affordable and less readily available than unhealthy foods, as well as less promoted and therefore often less appealing. The result is that people in the UK continue to consume less of the healthy foods that nourish the body, and more of the unhealthy foods that are harmful.

Dietary intake has a critical impact on health outcomes across the population and is particularly important for young children as their brains and bodies grow, and as they establish lifelong food habits and preferences. Bold actions are needed if Labour are to succeed in their ambition of raising the healthiest generation of children ever in Britain.





GLORY OMOAKA, GLASGOW

Food Foundation Ambassador Photo Story



Images on this page © Glory Omoaka

The lack of culturally appropriate food in schools influences dietary behaviour. I wanted to show what a healthy food environment looks like through my photos: when culture meets nutrition.

When these healthy choices are unavailable, unaffordable, inaccessible and unappetising, people will go for food lower in nutritional value. Children skip lunch at school because the offering doesn't

align with their cultural needs. This will hinder their learning and development.

Policymakers can create a fairer UK by fostering a healthier food environment. A government that supports culturally appropriate Free School Meals fosters inclusivity, respect for diversity, and better nutrition for low-income families. I also want to see the government support communities with grants that

fund food education and allow people to grow and cook their own food. This is not just about diet – it's about cultural diversity through food, which can also educate people, especially children, about different cultures and skills.

We want thriving and cohesive communities, and this can only happen when we include everyone.

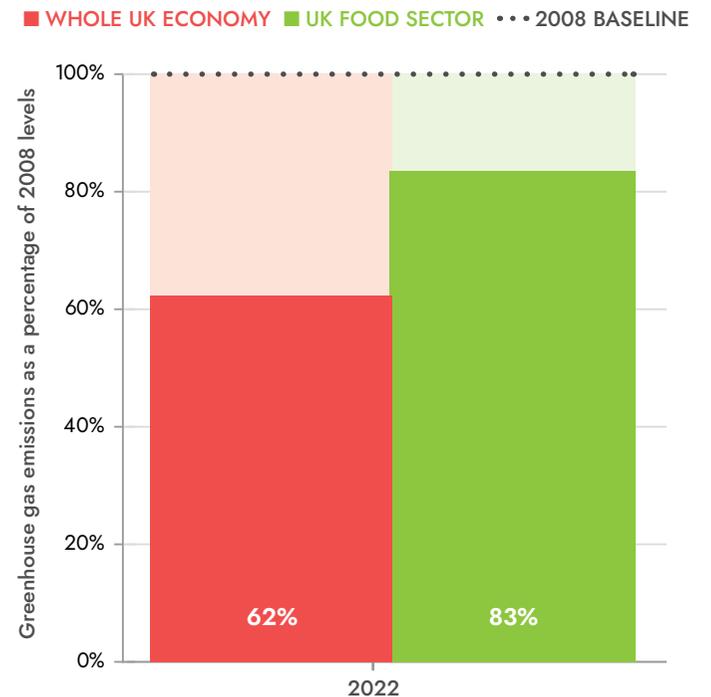


Greenhouse gas emissions from the food system

While UK emissions for the whole economy fell by **38%** between 2008 and 2022, emissions from the food system fell by just **17%** over the same period of time.

