

A Healthy and Sustainable Food Future

Policy recommendations to embed sustainability in the Eatwell Guide and wider UK food policy

It is vital that steps are taken to shift eating patterns towards ones that are healthier for both people and planet. Medact and Eating Better are calling for action from governments, health professionals and other policy actors to develop and implement dietary guidelines that give due consideration to the interconnections between health and environmental sustainability, particularly in relation to promoting reduced consumption of meat and dairy foods. In a welcome move, several countries have produced dietary guidelines that explicitly integrate this messaging. In this briefing, we examine the UK's Eatwell Guide and outline policy recommendations for the UK government.

Why is sustainability relevant to dietary guidelines?

Dietary choices not only impact on individual health, but also have significant implications for the health of the planet – upon which human health is reliant – and for our ability to feed current and future generations equitably. Our food system contributes significantly to climate change through greenhouse gas (GHG) emissions; and impacts negatively on ecosystems, including through deforestation, water use, overfishing, pollution and biodiversity loss. Meat and dairy foods carry a particularly high environmental footprint as livestock production accounts for [14.5%](#) of global GHG emissions¹.

Shifting towards predominantly plant-based diets needs to be a priority among high-consuming countries like the UK in order to meet the international [Paris agreement](#) on climate change to keep global temperature rise below 2°C². At the same time, overconsumption of meat has significant health and economic “footprints” – [one study](#) has estimated that reducing average meat consumption in the UK to two to three servings a week could prevent 45,000 deaths a year, and save the NHS £1.2billion³.

Given that there is clear alignment between healthy and sustainable diets, and in recognition of the impact that eating patterns have beyond immediate health, there is now a growing consensus around the importance of integrating environmental

sustainability into healthy dietary guidance. The [Eatwell Guide](#)⁴ is the UK's official guide to healthy diets. Its purpose is to promote healthy eating by providing accessible advice to both the public and a range of relevant professionals, including those working with schools, hospitals, caterers, food retailers and manufacturers.

In March 2016, Public Health England (PHE) updated the dietary advice in the national model for the first time in twenty years (the Eatwell Guide replaced the previous Eatwell Plate) in order to incorporate the government's Scientific Advisory Committee on Nutrition's (SACN) updated [recommendations](#) on carbohydrates and health (including recommendations to reduce sugar consumption)⁵. The process was underpinned by [modelling changes](#)* (included in an Eatwell Guide [supplementary report](#)⁶) to the proportions of foods consumed as part of a typical British diet, in order to meet the population intake recommendations for key nutrients⁷.

Additionally, for the first time, some sustainability considerations were included. There is however currently a missed opportunity to communicate these more effectively, and for this guide to be used as a tool to support government food, farming and fishery policies more broadly.

* It should be noted that the amounts for different foods created by the modelling are not officially recommended consumption levels (as government doesn't provide such advice), and different combinations of food and drink are possible to meet the recommended intake. In this briefing paper, we highlight amounts of different foods from the modelling for illustrative comparative purposes.



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Eating Better is a broad UK-based civil society alliance that brings together over 50 national organisations with climate, environment, public health, international development, animal welfare, responsible producer, professional and faith interests. We are calling for action by governments, the food industry and all those who can make a difference to help people eat a greater variety of plant-based foods and less meat, and for the meat they do eat to be better; produced in ways that benefit health, the environment, global food security and animal welfare.

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Explicit incorporations of sustainability into the guidelines

Medact and Eating Better welcome the inclusion of sustainability within the Eatwell Guide. Though much of the messaging is subtle, this includes:

The word 'sustainable' features twice in the pictorial guide, once in the subheading, and once in relation to choosing which types of fish to eat.

The 'beans, pulses, fish, eggs, meat and other proteins' section places an emphasis on plant-based proteins, and recommends eating "more beans and pulses". These have a lower environmental impact than animal products, as well as providing health benefits – including increasing fibre intake as recommended by the SACN report.

The Carbon Trust compared the environmental sustainability of current average UK diets with the Eatwell Guide taking into account greenhouse gas emissions, water consumption and land use requirements. [This analysis](#) confirmed that the guidelines are measurably more sustainable than current diets, due in large part to reduced consumption of dairy and meat (as well as rice, pasta, pizza and sweet foods) in eating patterns that meet the dietary guidance⁸.

Synergies between healthy and sustainable eating

While the Eatwell Guide remains primarily health focused, synergies between health and sustainability mean that the guidelines do include implicit sustainability messaging. For example:

Advice to limit consumption of red and processed meat to 70g / day reflects previous [SACN advice](#)⁹ and more recent advice from the [International Agency for Research on Cancer](#) (IARC)¹⁰ on the links between red (including beef, lamb and pork) and processed meat consumption, and cancer. However, neither the health nor the environmental benefits of reducing consumption are explained.

