

Sustainable nutrition



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If it was easy to change the way we eat, malnutrition in all its forms – undernutrition, overnutrition and micronutrient deficiency – could have been eliminated long ago. Everyone would have access to affordable food and choose to eat the quantity and variety that keeps them in optimal health.

That's the dream. The reality is that humans have a food problem. It is a complex and multidimensional issue, but in broad brush strokes: huge numbers of people go hungry; large nutritional imbalances persist between high- and low-income nations and regions; and the food system, from production to supply and consumption, is both failing society and damaging the planet.

The COVID-19 pandemic has highlighted the problems, and exacerbated them (see page S57). Political, economic and cultural obstacles are prolific on the pathway to achieving a sustainable global diet (S54). Even if a suitable global menu could be agreed on, changing eating behaviours at scale is a formidable and understudied challenge (S70).

The mainly plant-based diet that nutritional scientists recommend for physical and, more recently, mental health (S63) is better for the environment than diets that are heavy in meat and highly processed foods. To reduce our reliance on farmed meat, scientists around the world are developing affordable protein alternatives. Researchers are racing to transform lab-grown meat from a headline-grabbing novelty into a viable industry supplying supermarkets (S64). And according to projections, aquaculture is ramping up to overtake wild fish stocks as the main source of aquatic protein in diets by 2050 (S60). Farming methods that intensify agricultural production while rebuilding and sustaining natural systems are also becoming more widespread (S58).

Diversity is key. There is no single solution that will guarantee sustainable nutrition for everyone. In the same way that the pandemic demands an integrated, cooperative and global response, in which science plays its part, so does feeding the global population.

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Catherine Armitage

Chief editor, *Nature Index*

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Eating well for the health of the planet. Credit: Sophie Casson for *Nature*

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