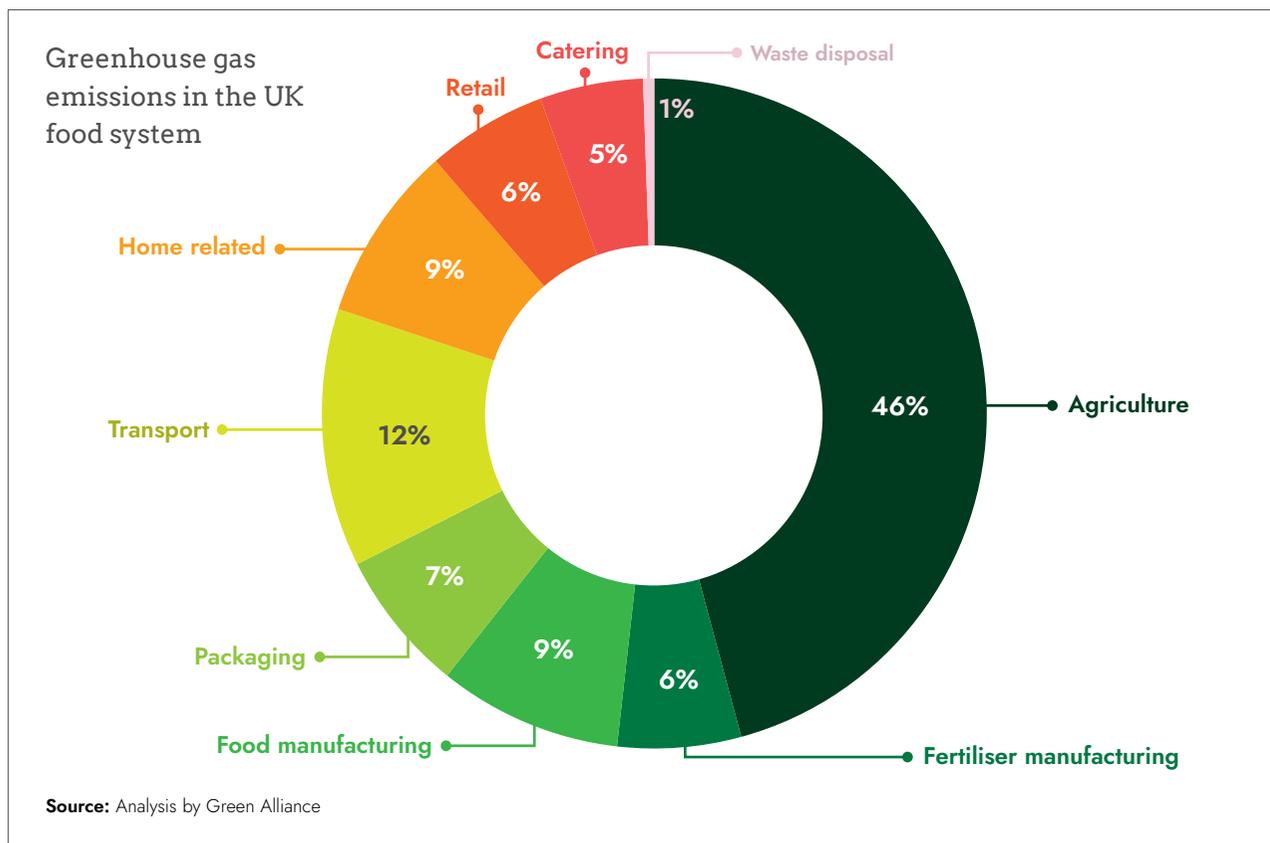


Comparison of domestic greenhouse gas emissions from whole UK economy and food sector



Source: Analysis by Green Alliance

Index: 2008=100%



Between 2008 (the baseline for this analysis) and 2022, greenhouse gas emissions in the UK across the whole economy fell by 38%. However, the food sector has lagged behind, achieving only a 17% reduction from baseline over the same period, indicating that far greater action is needed to reduce emissions from the food system to prevent further climate change.

Some reductions in food sector emissions may be attributed to spillovers from other sectors, such as more efficient appliances and increased renewable energy use, not cleaner farming or eating⁴¹. Emissions from agriculture, the largest contributor within the food sector, have decreased by just 2%, and yet accounted for 46% of total UK food emissions in 2022, making it one of the most important targets for reducing our greenhouse gas emissions.



Commentary

Our food system is severely damaging the planet, contributing heavily to both greenhouse gas emissions and biodiversity loss.

Globally, the food system is the second-largest source of greenhouse gas emissions after the energy sector, accounting for a third of emissions⁴². This highlights the major role that our food system plays in driving climate change. If the UK is serious about its commitments under the Paris Agreement⁴³ to hold the increase in the global average temperature to well below 2°C, transforming the way we produce, process and consume food is essential.

In the UK, emissions from the food system account for 19% of our domestic greenhouse gas emissions, rising to nearly 30% when emissions from imports are included. Despite this, there is no acknowledgement of the need for dietary changes in the government's Net Zero strategy. **While emissions across the UK economy decreased by 38% between 2008 and 2022, the food system achieved only a 17% reduction in the same period (Metric 10, p40)**. These trends suggest that the food system is falling behind in decarbonisation, underscoring the need for systemic change.

In addition to its impact on climate change, the food system is a leading cause of biodiversity loss. Industrial food production and agricultural practices can lead to habitat



destruction and land use changes (also the biggest driver of food system emissions⁴⁴). Along with other intensive practices, these can harm wildlife, damage natural ecosystems and accelerate species extinctions. UK diets, especially the consumption of ruminant meats like beef and lamb, are directly linked to increased extinction risks for numerous species⁴⁵.

Analysis by the Mandala Research Consortium into the impact of land use on approximately 30,000 vertebrate species found that while current UK diets are putting species at risk of becoming extinct, shifting to plant-based diets could reduce the projected number of extinctions linked to current dietary habits by 58% (unpublished research shared with The Food Foundation). Furthermore, the analysis found that 92% of the impact of UK diets on species extinction occurs overseas due to the high volume of animal products that are

imported to the UK from other countries. For example, 25% of our lamb and 5% of our beef are produced in Australia and New Zealand⁴⁶. This increases the risk of species extinction linked to UK diets because in those countries ruminant production is fairly concentrated in areas with high biodiversity, and many of the animal species subsequently at risk exist only in that part of the world. Ensuring post-Brexit trade deals do not lead to increased imports of foods that have a high impact on biodiversity, such as meat, is therefore essential to avoid further exacerbating environmental damage.

Addressing these environmental impacts of our food system is crucial if the government is to meet its commitments to cut greenhouse gas emissions, protect 30% of UK land by 2030, halt wildlife decline by 2030^{47,48} and forge a global deal on nature conservation^{49,50}. Furthermore, climate change and biodiversity loss both pose serious risks to food and nutrition security, as well as to the economy, by increasing extreme weather events and reducing harvests^{51,52,53}.

To create a more environmentally sustainable food system, food environments should enable people to shift their diets towards increased consumption of minimally processed, plant-based, alternatives such as vegetables and legumes. These foods offer benefits for both sustainability and health⁵⁴. Achieving this requires making minimally processed, plant-based options more affordable, accessible and appealing to everyone.



WENA ISENAME, EDINBURGH

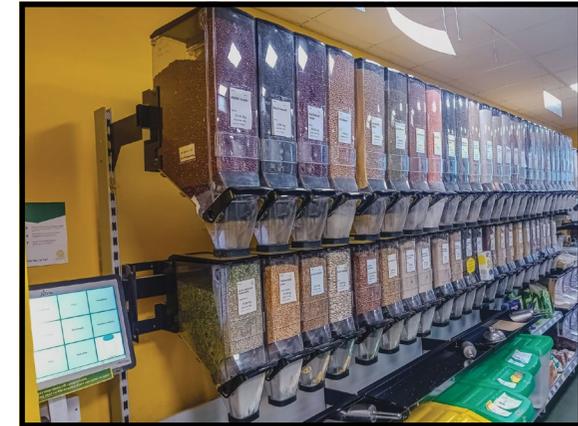
Food Foundation Ambassador Photo Story

**Decision:**

On one side you have food insecurity depicted as a bare and dry tree, while on the other, a luscious thriving tree depicts a society where consumers, our health and environment are prioritized. The building behind the trees signifies the closed walls of the government, making decisions for us. Their eyes are open and yet we are not seen. The cars on the road signify us: knocking on the doors of the government, saying 'let us in, we deserve a seat at the table'.

