The Whole Truth

Positioning whole foods at the centre of government food strategy

Soil Association

1. Introduction

Whole foods consist of a single ingredient and are consumed largely as they are found in nature. Think of an apple, or a bean, or a mushroom, or an egg. Foods in this category include intact fruits and vegetables, and pulses, seeds, roots, tubers, fungi, and wholegrains, plus fresh meat, offal, eggs, and milk. Under the NOVA classification system, these foods are described as 'unprocessed or minimally processed'. Eaten in balance and diversity, with an emphasis on foods of plant origin, whole foods form the basis of a healthy and sustainable diet.[1]

British diets are often lacking in such foods. Instead, we consume the most ultra-processed diet in Europe, eating more industrially manufactured cakes, biscuits, breads, meat products, fizzy drinks, snacks, crisps, and ready meals than any of our neighbours.[2] Our diets are often unhealthy, and they are consistently unequal. The consumption of ultra-processed products is higher in less affluent groups, while consumption of whole foods, such as fruits and vegetables, is lower.[3] Health outcomes such as obesity also arise along a distinct social gradient.

Ultra-processed foods come in all shapes and sizes, and are manufactured in many forms, but they are characterised by the absence or fracturing of whole foods. Substances extracted from whole foods are modified and assembled, using industrial processing techniques and additives that enhance palatability, into products that are typically vigorously marketed. These products can be tasty and convenient, and for many people they may be all that is available, but a growing body of evidence indicates their excessive consumption is harmful to health.

Scientists studying the causes understand that some ultra-processed foods interfere with satiety signalling (feelings of fullness) and possess properties that drive the over-consumption of calories, while others can cause harm to biological systems, leading to outcomes such as enhanced cancer risk. In every scenario where they are consumed, ultra-processed foods risk displacing nutrient-dense whole foods from the diet. A substantial body of science affirms that diets based around whole and minimally processed foods are best for our health.[4 - 6]

This displacement of whole foods is particularly prevalent among children. Ultra-processed

NOVA classification

All food is processed to some degree, and processing can be necessary and beneficial. Grain will be dried and milled and turned into flour. Vegetables are washed and packed and might be frozen. Fish is tinned and beans are canned. Many processing techniques have been used for centuries to preserve and transform food, making it taste better and last longer. Processing can support food security and improved nutrition, extending the shelf life of a product. It can make food safer, and some processing techniques (such as cooking) can enhance rather than diminish the nutritional quality of foods when eaten. But ultra-processing is different.

The concept was introduced by a team at the University of São Paulo in 2009. The thesis was this: that the extent and purpose of food processing shapes the relationship between food, health and disease. While there have been previous attempts to classify food types according to their processing level, the NOVA system of classification, which introduces 'ultra-processed' as a food category, has been widely employed within the research community, and is increasingly used by national governments and international organisations.[9]

Group 1 consists of minimally processed or unprocessed foods, including whole fruits and vegetables, fresh meats, and fish.

Group 2 includes processed culinary ingredients like salt, sugar, and oils.

Group 3 features processed foods such as canned fruits and tinned fish.

Group 4 includes ultra-processed foods, manufactured using industrial processes and additives which wouldn't be found in a home kitchen.

products account for nearly two thirds of the average child's energy intake between the ages of two and five, and this percentage increases as they grow older.[7] As a result, many children in Britain are growing up with a disrupted relationship with food. Many are routinely denied the tastes, textures, and smells of fresh produce. Many will not know the feel of real foods in their fingers, the taste of bitter greens or spicy ginger, or the crunch of a carrot between their teeth.

If Britain's diet is excessively ultra-processed, this is not the result of poor individual choices, a lack of information, or a failure of will. We are fed by, and live within, an ultra-processed food system, one oriented towards the mass manufacture of branded and marketable goods that deliver shareholder returns. The system excels at generating profit for a handful of corporate actors, creating the conditions for an ultra-processed diet, and at an overall cost to public and planetary health. It is no surprise that parents in Britain feel the food system does not support them well enough to provide for their families. There is strong public appetite for a government response on ultra-processing, and for action that promotes a healthier food environment.[8]

There is much that needs to change. Addressing the ultra-processed food challenge requires that the system is 're-wired' to prioritise healthy foods, with a renewed emphasis on social equity and ecological wellbeing. This will require action to curb the excessive market power and lobbying influence of dominant food corporations, and action to address conflicts of interest at the interface of science and policy. Flows of finance will need to be re-directed so that farmers and citizens are granted a fairer deal, and the values of the agroecology and organic movements will need to be institutionalised and embedded in policy frameworks.