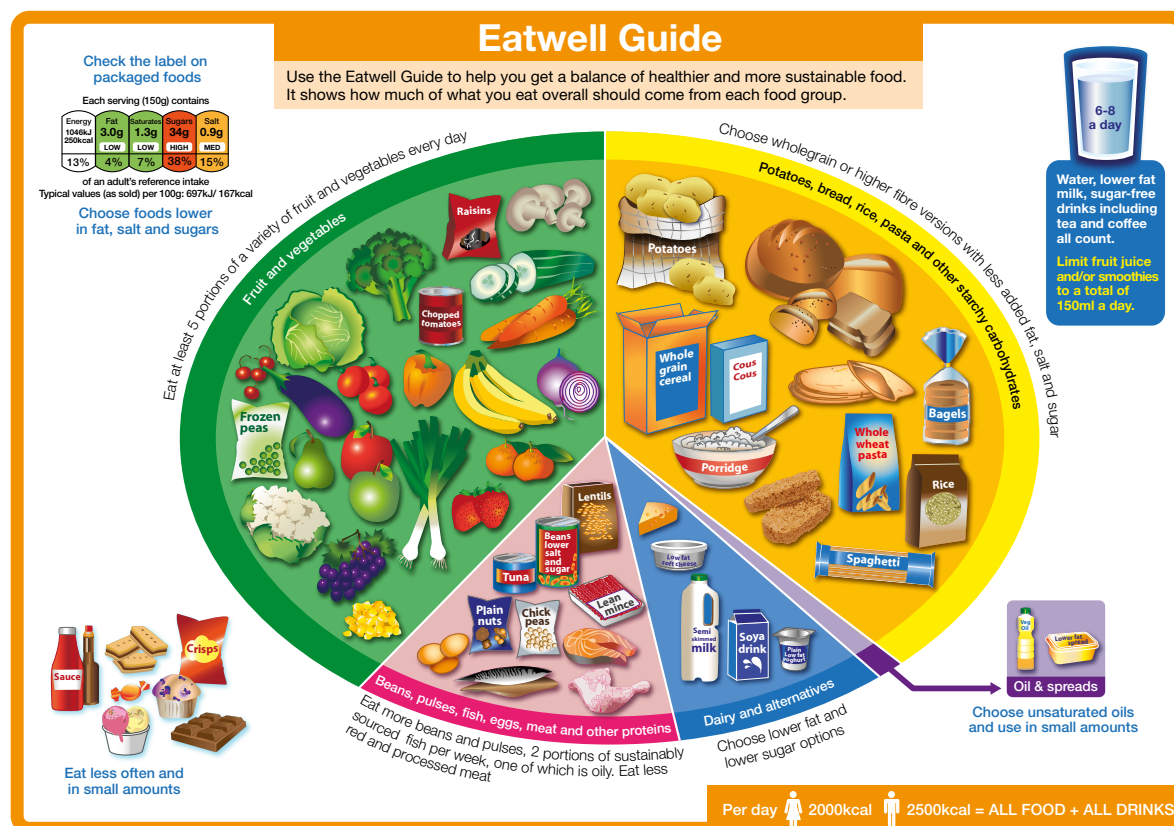
Previous analysis of [National Diet and Nutrition Survey](#) (NDNS) data has found that 57% of men and 32% of women in the UK exceed this recommended limit for red and processed meat¹¹. Comparing the modelling data to average current eating patterns indicates that red and processed meat consumption would require a [78% reduction](#) (from 68g to 15g per day), and pulses an increase of [90%](#) (from 14g/day to 26g/day) to be in line with the modelled diet⁷.

Reducing recommended dairy consumption. The guidelines contain no explicit recommendations to consume less dairy, nor specific guidance on different types of dairy. However the proportion of space allocated to dairy foods is smaller in

the updated guidelines (compared to the previous Eatwell Plate), and now includes "alternatives" such as soya milk.

The modelling data⁷ underpinning the guide shows a reduction in cheese (but not milk) consumption of [85%](#) (from 17g to 3g per day) compared to current eating patterns, due to the high salt and saturated fat content of cheese. Per kilogram, the carbon footprint of hard cheese is around [ten times larger](#) than it is for milk¹², thus a diet which includes less cheese is more compatible with both health and sustainability.

Increasing recommended intake of plant-based foods. While the scale is not explicit, the proportion of space allocated to fruits, vegetables and starchy carbohydrates is greater in the updated guidelines¹¹, and it is recommended that these foods make up over two thirds of the diet. Plant-based foods tend to have a lower environmental impact than meat and dairy, so this advice has strong positive implications for both health and sustainability. The modeling underpinning the Guide indicates a [54% increase](#) in vegetable and fruit consumption (from 342g/day to 526g/day), equating to almost 7 portions a day⁷. Importantly the modelled healthy sustainable diet is no more expensive than current average diets.



