

ixing food systems is a win-win for addressing malnutrition and mitigating climate change. To date, efforts to transform food systems have failed to prioritise healthy and sustainable diets for children and adolescents. As articulated by the Innocenti Framework (Raza et al., 2020), the diets of children and adolescents are shaped by food systems in ways that make them uniquely susceptible to exploitation by commercial companies.

Commercial actors do have opportunities to drive positive change in societies; however, a substantial number of them are contributing to avoidably high levels of ill health, planetary damage, and inequities. These actors include large, multinational food companies, also known as 'Big Food', who promote and sell unhealthy foods (such as those that are highly processed or high in sugar or salt). Many of these companies lobby in national policy environments, promote globalisation, and drive market economies, for the benefit of their own profits rather than global health. While the commercial determinates of health affect everyone, young people are especially at risk.

What we know:

Current food systems are failing young people (defined as ages 10–24 years for the purpose of this article). Food systems often overlook young people's nutritional needs and fail to provide the quantity, frequency, and quality of food that they require to grow and develop.

What this adds:

This article builds upon a blog post published by the authors in November 2023. It describes six reasons to be hopeful about the role of youth in fixing food systems and provides more detail through key examples.

oday, adolescents make up 1.3 billion of the world's population, the largest cohort in history. Many low- and middle-income countries (LMICs) currently have a 'youth bulge', a large population of adolescents and young people. This should be a demographic gift for national economies. However, the demographic dividend is being exploited by Big Food² to make larger profits from the sale of unhealthy foods, at the expense of the nutritional status of young people and planetary health.

While we know that malnutrition is prevalent among adolescents, current data systems are poorly equipped to monitor the nutritional status of this age group (Lelijveld et al., 2022). Without the ability to monitor, national governments don't know the scale of the problem and they cannot set targets for improvement.

There are many reasons to be concerned about the negative influences of Big Food on the diets of young people, but there are also reasons for hope! Here are six:

Young people are empowered by knowledge and skills

Adolescents are knowledge-seeking and do understand the importance of good nutrition. In a study across 18 countries, adolescent participants discussed how nutrition was a high priority for them (Fleming et al., 2020). Young people valued health and wellbeing with an understanding that they need to consume a quality diet to ensure they stay healthy. They also called for better integration of nutrition education in their schools, seeking more opportunities to learn and to develop the practical skills needed to eat healthily.

When armed with knowledge on 'why' and skills for 'how-to', young people can make good food choices. Research from Brazil (Inácio et al., 2022) found that educating young people on food choices and meal preparation and overcoming obstacles to healthy eating had positive impacts on their self-efficacy in preparing healthy meals and reduced their consumption of ultra-processed foods.

Ultra-processed foods are pervasive throughout global food systems and consuming them in large quantities contributes to rising levels of childhood obesity, increases the risk of developing non-communicable diseases like diabetes and heart disease, and has detrimental impacts on environmental sustainability. In Chile, qualitative research (Fretas et al., 2021)

showed that, even at young ages (8-9 years), when simple concepts like 'taking care of the planet' were used to communicate with children, they could link environmental sustainability to the food they eat through 'green actions' such as recycling and eating less meat. They also demonstrated concerns around animal suffering and had positive perceptions of using simple eco-labels to distinguish between foods that were 'better' or 'worse' for the environment. By connecting nutrition-related knowledge and skills to benefits for health, wellbeing, and environmental sustainability, we can maximise their impact by tapping into the different priorities, concerns, and aspirations that resonate with young people and galvanise their commitment to change.

Young people are excellent changemakers

Young people can influence the health behaviours of their families and wider communities. Research from Ethiopia (Trübswasser et al., 2021) found that adolescents were confident in their ability to identify solutions to the challenges within their food environments. They desired more opportunities for involvement in nutrition research and programming and to influence decision making in their schools, households, and wider communities. 'Children for Health' is one organisation that harnesses young people's motivation and aspirations for food system transformation by encouraging children to be agents of change. They have created storybooks, posters, recipe books, and teaching guides to positively impact community food choices, breastfeeding practices, and hygiene practices. Their Rainbow Flower is a training tool that aims to promote more participatory methods of health education and to put empowerment principles for children and adolescents into practice.