While these structural changes will ultimately be required, the ambitions of this report are more modest. Outlined below are some of the policy solutions already on the table which could help shift the dial on Britain's diet. These are not solutions which seek to radically reconfigure the food system, but smaller actions that can make a real near-term difference to the balance of diets, making it easier for everyone – especially infants and children, and those in vulnerable or disadvantaged communities – to consume more whole and minimally processed foods. These actions already enjoy widespread support, and they can be enacted now.

In making these recommendations, the report draws on the precedent set by communities and grassroots initiatives around the country. The caterers preparing meals from scratch in school kitchens. The community food hubs supporting local access to fresh produce. The businesses employing digital technologies to bring whole foods to market, and the farmers innovating on the land. It also takes inspiration from the ethnically diverse and vibrant food cultures alive in Britain, which already champion fresh and healthy foods. Grassroots inspiration is available in abundance. Action is now needed from government to ensure that solutions are scaled, so that everyone can access and enjoy whole foods, whoever and wherever they are.

In the UK...

2/3

of the average child's energy intake between ages two and five is from ultra-processed food

The Lords Committee on Food, Diet and Obesity

In 2024, the House of Lords Committee on Food, Diet and Obesity took oral and written evidence from experts across science, academia, civil society and industry, interrogating the role of ultra-processed and nutrient poor foods in shaping health outcomes. *"The rapidly growing epidemiological evidence showing a correlation between consumption of ultra-processed foods defined using the NOVA classification and poor health outcomes is alarming,"* the Committee noted in their final report. And in response, they said: *"The Government should commit as part of its new comprehensive food strategy to tackling the over-consumption of such less healthy foods, and increasing consumption of healthier, largely unprocessed and minimally processed foods, ensuring a healthy and affordable diet for all."* [10]

2. What should we eat?

The World Health Organization (WHO) recommends the consumption of whole foods and cautions against highly processed products. Healthy and sustainable diets, the WHO says, *"are based on a great variety of unprocessed or minimally processed foods, balanced across food groups, while restricting highly processed food and drink products."* [11]

A growing number of countries – among them France, Belgium, New Zealand, Canada, Brazil, Ecuador, Peru, Uruguay, Chile, Mexico, Israel, Malaysia, Zambia, Sri Lanka, and Qatar – have begun to promote non-ultra-processed diets in their official food policies, including by recommending consumption of whole and minimally processed foods. Brazil's guidelines say: *"Make...minimally processed foods the basis of your diet"*, while New Zealand recommends *"eating a diet with more whole, low or minimally processed foods"*. Australian public health authorities similarly recommend *"fresh and minimally processed foods"* and policies that *"increase the production and consumption of whole foods"*.[12]

No such guidance has been voiced by the UK Government, despite the scientific rationale for doing so. Government dietary advice is communicated via the Eatwell Guide. Consumption of whole foods is implicitly encouraged – through the recommendation to consume at least five portions of fruit and vegetables per day, for example – but is not explicitly stated. Foods high in fat, salt and sugar are noted to be surplus to a balanced diet, but the Eatwell Guide includes no explicit caution against excessive consumption of ultra-processed products.

Is the UK Government falling behind?