**Choices:**

When it comes to the basic necessities of life – including food – the government, businesses and postcodes decide for us. The three apples signify this reality: the whole apple signifies big food corporations who decide on procurement, supply and demand; the apple with a small bite signifies the government who makes the choices of affordability and availability; and the threadbare apple signifies the consumers who suffer the fate of the choices.

**Measurement:**

'Eat, shop according to your need, avoid waste' – an ideal and appealing future, and unaffordable and unavailable present.

Images on this page © Wena Isemane



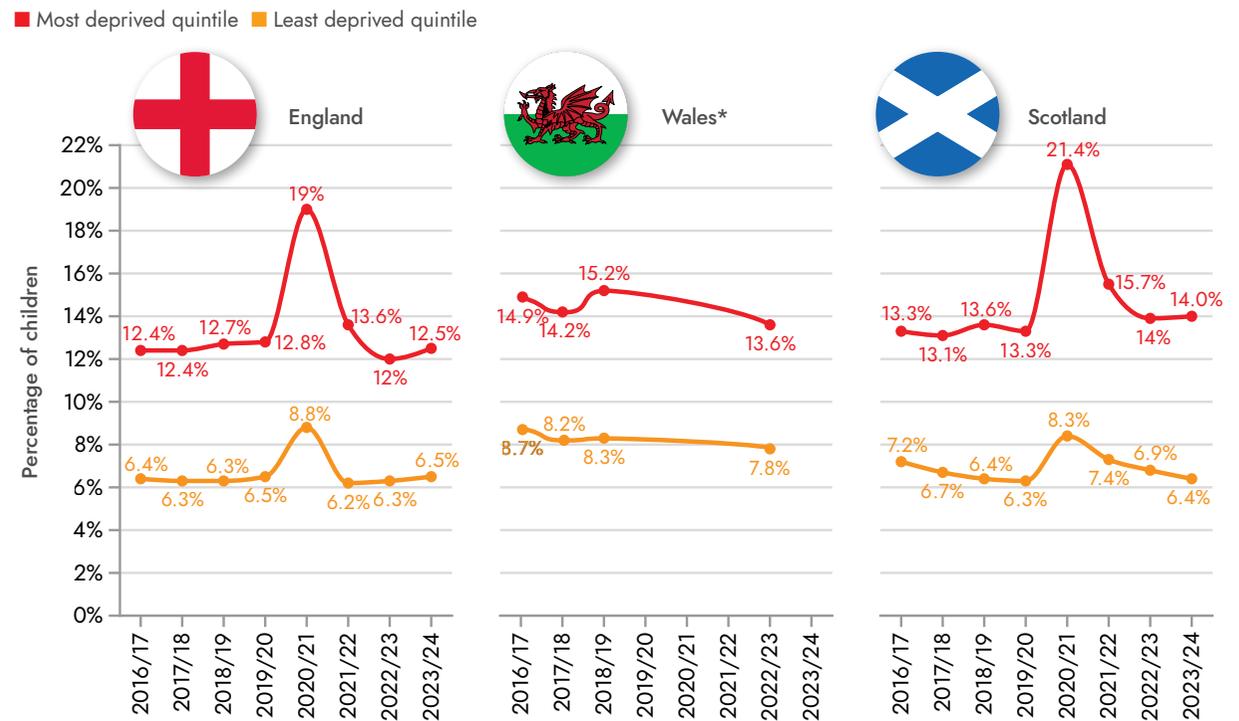
Children's weight

Children in the most deprived fifth of the population are nearly **twice** as likely to be living with obesity as those in the least deprived fifth by their first year of school.



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.

Percentage of children living with obesity in their first year at school in the most and least deprived neighbourhoods



Source: NHS Digital, Public Health Scotland, Public Health Wales NHS Trust

*Due to insufficient data in Wales for the 2019/20 official statistics report and limited data for the 2020/21 and 2021/22 years, a data gap remains within those years.

The most recent annual government data on childhood weight shows persistent disparities in obesity rates among children by their first year of school. In England, approximately 12.5% of children from the most deprived groups are living with obesity, compared to 13.6% in Wales and 14.0% in Scotland. In contrast, obesity rates among children from the least deprived fifth of the population are 6.5% in England, 7.8% in Wales, and 6.4% in Scotland. This means that children from the most deprived groups are nearly twice as likely to be living with obesity by the time they start school.

Although the prevalence of childhood overweight and obesity has declined from the peak levels observed during the Covid-19 pandemic, levels remain high across all socio-economic groups.



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.