Public Health England's Eatwell Guide 2016

Further information, including the Eatwell Guide booklet available at: <https://www.gov.uk/government/publications/the-eatwell-guide>

What's needed?

We recognise that integrating health and environmental considerations is [not always a perfect match](#). For example, fish is a healthy source of protein, yet many fish stocks are under threat. Similarly, hot housed or airfreighted fruit and vegetables can carry a high environmental footprint. Furthermore, while high levels of red and processed meat consumption are the focus of health concerns, white meat (poultry) production also comes with its own environmental challenges and animal welfare concerns. There are also health concerns regarding the [high use of antibiotics](#) in more intensive farming systems, contributing to antibiotic resistance in humans^{13,14}. Despite these complexities, we do know that current levels of meat and dairy consumption are excessive. It is therefore clear that we need not only less but also 'better' meat and dairy, produced to higher environmental and welfare standards (e.g. free range and pasture fed).

Despite the many complexities to defining sustainable diets, there is [strong evidence](#) to show that an overall reduction in meat and dairy consumption would be better for health and the environment, including reducing GHG impacts^{13,15}. We therefore need clearer and stronger guidance on reducing meat and dairy consumption, increasing consumption of beans, pulses, fruit and vegetables, and ensuring that UK food, farming and fishery policies support a shift towards healthy sustainable diets for all.

Political Challenges

One challenge to embedding health and sustainability into dietary guidelines on reducing meat and dairy consumption is that public health agencies can

come under pressure from agriculture departments and vested interest groups. For example, in the US, scientific advice to incorporate elements of sustainability into [dietary guidance](#) (with particular reference to meat production) was overturned by business interests¹⁶. Similarly, Holland's government-linked National Institute for Public Health and Environment (RIVM) received backlash from the Dutch Meat Association for [publishing a report](#) suggesting that reducing meat consumption is better for health and the environment¹⁷.

Another issue is a lack of integrated policy synergy between PHE and the government's Department for Environment, Food and Rural Affairs (DEFRA) around food, health and sustainability. For example, in 2013 DEFRA published a [Sustainable Consumption report](#)¹⁸ which included explicit recommendations to reduce meat consumption. This report followed DEFRA's [Green Food Project](#)¹⁹, which culminated in the independently published [Principles of Healthy and Sustainable Eating Patterns](#)²⁰, a report that addressed a broad range of sustainability issues. However, although both reports were developed by multi-stakeholder groups under the auspices of DEFRA, and despite their nutritional relevance, the links between their recommendations and the Eatwell Guide were not made, nor did they become official policy.

Learning Opportunities

The Eatwell Guide does not provide specific guidance around consumption of different meat and dairy products, except for limiting red and processed meat to no more than 70 grams per day. A number

of other European countries (such as [Sweden](#)²¹, [Holland](#)²² and [Germany](#)²³) have been [more explicit](#) (see Table 1)²⁴. For example, Sweden and Holland's guidelines both go beyond red and processed meat – recommending limiting overall meat consumption to 500 grams per week. Although these figures were based on the more immediate benefits to health, rather than wider environmental considerations, the link between meat and environmental change is made explicit. In addition, Sweden explicitly links health and environmental issues to every food group, including highlighting which plant-based foods are preferable (e.g. root vegetables over salads due to being less perishable and having lower environmental impacts). More recently, [France](#) has also updated its guidelines to include advice to eat less meat and more plant protein (such as pulses), but stops short of making an explicit link to sustainability²⁵.

[WWF's Livewell 2020 Plate](#)²⁶ provides a UK-based example of research to combine both health and sustainability (in this case carbon footprint) into dietary advice. The Livewell Plate provides specific weight-based recommendations for different types of animal products such as meat, dairy and eggs. This guidance is currently being updated to also include water and land use impacts alongside climate impacts.

There are also learning opportunities in terms of improving the review process for updating dietary guidelines. For example, [in the US](#)¹⁵ guidelines are reviewed and updated on a broad base of evidence, every five years, to ensure they reflect the most up to date information.