In 2025, the UK Climate Change Committee recommended eating more *"whole plant foods"* to reduce carbon emissions.[13] The Scottish 'Good Food Nation Plan' recommends *"choosing fresh foods or minimally processed foods"* [14], while a 2025 motion agreed in the Senedd called on the Welsh Government to *"develop a holistic, joined up government strategy to improve people's diets"* and *"promote the benefits of fresh, unprocessed food to encourage dietary shifts and tackle the dominance of ultra-processed foods."* [15]

NHS Professionals, owned by the Department of Health and Social Care, advises staff working in the NHS to consume whole foods – defined as *"natural, unprocessed or minimally processed food that is as close to its original form as possible"* – though the NHS currently does not extend the same advice to the public.[16] In the absence of central guidance, some NHS Trusts have issued bespoke advice, one Trust publishing public guidance in 2024 that recommends *"eating more whole foods"* and *"being mindful of foods which are linked with poor health, such as ultra-processed foods."* [17] The Eatwell Guide should be updated to employ similar language.

Indeed, UK Government food and nutrition policies sometimes perversely encourage an ultra-processed diet:

Traffic light labels

UK traffic light labelling uses a colour-coded system of green, amber, and red to indicate whether a food is low, medium, or high in fat, saturated fat, sugar, and salt. While many ultra-processed foods have red traffic lights, some are portrayed as being 'healthier' through amber or green lights. A 2024 study found that these 'healthier' ultra-processed products typically had a worse nutritional profile and higher energy density than minimally processed foods with an equivalent traffic light score. These results suggest UK food labelling does not adequately differentiate between ultra-processed and minimally processed foods, providing inadequate incentive towards consumption of the latter.[18]

NHS 'Good Choice' logo

The NHS Food Scanner App proposes product swaps for families, nudging consumers away from foods with red traffic lights by placing a 'Good Choice' logo and a 'thumbs up' image on alternative products. Many of these products are nutrient poor and ultra-processed. A 2023 Soil Association investigation found ultra-processed cakes, puddings, crisps, biscuits, artificially sweetened beverages and energy drinks had been awarded the 'Good Choice' logo and implicitly endorsed by the NHS.[19]

Nutrient Profile Model (NPM)

The NPM was developed as a tool to help improve adverts and marketing, primarily to children. Its scoring system balances the contribution made by 'beneficial nutrients' with 'nutrients of concern', with some foods defined as 'unhealthier' or 'HFSS'. A wide range of ultra-processed foods 'pass' the model and are deemed 'healthier'. These include ultra-processed energy drinks, crisps, snacks, cereal bars, fizzy drinks, puddings, pizzas, burgers, ice creams, pastries, and chewing gums. Artificial sweeteners have not been incorporated into the scoring system and should be integrated as a priority.

'5 a Day'

Claims that relate to a product delivering '1 of 5 a Day' are regulated, and use of the associated logo is generally restricted to products based on whole fruits and vegetables. However, in 2019 Public Health England raised concerns about commercial baby foods, noting that highly processed 'pouches' were carrying '1 of 5 a Day' claims while being very high in sugars (one pouch containing 67g sugar per 100g of product).[20] Other brands have been observed stretching or flouting the regulations. The Advertising Standards Agency has previously upheld complaints about adverts for soups and fruit drinks because advertisers over-claimed the number of portions those products contribute towards '5 a Day'. There are grounds for a government review of '1 of 5 a Day' regulations to make sure they are robust.

Government dietary guidelines and associated policy should be reviewed and refreshed to address these shortcomings, shifting the emphasis from 'nutrients of concern' to whole foods and the food systems that provide them. While excessive consumption of ultra-processed and unhealthy foods is driven by their ubiquity and the marketing power of major food companies, among other factors, the inadequacy of government policy is a contributing factor. Action is needed on multiple fronts to support healthier diets and equitable access to healthy foods, and the Eatwell Guide should be reviewed and updated as part of a wider package of measures.

As a priority, UK Government dietary guidelines should reiterate the World Health Organization's statement that healthy and sustainable diets *"are based on a great variety of unprocessed or minimally processed foods, balanced across food groups, while restricting highly processed food and drink products."* They should explicitly recommend the consumption of whole foods, with an emphasis on those of plant origin sourced from nature-friendly farming systems, while cautioning against the excessive consumption of ultra-processed products.