In many settings, children and adolescent girls do a lot of the cooking at home. An ongoing study in Malawi is looking to reduce salt intake for adolescents and their families through a school-based, experiential learning intervention, following a pilot study review that found adolescent girls can be very influential on the diets of the whole household.

https://www.anh-academy.org/community/blogs/

youth-power-vs-big-food-6-reasons-to-be-hopeful
https://www.researchgate.net/publication/343509732_
Fast_food_consumption_among_young_adolescents_
aged_12-15_years_in_54_low-_and_middle-income_
countries

Young people can also be changemakers at all levels of society. When over 700 adolescents from 18 countries were asked to identify specific actions to improve food systems, they provided concrete suggestions for change at all levels of their community, from "me and my family" to the wider community, industry, and government (Fleming et al., 2023). One of the four key areas in which young people sought change within their food systems was 'inclusion'. They wanted to share their views across diverse platforms, including through traditional media (newspapers, television) and social media channels, during workshops, open forums, meetings and conventions, and at schools. In turn, they wanted to feel listened and responded to by government and other relevant organisations. To ensure that they are heard and acknowledged, young people made six recommendations to better position themselves as changemakers (Box 1).

Young people have agency, redefining food systems to work for them

Agency is a key pillar of food security, alongside availability, access, utilisation, stability, and sustainability. Adolescents, just like adults, can redefine food systems that work for them. When agency is enhanced, young people's diet quality and nutrition improve.

The power of young people is increasingly being recognised, with representation at the World Food Forum, the 2021 UN Food Systems Summit, and as a key part of the Scaling Up Nutrition civil society network.

The global activation of the youth voice has shown that young people are acutely aware of the influence of multinational corporations on their food supply (Fleming et al., 2023).

Young people are reshaping food systems through social movements

Many young people are turning to social movements and other less traditional means of civic and political participation to challenge the influence of corporations. An article on Foodtank.com³ lists 20 youth organisations that are transforming food systems, such as Act4Food, a collective of global youth activists demanding a seat at the table to change food for good.

In Ghana, young people were central to the 'Advocating for Health' (A4H) project, which aimed to use scholar activism and advocacy to create a favourable environment and stakeholder buy-in for fiscal policies on food and drink products. This led to enactment of a sugar-sweetened beverage tax in 2023.

Fostering collective solidarity through shared goals, young people are also harnessing the power of social media, such as this powerful video⁴ by 'Bite Back', a youth-led organisation in the UK that exposes the powerful effect of advertising on food choices. This was instrumental in the development of a ban of junk food advertising online and before 9pm on TV in the UK from 2023.

Big Food might be powerful, but they are not infallible

Young people and wider society can take back some power by exploiting 'cracks' in corporate power,⁵ including vulnerable corporate reputations and conflicts within industry alliances.

The dietary practices of young people can be positively influenced by regulation, such as sugar taxes, restricting TV marketing, and limiting advertising in and around schools. Some LMICs already have strong policy frameworks in place to support adolescent nutrition, as outlined in case studies from Malawi and Bangladesh (Lelijveld et al., 2023).

Adolescents are calling for change (Fleming et al., 2023) through the regulation of food production and mechanisms to hold food producers accountable:

"Corporations cutting down on the profits they are making to make healthy food more affordable" – contribution from a young

person (aged 14 years) during a youth food systems workshop in Sydney, Australia

They also agree that marketing impacts their dietary choices and want governments to act by regulating marketing of unhealthy food and drinks. They are aware of, and can identify, tactics used by advertising companies to influence their food attitudes, preferences, and dietary habits. In Canada, research showed that adolescents identify teen-targeted advertisements according to their themes and their use of celebrity endorsements, special offers, music, and language (Elliot et al., 2022). Alongside regulation of unhealthy foods, youth have called for more intentional promotion of healthy foods, which would tip the scale toward healthier lifestyles:

