Diet-related diseases are at an all-time high and the latest UN Intergovernmental Panel on Climate Change (IPCC) report on climate change has been called a ‘code red for humanity’.

These two issues are intimately related. Our food system is at the centre of three global crises: health, climate, and ecology. We also have a crisis of ethics whereby more than a billion people remain hungry despite the production of enough food to feed two planets. If everyone ate a diet typical of the wealthiest nations, we would need seven planets to feed the world.

We have a simple solution in plain sight. A healthy plant-based diet (PBD) would not only improve global health, preventing an estimated 1 in 5 deaths, but would also keep the food system within the planetary boundaries necessary to avert climate disaster, while also promoting biodiversity and feeding more people. The Planetary Health Plate created by the Eat-Lancet Commission is predominantly plant based, with more than 85% of energy derived from healthy plant foods, and acknowledges that a 100% PBD is not only nutritionally adequate but also has additional benefits for planetary health.

Red and processed red meat production and consumption are particularly harmful for personal and planetary health, with 842 000 deaths associated with excessive red meat consumption globally. The largest analysis to assess the co-benefits of a nutritionally adequate yet sustainable diet, using the Planetary Health Plate as an example, found that the adoption of such a diet could prevent up to 63% of all deaths and up to 40% of cases of cancer while at the same time reducing greenhouse gas emissions up to 50% and land use up to 62%.

**THE PROBLEM WITH ANIMAL AGRICULTURE**

The National Food Strategy plan in the UK clearly lays out the problem and makes the connection between our food system and climate and health outcomes. Although the recommendations in our opinion do not go far enough, they are a step in the right direction. These include a 30% reduction in meat consumption, while increasing fruit, vegetables, and fibre consumption. These recommendations reflect the fact that animal agriculture accounts for nearly 60% of food system greenhouse gas emissions, with beef and dairy farming contributing the majority. Animal agriculture is also responsible for deforestation, biodiversity and species loss, land, air, and ocean pollution, not to mention the generation of new infectious threats with pandemic potential and contributing to antibiotic resistance. It is a highly inefficient system that also harms people, usually marginalised, migrant groups, who have little choice but to work in slaughterhouses, a workplace that contributes to both mental and physical ill health.

**DIET AND COVID-19**

We now have compelling evidence that a PBD can promote pandemic resilience, reducing the severity of SARS-CoV-2 infection. The first clue came from a study from China demonstrating the impact of the health of the gut microbiome, which thrives on a fibre-rich diet, on COVID-19 severity. This has been followed by the publication of two observational studies. A case–control study of healthcare workers with significant exposure to COVID-19 captured demographic, medical, lifestyle, and dietary data, and correlated these with severity of COVID-19 among 568 cases compared with 2316 controls. The results showed that those following a plant-based dietary pattern had a 73% reduction in the risk of moderate or severe COVID-19. This was independent of underlying chronic health conditions. In contrast, participants following a high-protein, low-carbohydrate diet had a three-fold higher risk of moderate or severe COVID-19. We accept that this study has a number of limitations; nonetheless, those participants described as eating a PBD had significantly higher consumption of legumes, nuts, and vegetables, and lower consumption of red/processed meat, sugar-sweetened beverages, and alcohol compared with participants who did not follow a PBD.

A further paper reporting more robust data from the Zoe COVID symptom study analysed diet quality in more than half a million participants from the US and UK. During the follow-up period, 31 815 COVID-19 cases were documented. Adherence to a healthy PBD was calculated using the healthy PBD index. Those eating a healthy PBD had a 10% reduction in risk of COVID-19 and a 40% reduction in severity of COVID-19. The impact was greatest in those from lower socioeconomic groups and independent of underlying chronic health conditions and lifestyle factors.

**A CALL TO ACTION FOR HEALTHCARE PROFESSIONALS**

It is heartening to see that healthcare professionals are strongly advocating for climate health. Greener Practice and Doctors for XR (Extinction Rebellion) are doing an incredible job at highlighting the impact of healthcare services on climate change and providing pressure for the implementation of readily available solutions. Similarly, the UK Health Alliance on Climate Change is working at a policy level. However, a more open and bold conversation is still lacking around the true impact of our food choices, and the healthcare community continues to prioritise their own dietary preferences ahead of public and planetary health. The recent British Society of Lifestyle Medicine annual conference served red meat at lunch so as not to exclude individual diet preferences. Hospitals continue to serve red and processed meat. We need to do better.

Our food choices matter. Without addressing food production, we cannot meet our climate targets. Healthcare professionals should be leading by example and supporting patients to make healthier choices that will improve their quality of life and those of future generations.

Shireen Kassam, Consultant Haematologist and Lifestyle Medicine Physician. Shireen is the founder of Plant-Based Health Professionals UK and co-founder of Plant Based Health Online [https://plantbasedhealthonline.com].

Email: shireen.kassam@nhs.net

Laura Freeman, GP, Lifestyle Medicine Physician, and co-founder of Plant Based Health Online.

This article (with references) was first posted on BJGP Life on 4 Nov 2021; https://bjgp-life.com/plant

DOI: https://doi.org/10.3399/bjgp21X717857