Learning from Brazil

Brazilian dietary guidelines recommend eating minimally processed foods and restricting or avoiding ultra-processed products. The guidelines place strong emphasis on foods of plant origin, while integrating sustainability and welfare concerns, emphasising the social dimension of eating, and promoting agroecological farming. The 'Golden Rule' voiced in the guidelines is to *"always prefer natural or minimally processed foods and freshly made dishes and meals to ultra-processed products."* [21]

These recommendations have underpinned broader policy development, such as investment in school meals. In 2025, the Brazilian government announced that 85% of the annual federal budget for school meals must be allocated to raw or minimally processed ingredients and freshly prepared meals, a figure that would rise to 90% in 2026, significantly curtailing the consumption of ultra-processed products in schools.

85%

of the Brazilian annual federal budget for school meals must be allocated to raw or minimally processed ingredients

3.

What the experts say

"NOVA has sometimes been misunderstood, because the part that is actually more important than ultra-processed food (category 4), is category 1: real food. How do we shift the balance of diets back towards those whole and minimally processed foods so that even a child could recognise them? Not only by being taught about whole vegetables in an abstract sense, but by holding them, smelling them, and tearing them apart? Such sensory experience would do them good and would nourish them. This is a huge area of government failure." [22]

Bee Wilson, Author and Co-Founder of TastEd

"While the debate around UPFs seems unlikely to disappear anytime soon, what the concept of ultra-processing has highlighted very clearly is the almost complete absence of clear government and business policy and strategy for promoting and supporting the role of healthy, minimally processed whole foods in diets." [23]

Food Foundation

"A shift in focus onto the whole food system rather than specific ultra-processed foods is needed. Thus, government policies are needed to reward food sector innovations, from farms and manufacturers to retail outlets and restaurants, that replace ultra-processed products with minimally processed foods." [24]

Dr Mathilde Touvier, Research Director at Inserm, the French National Institute of Health and Medical Research

"It is fascinating that UPF has caught the public imagination in a way that our talk of HFSS, frankly, never did. We might want to stop and consider how to use that opportunity and this moment in time to reconnect people with the fundamentals of food. A willingness by policymakers to acknowledge the health benefits of a minimally processed diet would be very helpful and a step along the way." [25]

Susan Jebb, Professor of Diet and Population Health, University of Oxford

"Rather than determining how we can make incremental changes in the nature of ultra-processed foods, global public health nutrition policy should focus further on policies that promote widespread access to convenient, palatable, and affordable minimally processed foods and dishes." [26]

Jean Adams, Professor of Dietary Public Health, University of Cambridge

4. Whole food solutions

Cohesive cross-government action is needed to enable increased consumption of whole and minimally processed foods. A food strategy should be aimed at addressing inequality of access, recognising this as a social justice issue, and should create the conditions for a minimally processed diet to be convenient, enjoyable, and affordable. This will require action to increase the availability of fresh foods, as well as healthier processed foods, and policies that enable healthier food businesses to thrive. The following policy solutions should be introduced as a priority, representing near-term solutions that can begin to re-balance Britain's diet.

1. **Extend the Healthy Start Scheme:** The Healthy Start scheme provides a critical nutritional safety net for pregnant people and families with children under four years old who are living in poverty through weekly payments for food and multivitamin supplements. But eligibility criteria are restrictive, meaning that only a very small number of families can benefit. By extending eligibility to all children living in families in receipt of Universal Credit, raising the age threshold to children of five years, and increasing the value of the weekly payments in line with inflation, the Healthy Start scheme could support many more families at risk of food insecurity to access whole and minimally processed food, and essential nourishment.

2. **Expand eligibility for Free School Meals:** Healthy school meals have been shown to have significant health and educational benefits, yet many children miss out because their families can't afford them, while access to means-tested Free School Meals is limited by restrictive eligibility criteria. By making Free School Meals available to all children whose families receive Universal Credit, roughly a million more children living in poverty would be able to access a meal each day. And there's a strong case for universal provision in the longer run. A recent analysis of the Universal Infant Free School Meals found that the policy successfully re-balanced diets away from ultra-processed products, widening access to whole and minimally processed foods across the population.