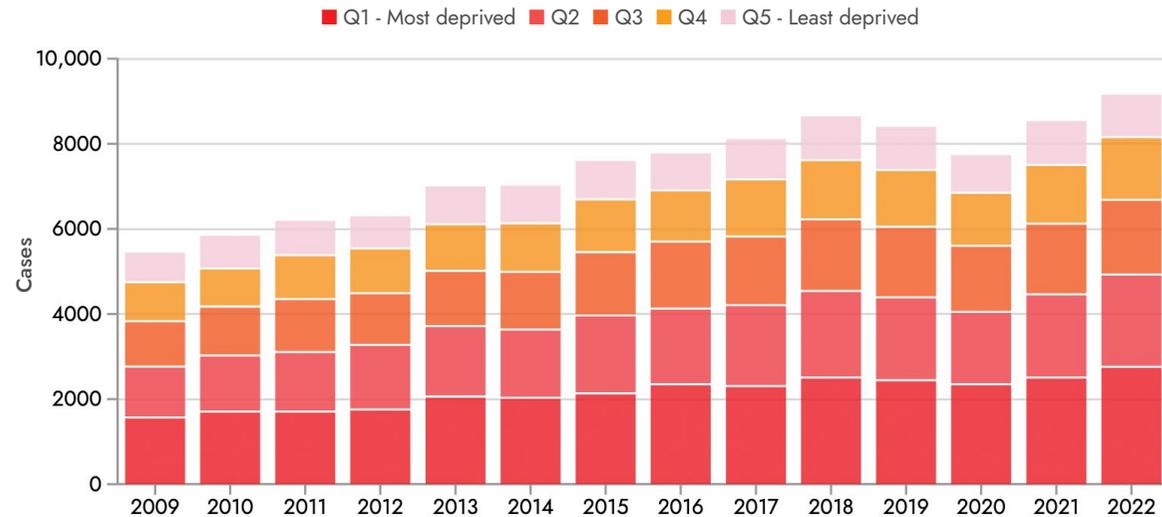


Diabetes-related amputations

Diabetes-related lower-limb amputations have increased by **68%** since 2009.



Diabetes related lower-limb amputations in England and Wales by deprivation quintile



Source: National Diabetes Audit Complications and Mortality Outcomes dashboard. Includes type 1 and type 2 diabetes-related major and minor amputations.

Data from the National Diabetes Audit shows a significant increase in cases of lower-limb amputation, rising 68% between 2009 and 2022, when a total of 9,155 cases were recorded in England and Wales.

Obesity is one of the main causes of type 2 diabetes⁵⁵, and lower-limb amputations are one of its severe chronic complications⁵⁶. Damage to blood vessels and nerves caused by the body's inability to regulate glucose levels in the blood can result in tissue death and infections over

time, which can ultimately require amputation.

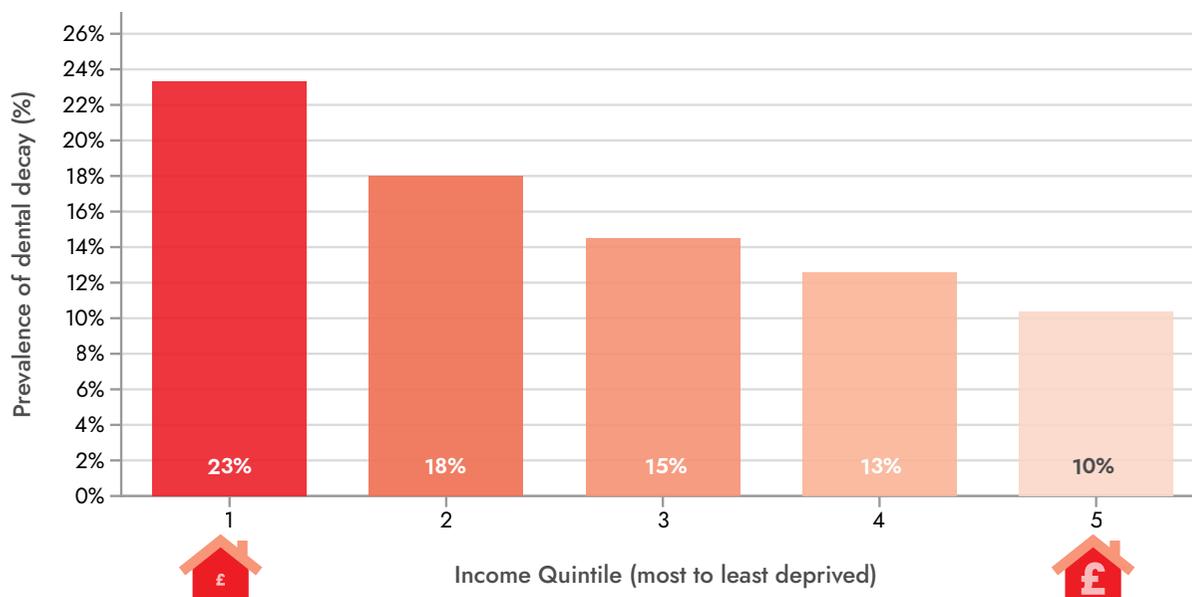
Deprived groups are much more likely to be affected by type 2 diabetes, and subsequently to experience a lower-limb amputation. People with diabetes in the most deprived quintile were almost three times more likely to experience a lower-limb amputation than the least deprived quintile in 2022 (2,760 cases in the poorest fifth of the population compared to 1,000 cases in the most well off fifth).



Children's dental decay

Children in the most deprived fifth of the population are more than **twice** as likely to have tooth decay in their permanent teeth compared to those in the least deprived by their last year of primary school.

Prevalence of dental decay in permanent (adult) teeth among children in the last year of primary school by income quintile



Source: Oral health survey of children in Year 6 2023, OHID

The Office for Health Improvement and Disparities' Oral Health Survey found that 16% of children in their last year of primary school in England have experienced tooth decay in their permanent (adult) teeth. Furthermore, there is an inequality gradient whereby children from the most deprived areas are more than twice as likely to have experienced tooth decay (23%) compared to those in the least deprived areas (10%)⁵⁷.