	Meat	Dairy	Eggs	Fish	Fruit / Vegetables	Legumes / Pulses	Fibre / Carbohydrate	Animal welfare
Sweden	Maximum 500g per week (4 meals) only a small amount should be processed	200-500ml per day	Advice to focus on vegetarian foods / eggs instead of meat	2-3 times per week	500g per day (excluding potatoes)	Included in fruit / vegetables, recommended as a meat alternative	One portion per day (70-90g)	Suggest eating 'less and better' meat in the context of animal welfare
Holland	Maximum 500g per week (only 300 grams of red / high carbon meat)	2-3 portions, plus 40g of cheese daily	2-3 eggs per week	1 portion per week (reduced from 2 in previous guide)	250g of vegetables and 2-3 portions of fruit per day	1-2 times per week	4-5 slices bread, and 4-5 servings of wholegrain cereal / small potatoes per day	Advises to pay attention to labels on meat / eggs e.g. Better Life star, free-range or organic
Germany	Maximum 300-600g of lean meat and sausage per week. White meat highlighted as a healthier option	250-300g per day, milk and cheese combined	Up to 3 eggs per week	1-2 portions per week (one lean, one oily)	At least 400g of vegetables and 250g of fruit per day	No mention	300-600g of wholegrain cereals, potatoes and pasta, and at least 30g of fibre per day	No mention
United Kingdom	'Less red and processed meat' in pictorial guide, max. 70g per day (490g per week) specified in accompanying booklet	'Some' dairy (no precise specification)	'Some' eggs (no precise specification)	2 portions per week (one lean, one oily)	400g per day (excluding potatoes)	Recommendation to 'Eat more beans and pulses' in protein section of guide	'Base meals on this food group, choosing wholegrains where possible' (no precise specification)	No mention

Table 1: Comparison of recommended intakes of meat, dairy, eggs, fish, fruit and vegetables, pulses and legumes, and carbohydrates and fibre, taken from the national dietary guidelines of Sweden, Holland, Germany and the United Kingdom.

Recommendations

Although PHE has taken an important first step by including some sustainability messaging in the new Eatwell Guide, there is still some way to go to fully embed sustainability into dietary guidelines. Furthermore, because there is a large divergence between current diets in the UK and Eatwell recommendations, more attention needs to be given to the practical steps needed to change food consumption patterns.

Here we make **four key recommendations** for effectively using the Eatwell Guide to reduce the gap between current diets, and those that are healthy and sustainable.

1. Ensure cross departmental ownership and collaboration

- If dietary guidelines are to effectively integrate sustainability and health they need to be championed by more than one government department. Specifically, we recommend the formation of a new cross departmental group working together to ensure integration of health and sustainability into the guidelines, and all relevant policies.
- In particular, the Eatwell Guide must underpin the development of joined-up food, farming and fishery policies. We recommend that DEFRA and other relevant government departments (including the devolved administrations) explicitly endorse the Eatwell Guide, and ensure that it informs the future development of food, farming, fishery and climate change policies, including public and private food procurement standards.

2. Develop and implement strategies to actively change dietary behaviour

- As well as promoting dietary guidelines more widely among the general public, health professionals, consumer organisations and those working in the food sector, PHE and other relevant departments should also actively develop strategies to enable behaviour change.
- Such strategies should: a) focus on healthy and sustainable diets more broadly, rather than just individual nutrients (e.g. sugar) and b) go beyond promoting individual behaviour change, considering the wider structural determinants of poor diets, such as regulation of the food retail sector and improving access to healthy, sustainable food.

3. Improve the content and messaging of the Eatwell Guide around health and sustainability

- There needs to be stronger and more explicit messaging about the links between diets, health and sustainability. This should enable the general public, health professionals, consumer organisations and those working in the food sector to understand and pay due consideration to the impact of the food system on the environment.
- More specific guidance on consumption patterns of different foods should be provided. This should include the section for dairy and alternatives, as well as the red meat, processed meat, fish, beans and pulses section, both of which currently group foods together under a single section in the Eatwell Guide even though they have significantly different health and environmental impacts. This should initially be done through supplementary guidance, but with the aim of the Eatwell Guide being amended accordingly in the future.

4. Develop a broader, more rigorous and regular dietary guidelines review process

- The Eatwell Guide should be regularly reviewed, for example every five years, in a transparent and comprehensive manner so that it can be improved and updated on the basis of the latest information available.
- This should be informed by an expert advisory group on healthy and sustainable eating which includes, amongst others, expertise in health, nutrition, agriculture, fisheries, environmental sciences, social behaviour and economics. This expert group should involve representation from other relevant committees such as SACN and the Committee on Climate Change.

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Citation:

A Healthy and Sustainable Food Future: Policy recommendations to embed sustainability in the Eatwell Guide and wider UK food policy. Medact and Eating Better Alliance Policy Briefing, 2017.

This briefing was written by Josephine Head and Elizabeth Atherton (Medact), with input from Sue Dibb, Clare Oxborrow and Elena Salazar (Eating Better Alliance); David McCoy and Ben Walpole (Medact).

Medact and Eating Better receive funding from the Esmée Fairbairn Foundation.