3. **Mandate and support a 'whole school approach':** A whole school approach means placing good food at the heart of the school day, embedding learning about food across the curriculum; inspiring pupils to handle and eat fresh, whole foods and learn how they are grown; learning about the origin of food, including through farm visits; learning to cook; and making a good food culture a priority for the school leadership team, with pupils involved in decision-making. By mandating and supporting a 'whole school approach' in all schools, and scaling practical and sensory food education, building on the models developed by Food for Life and TastEd, all children can be supported to enjoy a healthy relationship with eating, and instilled with an appreciation for the tastes and textures of real foods.

4. **Scale community food solutions:** In the context of rising food insecurity, food hubs, such as food pantries, community fridges, kitchens and cafés, community supported agriculture schemes, and social supermarkets, have proliferated. Food hubs will typically gather food from growers and suppliers, and distribute it, often operating within an explicit set of ethical priorities, and can provide a range of benefits, including by making fresh and whole foods available to those who could not otherwise access them. Government should invest in local food strategies and infrastructure, learning from the Sustainable Food Places network, to support food hubs and other local solutions to scale. Other novel interventions such as public diners (state-supported, affordable restaurants serving freshly prepared meals) could also help make minimally processed food more accessible and convenient.

5. **Devolve powers to local areas:** Local authorities should be supported to tackle unhealthy and ultra-processed food environments by being granted increased powers over licensing and planning, and enhanced control over advertising regulations around unhealthy foods. In parallel, government should increase its investment in public health, restoring the public health grant to its 2015/16 real-terms per person value, and allocating the grant through multi-year settlements. Increased investment in public health, alongside enhanced powers, would support local authorities to take a preventative approach, enabling action to promote healthier local food environments and more equitable access to fresh and healthy foods.

6. **Introduce mandatory business reporting:** The government should introduce mandatory reporting on food sales, requiring all businesses with over 250 employees to report on the volume and value of minimally processed *versus* ultra-processed food sales. Smaller businesses should also be supported with practical guidance. To ensure transparency and drive progress, the Food Standards Agency could oversee this reporting, with penalties for non-compliance. Progress should be reviewed periodically, ensuring reporting requirements and targets are adjusted to keep pace with evolving food industry and public health data, thereby helping to increase the availability and accessibility of minimally processed foods.

7. **Introduce novel fiscal measures informed by the Soft Drinks Industry Levy:** The Soft Drinks Industry Levy successfully led to a reduction in sugar content across soft drinks purchased by all socio-economic groups. Government should build on the success of the Levy by introducing a new levy on unhealthy ultra-processed foods that incentivises the reformulation of products, while simultaneously generating revenue that can be plugged into healthy eating initiatives. This revenue should be targeted at increasing consumption of whole and minimally processed foods in population groups most at risk of the harms of ultra-processed diets, including disadvantaged communities and children.

8. **Champion British horticulture:** A cross-departmental strategy supporting the production and consumption of British-grown fruit, vegetables and pulses is needed, both for the sake of struggling producers and to help increase consumption of whole fruits and vegetables. The strategy must give the right level of support to farmers, improve supply chain fairness and drive a transition to nature-friendly practices, such as organic, which have the potential to be more resilient in the face of a changing climate. Parallel support should be provided for initiatives that boost demand for these foods, such as by expanding the School Fruit and Veg scheme, incentivising fresh preparation and minimally processed foods in public settings by mandating procurement policy, and encouraging the marketing and promotion of whole foods in retail settings.

The added value of organic

The environmental benefits of organic farming are well established, and emerging evidence suggests organic food may be nutritionally different. Polyphenols in organically grown fruits and vegetables are nearly 80% higher on average than in non-organic. These compounds can help reduce the risk of conditions like cancer, diabetes, and heart disease, and can contribute to a healthy gut microbiome. It is thought that plants produced without synthetic pesticides produce more of these compounds to naturally repel pests, hence their increased concentration in organic crops.[27] Organic meat is also nutritionally different, having on average 50% more long chain omega-3 fatty acids, which can support brain and heart health. This is due to the diverse, grass-based diet containing high levels of clover consumed by livestock produced organically.[28] In addition to reduced exposure to pesticide cocktails and the toxic metal cadmium, these differences suggest organic may deliver added value for public health.