The Hospital Episodes Statistics for 2022-2023 provided further evidence of this disparity, showing that children from the most deprived areas had a decay-related tooth extraction rate nearly 3.5 times higher than those from the most affluent areas (381 episodes per 100,000 population compared to 109 episodes per 100,000 population)⁵⁸.



Commentary

The dire state of the nation’s health is a crucial issue that the government must overcome to improve the quality of lives of its citizens, to ensure a productive workforce that can boost the economy and GDP, and crucially to take pressure off the overburdened healthcare system.

While there are many factors that contribute to the health of the nation, what people eat is clearly one of the main drivers of health issues in the UK. The root of the problem lies in a food system that is not designed to make it easy to eat healthily, as described by the metrics throughout this report. More nutritious options such as fruits, vegetables, and other essentials are out of reach for many while the food system instead promotes excessive consumption of unhealthy foods⁵⁹.

Stark inequalities in health exist between households and between regions of the country. Childhood obesity is one such health issue where inequalities are clear. **Children from the most deprived fifth of the population are nearly twice as likely to be living with obesity in their first year of school compared to children from the least deprived fifth (Metric 11, p44).**



This disparity is also seen in complications from obesity. For example, there has been a **68% increase in diabetes-related amputations since 2009 (Metric 12, p46)** - a stark reminder of the severe and preventable complications of poor-quality diets and unhealthy food environments.

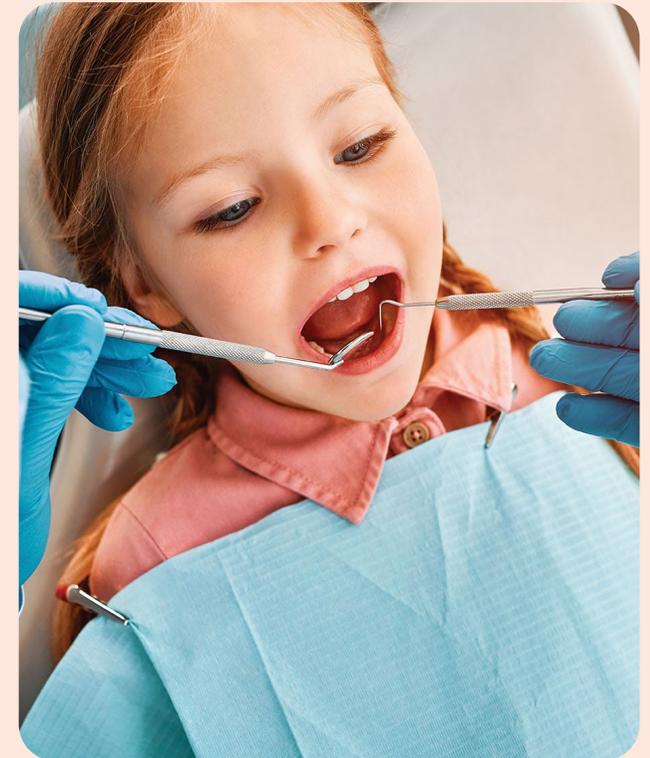


Poor quality diet also contributes to inequalities in dental decay. **Children in the most deprived fifth of the population are more than twice as likely to have tooth decay in their adult teeth compared to those in the least deprived by their last year of primary school (Metric 13, p47).** Alongside access to fluoride and dental care, high sugar intake is a key factor driving tooth decay and therefore, reducing sugar intake and improving access to healthy foods are essential steps in addressing these health inequalities.



Addressing these inequalities will require strong policies and commitments to tackling social and commercial determinants of health, including access and affordability of healthy and sustainable food. Health-related inequalities were recognised by Labour in their manifesto where they committed to “halve the gap in healthy life expectancy between the richest and poorest regions in England”, as well as have “the healthiest generation of children ever”. To achieve these ambitions, the current

cycle of junk food consumption must be disrupted, and bold steps must be taken by the government to prioritise the reduction of dietary health inequalities, securing policies that are urgently needed to ensure everyone has the ability to thrive and live in good health.



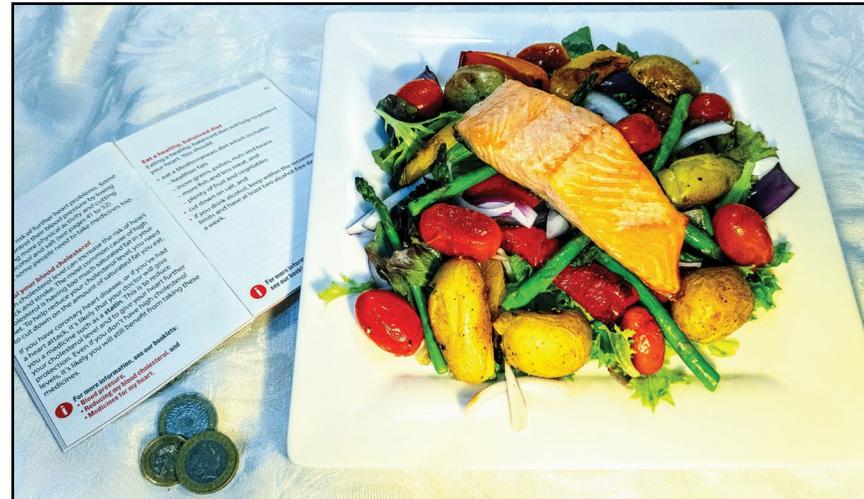


KATHLEEN KERRIDGE, PORTSMOUTH

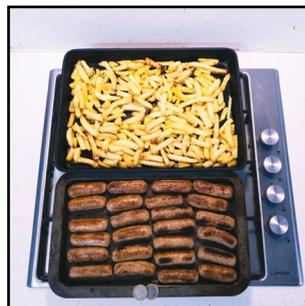
Food Foundation Ambassador Photo Story



50p per meal, at what cost?



