



## FOOD FOR THOUGHT 2023

## Challenges of obesity and type 2 diabetes require more attention to food environment

The narrative must shift away from individual choice on to structural factors

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Over half of the global population will be living with overweight or obesity by 2035 if current trends continue, and more than 1.3 billion people worldwide will have diabetes by 2050<sup>1</sup>; type 2 diabetes will account for most of the new cases, fuelled by changes in obesity and dietary risks.<sup>2</sup> These trends are likely to have serious health, social, and economic effects, not least for low and middle income countries, which are forecast to bear the brunt of the increases. However, we already have evidence of the inequitable burden of obesity and type 2 diabetes, notably during the covid-19 pandemic when people with obesity and type 2 diabetes experienced poorer outcomes.<sup>3</sup>

In 2018, *The BMJ* launched Food for Thought, a collection exploring key questions around what we should eat to stay healthy and avoid disease.<sup>4,5</sup> The collection showed how weak science, commercial influences, and conflicting media messages all contribute to making questions on nutrition so difficult to answer. Five years on, not only does nutrition research remain beset by these problems but rates of cardiometabolic disease—driven in no small part by dietary factors—continue to rise.

The global challenges posed by these trends and inequities remind us that what, where, and how people eat does not happen in a vacuum. We know that approaches towards promoting healthier eating that emphasise individual responsibility and providing information are unlikely to be successful on their own,<sup>6</sup> particularly in the context of the cost of living crises faced by many around the world. Narratives around personal choice add to a sense of shame for people unable to access or afford healthier diets and reduce the onus on politicians and industry to take meaningful action on regulation, marketing, and the social gradient. It is within this context that new medical treatments for individual weight loss, such as semaglutide, are now available; but these are accompanied by concerns about high cost, poor accessibility, and uncertainty about the effects of long term use.<sup>7</sup>

The Food for Thought 2023 collection ([www.bmj.com/food4thought23](http://www.bmj.com/food4thought23)) focuses on the role of nutrition in the development, prevention, and treatment of cardiometabolic disease. It is therefore unsurprising that a recurring theme is a renewed emphasis on the broader social, political, and economic influences on the food environment and the choices available to individuals.

## Acting on imperfect evidence

There is an increasingly diverse evidence base on promising areas of intervention to improve cardiometabolic outcomes, although in some emerging fields applied research is not yet strong and consistent enough to drive consensus across guidelines. For example, Hedrick and colleagues argue that current evidence is inadequate to inform conclusive guideline recommendations on non-sugar sweeteners, and evidence on long term effects is limited.<sup>8</sup> And despite the depth of basic research establishing the effect of microbial metabolites on human health, Valdes and Ghosh highlight that we still have little evidence from clinical trials examining the effect of manipulating the gut microbiome on disease specific outcomes.<sup>9</sup>

Diet and nutrition related population level interventions have a vital contribution to tackling cardiometabolic disease, but the contentiousness surrounding definitions and categorisation of food groups can impede policy action. Gearhardt and colleagues examine some of the uncertainties around conceptualising certain foods as addictive but maintain that the classification is valid and clinically relevant, noting that it provides an additional avenue for policy intervention to improve health.<sup>10</sup> Touvier and colleagues similarly argue that shortcomings in the evidence base around ultra-processed foods can no longer be used to defend inaction.<sup>11</sup> Rather, they say, we know enough now to justify a public health response to reduce individuals' exposure to and consumption of ultra-processed foods.

Population level drivers, and consequently opportunities for improved nutrition and prevention of disease outcomes, are also discussed by Romero-Gómez and colleagues in the context of non-alcoholic fatty liver disease.<sup>12</sup> They evaluate the evidence for the role of diet in the development of the disease and for prevention through promotion of dietary approaches such as the Mediterranean diet. Piernas and Merino also lay out the potential benefits of a healthy diet in lowering covid-19 risk and severity, especially for disadvantaged communities.<sup>13</sup> Finally, Maessen and colleagues highlight that early childhood may offer unique opportunities for the prevention of obesity, noting that some countries seem to have been able to reverse trends towards increasing obesity rates in this age group<sup>14</sup> but making clear this should be no excuse for complacency on policy action.

We must move beyond narrowly conceived frameworks emphasising individual choice and towards action that tackles the population level structural drivers of cardiometabolic disease. The Food for Thought 2023 collection lays out some clear priorities for doing so, but also the critical uncertainties, as well as next steps to tackle the dietary drivers of obesity, diabetes, and other cardiometabolic diseases.

Competing interests: *The BMJ* has judged that there are no disqualifying financial ties to commercial companies. The authors declare no other interests. Further details of *The BMJ* policy on financial interests are here: <https://www.bmj.com/sites/default/files/attachments/resources/2016/03/16-current-bmj-education-coi-form.pdf>

Provenance and peer review: Commissioned; not externally peer reviewed.

This article is part of a collection proposed by Swiss Re, which also provided funding for the collection, including open access fees. *The BMJ* commissioned, peer reviewed, edited, and made the decision to publish. Nita Forouhi, Dariush Mozaffarian, and David Ludwig provided advice and guided the selection of topics. The lead editors for the collection were Navjoyt Ladher, Rachael Hinton, and Emma Veitch.

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