5. Stories of Success

Food for Life

https://www.foodforlife.org.uk

The Soil Association's Food for Life programme works with caterers, schools and communities to make healthy and sustainable food available to all. The Food for Life Served Here scheme verifies that caterers are serving meals freshly prepared from whole foods and minimally processed ingredients. Over a million meals are served each day under the scheme, and many are in disadvantaged communities. East Ayrshire Council in Scotland, for example, serves over 5,000 meals each day certified to 'gold' standards, inclusive of local and organic produce, across 40 primary schools, and roughly two thirds are free school meals. The 2021 National Food Strategy commissioned by the Conservative government recommended that Food for Life Served Here should be scaled nationally, supporting healthier diets, sustainable procurement and local food economies.

The associated Food for Life School Award works with schools to encourage healthy eating and a good food culture. Some schools run competitions that encourage children to bring in fruit and veg for consumption at breaktime; while in other schools, pupils are interviewed about their lunchtime experience and encouraged to get involved in a gardening club, growing red currants, strawberries, mint, onions, potatoes, carrots and peas. Across the Award, children are involved in growing, cooking and farm visits, handing and tasting whole foods, and these activities have been linked to enhanced academic and emotional development. Independent evaluation shows a notable impact on dietary behaviours, such that if every school in the country followed Food for Life's approach, a million more children would be eating their five-a-day.

Innovative Farmers

https://www.innovativefarmers.org

Producing whole foods in a changing climate will be challenging, and Innovative Farmers – a network of farmers and growers running on-farm trials – is supporting grassroots innovation through 'field labs', bringing farmers and scientists together to test solutions. These labs are exploring (among other things) the benefits of cover cropping and living mulches to fruit and veg production; the benefits delivered by integrating trees, including fruit and nut trees, into livestock systems; and how cereal-legume intercropping can boost the production of legumes and cereals while simultaneously increasing the resilience of farm systems to climate change. By investing in farmer-led innovation, government can ensure a more sustainable and resilient supply of whole foods in the context of growing environmental challenges.

Sustainable Food Places

https://www.sustainablefoodplaces.org

The Sustainable Food Places network brings together pioneering food partnerships from towns, cities, boroughs, districts and counties across the UK that are driving innovation and best practice on all aspects of healthy and sustainable food, including through community kitchens and food hubs. Among many stories of success are Food Works Sheffield, which is working to upcycle quality surplus and locally grown ingredients into meals that are made available on a 'pay what you can afford' basis in local food hubs; and the food partnership in Middlesborough, which is working with partners, including disadvantaged communities, to develop, design, and distribute a healthy, appetising ready meal prepared with surplus, fresh ingredients which would otherwise be wasted, with the aim of supporting people with mental illness to enjoy more whole and minimally processed foods. Inspiring examples can be found in localities around the UK and could be scaled with the right government incentives.

References

1 FAO and WHO. 2019. Sustainable healthy diets – Guiding principles. Rome.

2 Monteiro CA, Moubarac JC, Levy RB, Canella DS, Louzada MLDC, Cannon G. Household availability of ultra-processed foods and obesity in nineteen European countries. Public Health Nutr. 2018 Jan;21(1):18-26. doi: 10.1017/S1368980017001379. Epub 2017 Jul 17. PMID: 28714422; PMCID: PMC10260838.

3 Colombet Z, Schwaller E, Head A, *et al* OP12 Social inequalities in ultra-processed food intakes in the United Kingdom: A time trend analysis (2008–2018) J Epidemiol Community Health 2022;76:A6-A7.

4 Lane MM, Gamage E, Du S, Ashtree DN, McGuinness AJ, Gauci S *et al*. Ultra-processed food exposure and adverse health outcomes: umbrella review of epidemiological meta-analyses BMJ 2024; 384 :e077310 doi:10.1136/bmj-2023-077310

5 Schwingshackl L, Bogensberger B, Hoffmann G. Diet Quality as Assessed by the Healthy Eating Index, Alternate Healthy Eating Index, Dietary Approaches to Stop Hypertension Score, and Health Outcomes: An Updated Systematic Review and Meta-Analysis of Cohort Studies. Journal of the Academy of Nutrition and Dietetics 2018;118(1):74-100.e11. doi.org/10.1016/j.jand.2017.08.024

6 Katz, DL, Meller, S, (2014), Can We Say What Diet Is Best for Health?, Annual Review of Public Health 2014 35:1, 83-103.