£5 for a "healthy" meal, not a cost I can afford.



Images on this page © Kathleen Kerridge

Cardiovascular disease (CVD) costs the NHS £7.4 billion and the economy an estimated £15.8 billion a year in England⁶⁰. The NHS puts eating a healthy diet as the number one way to prevent CVD and heart attacks.

When the costs are so high, why is it so hard to afford a healthy diet? Increase benefits, increase wages, improve health. Make food affordable and a healthy population follows.

Conclusion

This report exposes a troubling reality. The data clearly show that too many people in the UK lack the financial means to access decent food, and that much of the food that is easily available and marketed to us is damaging to our health and our planet. But we can change this. Our food system can be reshaped so that the healthiest and most sustainable options are the most affordable, available and appealing. A more nourishing and more sustainable food system can underpin a healthy and prosperous society in which everyone, regardless of income or background, can eat food that promotes health and wellbeing, protects our planet and future food supply, and strengthens our society and economy.

Everyone can play a part in building the food system we want for our country – from policymakers to food businesses, local authorities, investors and citizens, but we need better structures in place which allow the right people to be involved at the right moments. We have very few opportunities for meaningful engagement between citizens and policymakers on food policy; and we have too many examples of businesses lobbying against the introduction of policies which could make a difference. [The Food Foundation's manifesto](#) provides a roadmap of key policies that can improve access and affordability of nutritious food and shape healthy and sustainable food environments.

Ultimately political leadership, supported by our best civil servants, is the key to unlocking change but has been in short supply in recent years. The Labour Party manifesto committed to end mass dependency on emergency food parcels, reduce child poverty levels and raise the healthiest generation of children ever. The proposed Food Strategy, Child Poverty Strategy and broader thinking on food insecurity are all in train, creating an excellent opportunity – but these must all come together to deliver coherent, significant and swift action. We applaud the commitments and ambition: now it is time for action.



© 2023. Provided by Impact on Urban Health, licensed via a CC BY-NC-ND 4.0 license.

APPENDIX: METHODS IN SHORT

This section provides a brief overview of the sources and methods used to calculate each metric in the report. Further details on the methodologies can be found in the *Broken Plate Technical Report*, available from The Food Foundation's website.

FOOD PROMOTIONS

Questionmark identified a total of 17,686 multibuy and price reduction promotions. The Government's Nutrition Profiling Model (NPM) was used to assess the healthiness of offers. According to these criteria, foods scoring 4 or more points, and drinks scoring 1 or more points are classified as high in fat, salt and/or sugar (HFSS). Products lacking nutrient information online were categorised as "unknown". The ingredients list was used to identify products containing sweeteners and emulsifiers.

ADVERTISING EXPENDITURE ON FOOD

Data from Nielsen on advertising spend in the UK for food and soft drinks between August 2023 and July 2024 were analysed, covering cinema, direct mail, door drops, outdoor, press, radio and TV. The percentage of advertising spend on different categories of food and drink, and on brand advertising was then calculated. Data was compared to previous years' Broken Plate reports.



This year Nielsen also ran a report on food and drink advertising spend on digital and social media channels during this period. Given

the fast-moving and highly targeted nature of advertising spend on digital and social media, Nielsen data on these channels is indicative rather than capturing actual spend.

MARKETING OF INFANT FOODS

Between January – April 2024, Action on Sugar collected data from ten major supermarkets (Aldi, Asda, the Co-operative, Lidl, Marks and Spencer, Morrisons, Sainsbury's, Tesco, Waitrose, and Iceland/The Food Warehouse) to assess baby and toddler snacks. 136 snacks met the inclusion criteria. Sugar content was assessed using adult front of pack colouring criteria as there are no equivalent criteria for baby food (sugar data are based on total sugars, but most of the sugars in these products are free sugars). Packaging of products was then assessed for promotional claims on front-of-pack according to the World Health Organisation's prohibited compositional, health and marketing claim definitions and allowed promotional messages.

SUGAR IN CHILDREN'S FOOD PRODUCTS

Between January – April 2024, Action on Salt and Sugar collected data from nine major supermarkets (Aldi, Asda, the Co-operative, Lidl, Ocado (including Marks and Spencer), Morrisons, Sainsbury's, Tesco, and Waitrose) to assess the nutritional content of breakfast cereals and yogurts with packaging marketed to children. Information was mostly collected in store. Products that were available last year but not found in store were searched for online via retailer websites. Data from 136 breakfast cereals and 66 yogurts were captured. Products were then assessed against the Government's Front of Pack nutrition labelling

guidance. The data have been compared to data from previous Broken Plate reports to assess changes over time.

PLACES TO BUY FOOD

Data on the proportion of fast-food outlets out of the total number of food outlets for each local authority were obtained by the MRC Epidemiology Unit at the University of Cambridge from Ordnance Survey's Points of Interest (POI) dataset for June 2024. The average proportion of fast-food outlets out of all food outlets within all local authorities in England was calculated. The data have been compared to data from previous Broken Plate reports to assess changes over time. All local authorities were numbered according to their IMD ranking and divided into quintiles in equal proportions. The average density of fast-food outlets for each quintile of deprivation was then calculated.

