NO MEAL IS AN ISLAND

A myriad of factors influence what we eat, from personal preferences to the marketing campaigns of big corporates. Sometimes even a small, but well-placed, intervention can have large ripple effects.

"There is little in life that is as both ordinary and powerful as food."



n 2015, Aulo Gelli, a senior research fellow at the International L Food Policy Research Institute in Washington DC, spoke to a village chief in the poverty-stricken Zomba district of Southern Malawi. To Gelli's surprise, the man credited the local pre-school food program for helping his job as a chief. The activity around food in the pre-school had created cohesion in the community. Villagers contributed their time and money to make the program work, and their shared sense of unity and mission made it easier for the chief to lead. The programme had laid the groundwork for him to encourage his community to eat healthier food, and also highlights the nested and complex relationships that affect food choices.

Wherever people live, there is little in life that is both as ordinary and as powerful as food. Seemingly simple choices about what to eat are shaped by complicated social systems, from personal preference to family and context, to culture and institutions, to marketing and the media. These systems interconnect and, in turn, reflect and shape systems such as agriculture, policy, manufacturing and marketing. They are also overlaid by sudden shocks such as a pandemic or creeping disasters, like drought.

Understanding how such nested complexity shapes nutrition is a pressing social problem. In many Western societies, neoliberal politics and economics call for less intrusive policy approaches and health choices are considered an individual rather than collective responsibility. In a world afflicted by both 'overnutrition' and undernutrition, and at a time of increasingly dire environmental pressure, we need to understand which social factors have most impact on nutrition decisions.

Better choices come in small packages

In the Malawi programme, Gelli provided a small piece of information, a little training and a small incentive like seeds or chicks. Many social programs in the developing world give food or cash to communities, he explains, but in his programme local mothers were taught how to tweak their pre-school children's diets—by adding small amounts of nutrient dense foods to typical meals, like putting green leaves in the standard porridge. They also took turns preparing food for the pre-schoolers.

One year into the programme, Gelli and his colleagues found that the small amounts of information had gone a long way. The pre-schoolers who ate slightly more nutritious food were taller than a control group after one year. Remarkably, their younger siblings also grew taller because the mothers had incorporated the tweaks in their home cooking, In fact, the younger siblings grew taller, faster. The pre-schoolers eventually caught up, but it took them a bit longer. The younger siblings also performed better on standardized tests of fine motor, gross motor, language, and psycho-emotional skills than the control group.

"Key nutrients at the right time can change a child's life beyond physical health," says Gelli. How those key

nutrients are delivered also matters. They were not delivered from outside the community, they were incorporated as a matter of individual choice by mothers who were trained. "One of the most important factors is that people need to have a sense of ownership over their choices," he concludes.

Creating a sense of ownership and having impact is highly context specific. Behavioural nutritionist, Anthony Worsley at Deakin University, Australia, agrees it is critical to increase people's agency and encourage confident decision making. "Information doesn't necessarily change behaviour," he says. Psychology and culture must also be considered.

A 2020 review by Worsley and colleagues explored the long-term impact of a parent's personal style when serving food. Parents who were authoritative — rather than authoritarian, permissive or disengaged — were more likely to have children with healthier diets. Outside the realm of the family, Worsley has examined the influence of more abstract values on diet, such as "caring", either for other people or animals. In Western societies, many healthier foods are linked to that kind of caring, known as universalism, he said. Some behaviours that are shared across cultures can be leveraged by food researchers. In Ghana and Vietnam, Gelli is piloting a programme for teenage girls that uses a phone-based app to promote healthy eating. The user takes a photo of their meal and the app's AI program tells them how healthy it is and makes suggestions: for a photo of spaghetti and tomatoes, it may suggest adding greens.

Better choices need top-down support

An individual or family's food choice decisions take place within a larger context, whether it's the diversity of local crops, proximity to a supermarket, or how much ultra-processed food is on offer. Local food landscapes may be relatively fixed, which can be a problem, but when they are not, marketing can have a huge influence on daily choices. Worsley notes that in many countries, manufacturers of ultra-processed unhealthy food are legally allowed to market directly to children. Supporting better choices and helping prevent unhealthy ones requires legislative change. "It's a continuum," says Worsley. "Actions at all levels are important."

Legislative change is just part of the public policy leadership required of

governments. Also required, suggests a 2018 article by Dariush Mozaffarian of Tufts University in Boston, US, is evidence-based policies that support integrated, multi-pronged government strategies within a learning and adaptable system. Governments also need cooperation and complementary efforts by major nutrition stakeholders, including private health and life insurance corporations, for R&D into healthier products and effective behaviour change.

For Gelli, the most effective programmes for change are those that include funding for preliminary investigations. This enables researchers to learn, in advance, about the culture and context they are trying to change. Co-design also helps. Gelli suggests that the science is more robust when it includes local experts, who can speak to subtle differences and local expectations and help shape research questions.

The key to nudging people towards healthier diets, Gelli explains, is to find the right point of entry into the complicated, interacting systems. The good news is that once you find it, one small, well-placed change can have enormous impact.