

Plant-based diets – an underutilised way to tackle our health and climate crises

Could cutting our meat and dairy consumption be key to improving our health as well as instrumental in dealing with climate change?

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In this article, Dr Shireen Kassam, Consultant Haematologist and founder of [Plant-Based Health Professionals UK](#), discusses how healthcare systems can influence the adoption of plant-based diets for the benefit of patients and the planet.

As healthcare professionals we are naturally interested in and supportive of actions that improve health in its broadest sense. Yet when it comes to discussing diet choices and the food environment, there seems a reluctance to embrace change. For doctors at least, a lack of nutrition education supports the status quo, along with concerns around restricting choice or upsetting patients. However, health promotion and counselling should be a part of all health professionals' skill set. The impact of diet change can be truly remarkable. Embracing change starts with ourselves so that we can role-model with confidence and advise with credibility.

Improving human and planetary health

Unhealthy diets are a key driver of the chronic ill-health epidemic, with dietary risk factors now being the leading cause of chronic conditions and premature death.¹ At the same time, our food system is at the centre of the climate and ecological crises.^{2,3}

Our diets are too high in meat and ultra-processed foods and insufficient in the plant foods that promote health. This is leading to more than 12 million premature deaths globally every year from conditions such as cardiovascular disease, type 2 diabetes and cancer.⁴ Moreover, if we all ate a diet typical of high-income countries, we would require the resources of 7 planet Earths to feed the world.⁵ Shifting to a plant-based diet is one of the single most impactful actions we can take to improve our own health and that of the planet.³

Making proportionate changes

The best available evidence informs us that, without transitioning our food system away from animal agriculture, we cannot meet our climate and nature commitments and will not be able to limit global warming to below 1.5 °C or even 2 °C.⁶ Agriculture contributes at least a third of all greenhouse gas emissions and is the primary cause of biodiversity loss, threatening up to 90% of species with extinction.

The largest contribution comes from farming animals. Yet we can still feed a projected global population of 10 billion while keeping the food system within planetary boundaries if we all shift to a healthy plant-based diet. The EAT-Lancet Commission diet, also known as the planetary health diet, derives more than 85% of energy from fruit, vegetables, whole grains, beans, nuts and seeds.² The diet does not have to be 100% plant-based, but it can be, to gain the maximum benefit for the planet.⁷ If choosing to consume animal-sourced foods, these should be limited to 1 portion of red meat, 2 portions of poultry and 3 eggs per week. Dairy consumption is not considered essential. High-income countries like the UK need to make the greatest change with an 80% reduction in animal foods, while increasing the consumption of whole plant foods.

Moving away from meat and dairy consumption

The greatest impact comes from removing red meat and dairy from the diet, the production of which contributes to 57% of agricultural emissions globally while being responsible for 16% of all diet-related deaths (1.9 million). In the UK, the agriculture sector contributes almost 45% of the UK's greenhouse gas emissions, with red meat and dairy accounting for 74% of these emissions. In addition, around 42,000 deaths annually are associated with excessive consumption of dairy, red meat and processed meat and 70,000 deaths are associated with insufficient intake of nutritious plant-based foods (such as fruits, vegetables, legumes, whole grains, nuts and seeds).⁴

Even small dietary changes have a big environmental impact. Replacing 30% of meat with plant protein could offset almost all global aviation emissions, free up an India-sized carbon sink that could absorb CO² from the atmosphere and save 7.5 million swimming pools' worth of water a year.⁸ If we were bold and supported a fully plant-based transition, we could return 75% of farmland back to nature, allowing a drawdown of carbon equivalent to 16 years' worth of emissions from fossil fuel use.⁹

Health benefits of a plant-based diet

Of particular importance to healthcare, a plant-based diet is associated with considerable health benefits, with significant reductions in cardiovascular disease, type 2 diabetes, obesity, certain cancers and dementia.^{2,10,11} Further co-benefits include reductions in the use of antibiotics in farming and

consequently the risk of antimicrobial-resistant infections.^{12,13} Similarly, 3 of 4 new and emerging infections with pandemic potential come from animals; the next pandemic is predicted to arise from industrialised animal farming, likely a bird flu.¹⁴

How can healthcare influence dietary change?

Healthcare systems around the world have the potential to influence more widespread dietary change. For example, the NHS has almost 1.3 million employees and serves around 140 million meals to hospital patients each year. Switching to a plant-based menu could reduce food-related carbon footprint by more than 50%.¹⁵ £633 million is spent on inpatient food provision, yet studies have shown that a plant-based diet would actually cost a third less in the UK.¹⁶ In addition, economic modelling suggests billions in health-related cost savings for the NHS.¹⁷

Government subsidies away from meat and dairy towards healthy plant-based foods would help to reduce the cost further. A real-world example showcasing what can be achieved comes from New York City. Here, the Mayor, Eric Adams, has championed plant-based meals as the default in 11 city hospitals.¹⁸ This has led to 60% of meals consumed being plant-based, with reductions in food cost, excellent patient satisfaction and a 36% reduction in food-related greenhouse gas emissions. The beauty of a plant-based diet is that it is adaptable to all traditional and cultural diet patterns, making it inclusive, delicious and nutritious.

Barriers to adopting a plant-based lifestyle

Policy documents and sustainable healthcare curricula all state the broad benefits of a plant-based diet. Yet action is too slow, given that we have already breached 6 of the 9 planetary boundaries and now have less than a decade to make meaningful changes to ensure a future liveable planet.

Sadly, industry influence from a powerful meat and dairy lobby is hampering meaningful change. Many healthcare professionals still follow the narrative that meat and dairy are essential; the co-opting of doctors and scientists for industry benefit reminds us of a time when doctors were advertising cigarette smoking. This is not helped by the fact that farming policy and subsidies, certainly in the UK, do not align with health or climate goals. More than 80% of farmland is used to raise animals for food, leading to an excess of meat production, while the UK is reliant on imports for foods that promote health, such as fruit and vegetables.

Conclusion

I am hopeful that the tide is changing. Some doctors are now referring to the need for plant-based dietary change as 'a moral imperative'^{19,20} and plant-based options are more widely available. Health professionals need to show leadership, and this should start with getting our own house in order. Actions such as removing red and processed meat from healthcare menus, offering plant-based meals and dairy alternatives as the default and adding our voice to lobbying efforts, such as endorsing the Plant Based Treaty, would go a long way. The beauty of diet change is that we don't need to wait. We can all commit to adopting a plant-based diet today.

[References available on our website.](#)

Meet the author



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