COST OF MORE SUSTAINABLE OPTIONS

The price and nutritional information of the of milk and milk-alternatives being sold online from Aldi, Tesco and Waitrose were collected in September 2024. Data was gathered for all almond, oat, rice, and soya milk alternative 1 litre products targeted at the general population. We did not include flavoured milk alternatives e.g. chocolate. Average product prices were calculated for individual products on sale at different retailers. An average price was then calculated for each alternative milk type and compared with the average price of 1 litre of semi-skimmed fresh dairy milk (based on the price for a 2-pint bottle). The proportion of products fortified with key micronutrients was calculated using the scraped nutritional information. Data were compared to previous Broken Plate reports.

COST OF HEALTHY FOOD

The MRC Epidemiology Unit at the University of Cambridge built on food price research first conducted in 2014⁶¹ and matched price data for food and drink items that have been continuously tracked by the Office for National Statistics' Consumer Price Index (CPI) between 2014 and 2024 to food and nutrient data from the National Diet and Nutrition Survey. Price per 1,000 kilocalories in each quarter of each year was calculated for each item as well as the mean price across all quarters in each year calculated. Using price per kilocalories is a helpful way to understand the relative prices of foods which make up diets and meals, rather than comparing individual products within specific food categories. Each item was categorised as either 'more healthy' or 'less healthy' using the nutrient profiling model developed by the Food Standards Agency (FSA). The methodology for this metric was updated to include food items from each CPI basket from 2014 to 2024, without excluding items that were not consistently present throughout the entire period. Calorie content was also updated. Outlier items (those priced significantly above the mean) were excluded. Previous years data have been re-analysed to reflect the changes in the set of products that have been consistently measured over the time period.

AFFORDABILITY OF A HEALTHY DIET

The estimated cost of the Eatwell Guide was estimated using a methodology based on modelling undertaken by researchers at the University of Oxford from online supermarket price data collected in May 2022. This cost (£7.48) was then adjusted for inflation since May 2022 (giving an updated cost of the Eatwell Guide for April 2024 of £9.07) and based on household composition.

Data on household income from the Family Resources Survey for 2022/23 were used to calculate the proportion of disposable income (after housing costs were removed) that would be used up by the recommended diet. Data were analysed by income quintiles. The methodology used this year for this metric was updated in 2022, so the findings are not directly comparable to pre-2022 reports.

NUTRITIOUS FOOD CONSUMPTION

This metric used data from the National Diet and Nutrition Survey Year 9-11 for children less than 19 years old. Quintiles represent equivalised income.

GREENHOUSE GAS EMISSIONS FROM THE FOOD SYSTEM

This analysis updates an assessment that originally appeared in the National Food Strategy⁶² of emissions from the food system. For each category, emissions in 2008 were drawn from the Food Climate Research

Network report *Cooking up a Storm*⁶³. These figures were updated for 2022 to reflect the decarbonisation progress in each sector of the UK economy, as reported by the Department of Energy Security and Net Zero⁶⁴.

CHILDREN'S WEIGHT

The data presented were from the Governments' national child measurement programmes in Reception in England and Wales, and in Primary 1 in Scotland (aged 4-6 years). The most deprived quintile has been compared with the least deprived quintile. Northern Ireland uses a different definition of obesity and therefore, we are unable to compare it to the other nations.

DIABETES-RELATED AMPUTATIONS

Data analysed were from the National Diabetes Audit (NDA), Hospital Episode Statistics (HES), Patient Episode Database for Wales (PEDW), and the Office for National Statistics (ONS). Lower limb amputation data is presented for England and Wales for the calendar years 2009 to 2022. Deprivation quintiles are based on the Index of Multiple Deprivation.

CHILDREN'S DENTAL DECAY

The data presented are from the Sixth National Dental Epidemiology Programme survey of children in Year 6 England, 2023, and the Hospital Episode Statistics for 2022-2023 conducted by the Office for Health Improvement and Disparities. Deprivation groups are based on the index of multiple deprivation 2019 (IMD 2019) scores based on the home postcodes of the participants. Deprivation scores were used to allow weighting of the data to more closely match the actual distribution of deprivation quintiles in the source population.