7 Neri D, Steele EM, Khandpur N, *et al* (2022). Ultra processed food consumption and dietary nutrient profiles associated with obesity: A multicountry study of children and adolescents. Obesity Reviews: an official journal of the International Association for the Study of Obesity, 23 Suppl 1, e13387.

8 See polling and citizen engagement by the Food Farming and Countryside Commission and Food Standards Agency: https://ffcc.co.uk/ ; https://www.food.gov.uk/

9 Monteiro, CA, Cannon, G, Lawrence, M, Costa Louzada, ML and Pereira Machado, P. 2019. Ultra-processed foods, diet quality, and health using the NOVA classification system. Rome, FAO.

10 See: https://committees.parliament.uk/committee/698/food-diet-and-obesity-committee

11 FAO and WHO. 2019. Sustainable healthy diets – Guiding principles. Rome.

12 Koios D, Machado P and Lacy-Nichols J (2022) Representations of Ultra-Processed Foods: A Global Analysis of How Dietary Guidelines Refer to Levels of Food Processing. Int J Health Policy Manag. 11(11):2588-2599.

13 See: https://www.theccc.org.uk/publication/the-seventh-carbon-budget/

14 See: https://www.gov.scot/publications/national-good-food-nation-plan/pages/4/

15 See: https://www.theyworkforyou.com/senedd/?id=2025-02-12.5.655469.h

16 See: https://www.nhsprofessionals.nhs.uk/health-and-wellbeing/helpful-links/diet-and-nutrition

17 See: https://nhssomerset.nhs.uk/wp-content/uploads/sites/2/Moving-towards-more-whole-foods-May-2024.pdf

18 Dicken SJ, Batterham RL, Brown A. Nutrients or processing? An analysis of food and drink items from the UK National Diet and Nutrition Survey based on nutrient content, the NOVA classification and front of package traffic light labelling. Br J Nutr. 2024 May 14;131(9):1619-1632. doi: 10.1017/S0007114524000096. Epub 2024 Jan 15. PMID: 38220223; PMCID: PMC11043912.

19 Taking the Biscuit – How the UK government is promoting ultra-processed junk food to families. Soil Association report. 2023

20 Public Health England, 2019. Foods and drinks aimed at infants and young children: evidence and opportunities for action.

21 See: https://www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/Brazil/en

22 Oral evidence presented to the House of Lords inquiry on Food, Diet and Obesity (edited with permission)

23 The Food Foundation (2024), Ultra-processed foods: a new frontier for investors in food businesses? Available from: https://foodfoundation.org.uk/publication/ultra-processed-foods-new-frontierinvestors-food-businesses

24 Touvier M, da Costa Louzada ML, Mozaffarian D, Baker P, Juul F, Srour B et al. Ultra-processed foods and cardiometabolic health: public health policies to reduce consumption cannot wait BMJ 2023; 383 :e075294 doi:10.1136/bmj-2023-075294

25 Oral evidence presented to the House of Lords inquiry on Food, Diet and Obesity

26 Adams J, Hofman K, Moubarac J, Thow AM. Public health response to ultra-processed food and drinks BMJ 2020; 3 69 :m2391 doi:10.1136/bmj.m2391

27 Barański M, Średnicka-Tober D, Volakakis N, et al. Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses. British Journal of Nutrition. 2014;112(5):794-811. doi:10.1017/S0007114514001366

28 Średnicka-Tober D, Barański M, et al. Composition differences between organic and conventional meat: a systematic literature review and meta-analysis. Br J Nutr. 2016 Mar 28;115(6):994-1011. doi: 10.1017/S0007114515005073. Epub 2016 Feb 16. PMID: 26878675; PMCID: PMC4838835.