REFERENCES

1. https://assets.publishing.service.gov.uk/media/5a7cdac7e5274a2c9a484867/dh_123492.pdf
2. <https://www.bmj.com/content/384/bmj-2023-077310>
3. <https://www.food.gov.uk/research/consumer-interests-aka-wider-consumer-interests/consumer-insights-tracker-january-2024>
4. <https://www.medrxiv.org/content/10.1101/2024.08.27.24312650v1.full-text>
5. <https://foodfoundation.org.uk/publication/ultra-processed-foods-new-frontier-investors-food-businesses-0>
6. <https://doi.org/10.1017/S1368980024001757>
7. <https://www.bbc.co.uk/news/articles/cx2n2g5wze4o>
8. <https://www.bbc.co.uk/news/articles/cj04zyy1mp9o>
9. <https://doi.org/10.1371/journal.pmed.1003915>
10. <https://doi.org/10.1016/j.appet.2023.106539>
11. https://foodactive.org.uk/wp-content/uploads/2023/11/Location_Location_Location_Winter2023_FINAL.pdf
12. https://foodfoundation.org.uk/sites/default/files/2024-11/SofNFI_Report_FINAL_LIVE%202024.pdf
13. <https://www.bbc.co.uk/news/articles/c93qlyp42jyo>
14. <https://doi.org/10.1136/archdischild-2021-322851>
15. <https://www.nhs.uk/conditions/baby/weaning-and-feeding/baby-and-toddler-meal-ideas/>
16. <https://ifs.org.uk/publications/longer-term-impacts-covid-19-pandemic-dietary-purchasing-choices-british-households>
17. <https://link.springer.com/article/10.1186/s12916-021-01902-z>
18. <https://lgiu.org/blog-article/calling-time-on-takeaways/#:~:text=While%20the%20potential%20health%20benefits,to%20restrict%20fast%20food%20outlets>
19. <https://onlinelibrary.wiley.com/doi/10.1002/oby.24127>
20. <https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf>
21. https://media.nesta.org.uk/documents/How_eating_out_contributes_to_our_diets_Nesta_Report.pdf
22. <https://publications.parliament.uk/pa/ld5901/ldselect/ldmfdo/19/19.pdf>
23. <https://bmjpublichealth.bmj.com/content/bmjph/2/2/e000487.full.pdf>
24. <https://www.gov.uk/government/groups/food-data-transparency-partnership>
25. <https://gfieurope.org/wp-content/uploads/2024/10/UK-plant-based-food-retail-market-insights-October-2024.pdf>
26. <https://cot.food.gov.uk/Assessing%20the%20Health%20Benefits%20and%20Risks%20of%20Consuming%20Plant-based%20Drinks>
27. <https://foodfoundation.org.uk/news/plant-based-milk-alternatives>
28. <https://foodfoundation.org.uk/sites/default/files/2024-07/Affordability%20.pdf>
29. <https://foodfoundation.org.uk/initiatives/food-insecurity-tracking>
30. <https://www.trussell.org.uk/news-and-research/latest-stats/end-of-year-stats>
31. https://www.foodaidnetwork.org.uk/_files/ugd/79bfcf_605417a4892e4cbfa297231c0f18c20c.pdf
32. <https://www.jrf.org.uk/housing/placing-households-at-the-centre-of-the-economy>
33. <https://foodfoundation.org.uk/initiatives/food-prices-tracking#tabs/Food-Price-Indices-Tracker/Consumer-Price-Index>
34. <https://foodfoundation.org.uk/news/families-cutting-back-healthy-food-risks-widening-health-inequalities>
35. <https://uk.sodexo.com/newsroom/2024/sustainable-food-barometer>
36. <https://www.independent.co.uk/life-style/food-and-drink/plant-based-milk-dairy-alternative-vegan-one-third-b1921977.html>
38. <https://www.nhs.uk/live-well/eat-well/digestive-health/how-to-get-more-fibre-into-your-diet/>
39. <https://www.nhs.uk/healthier-families/food-facts/fat/>
40. <https://www.actiononsugar.org/media/actiononsugar/about-us/The-Future-of-Prevention-in-the-UK.pdf>
41. https://www.nationalfoodstrategy.org/wp-content/uploads/2021/08/NFS_Evidence-Pack.pdf
42. <https://ourworldindata.org/ghg-emissions-by-sector>
43. <https://unfccc.int/process-and-meetings/the-paris-agreement>

-
44. https://foodfoundation.org.uk/sites/default/files/2023-07/TFF_CLIMATE%20BRIEFING.pdf
45. <https://lordslibrary.parliament.uk/impact-of-climate-change-and-biodiversity-loss-on-food-security/>
46. <https://britishmeatindustry.org/industry/imports-exports/sheepmeat/> (accessed on 19 Oct 2024)
47. <https://www.cbd.int/gbf/targets>
48. <https://www.legislation.gov.uk/ukpga/2021/30/section/3>
49. <https://www.theguardian.com/environment/article/2024/aug/29/uk-emissions-targets-cop29-climate-summit-labour>
50. <https://defraenvironment.blog.gov.uk/2024/09/20/the-government-announces-new-uk-special-representatives-on-climate-change-and-nature/>
51. <https://www.nfuonline.com/media-centre/releases/press-release-nfu-survey-shows-collapse-in-farmer-confidence/>
52. <https://ca1-eci.edcdn.com/Wet-weather-production-analysis-170424.pdf?v=1714040539>
53. <https://www.pwc.co.uk/press-room/press-releases/corporate-news/more-than-half-of-global-gdp-is-exposed-to-material-nature-risk.html>
54. <https://foodfoundation.org.uk/sites/default/files/2024-08/Rethinking%20Plant-Based%20Meat%20Alternatives.pdf>
55. <https://www.diabetes.org.uk/about-diabetes/type-2-diabetes/causes>
56. https://www.diabetes.org.uk/about-diabetes/complications?gad_source=1
57. <https://www.gov.uk/government/statistics/oral-health-survey-of-children-in-year-6-2023-detailed-report/detailed-findings-of-year-6-oral-health-survey#executive-summary>
58. <https://www.gov.uk/government/statistics/hospital-tooth-extractions-in-0-to-19-year-olds-2023/hospital-tooth-extractions-in-0-to-19-year-olds-short-statistical-commentary-2023#:~:text=no%20such%20diagnosis.,Main%20findings,extractions%20for%20this%20age%20group>
59. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0109343>
60. <https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease>
61. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0109343>
62. <https://www.nationalfoodstrategy.org/>
63. https://tabledebates.org/sites/default/files/2020-10/CuaS_web.pdf
64. <https://assets.publishing.service.gov.uk/media/65c0d15863a23d0013c821e9/2022-final-greenhouse-gas-emissions-statistical-release.pdf>



International House, 6 Canterbury Crescent, Brixton, London SW9 7QD

foodfoundation.org.uk | +44(0)20 3086 9953 | [@Food_Foundation](https://www.instagram.com/Food_Foundation)