Young people particularly desire better regulation in the digital space – across social media, apps, and gaming applications. They want stronger rules around the types of marketing they see, and for those rules to be enforced and monitored, and for digital platforms to be held

"I would end junk food marketing. This would take the spotlight off unhealthy food and create a food system with a bias towards health, where companies prioritise... healthy products"

- contribution from a young person (aged 17 years) in the UK during a focus group discussion

accountable when they break them. They also highlighted the need to regulate the 'gimmicks' (or creative and convincing elements) used by marketing agencies, with a particular emphasis on a need to prevent dishonest and misleading marketing, including the use of health claims to sell unhealthy products.

Young people's nutrition is becoming more visible

UNICEF recently launched the Adolescent Data Portal, which features a focused selection of key indicators on health and nutrition, education, protection, and transition to work. Similarly, the Population Council houses an Adolescent Data Hub with data from across 127 LMICs.

Save the Children's Adolescent Health and Nutrition Index, launched in 2023, tracks key indicators for adolescent health, nutrition, gender equality, and adolescent empowerment in 75 LMICs against the finance and wider legal and policy environment. Presenting these components together provides context for the status of adolescent health and nutrition across settings where adolescents, their communities, and their governments face distinct challenges. For example, in some countries strong policy frameworks for adolescent health and nutrition may be undermined by absent or inadequate financing for implementation, while in others policies, systems, and programmes to support adolescents may be lacking, despite adequate financing mechanisms. Encouraging to note is that the first of Save the Children's recommendations to governments to meet the needs of adolescents is to partner with adolescents and young people, particularly girls and other groups impacted by gender inequality and discrimination. This should involve establishing and institutionalising mechanisms for young people's safe and meaningful participation in decision making, as well as providing the financial and technical resources for them to do so.

The Demographic and Health Survey programme, which collects representative health and nutrition data in more than 90 countries, has recently changed the way adolescent nutrition indicators are reported. Now, instead of including adolescent girls with adult women, data for girls and boys aged 15–19 years is disaggregated and classified using age-appropriate references (Wrottesley, 2023).

Box 1

Recommendations to ensure that young people are heard (in nutrition)

- 1. Listen to adolescents
- 2. Leverage social media, including dedicated spaces on platforms for adolescent voices
- 3. Allow for adolescents to drive change through participating in school and/or through community-level action
- 4. Meaningfully engage adolescents in the policy development process
- 5. Ensure that co-design occurs from conception to completion of nutrition interventions
- 6. Continually measure youth involvement and outcomes throughout the intervention process
- https://foodtank.com/news/2021/08/youthorganizations-transforming-food-systems/
- 4 https://www.youtube.com/watch?v=TLf2gOrL1iM&t=1s
- ⁵ https://gh.bmj.com/content/6/2/e003850

Conclusion

In summary, young people can be powerful changemakers for themselves and others. Companies are not invincible. Many young people are already acutely aware of the current issues facing food systems and the need to make choices for their and the planet's health. Arming more young people with knowledge can make them even more powerful. They deserve, and are entitled to, have their voices heard and their visions realised. At the same time, we are getting better at measuring and monitoring change. So, while Big Food propels food system-related climate change and is a huge contributor to the poor health and nutrition of young people, there are reasons for hope.

For more information, please contact Natasha Lelijveld at

natasha@ennonline.net

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Shaneka Thurman
Former Senior Advisor for
Nutrition-Sensitive Social and
Behaviour Change at USAID
Advancing Nutrition



Amelia Giancarlo
Former Project Officer at USAID
Advancing Nutrition



Abigail Conrad Former Senior Advisor for Research and Learning at USAID Advancing Nutrition



Lisa Sherburne
Former Director for Social and
Behaviour Change at USAID
Advancing Nutrition



Silvia Alayon Former Director for Measurement at USAID Advancing Nutrition



Alyssa KleinFormer Technical Advisor for USAID Advancing Nutrition

What we know:

Consumer demand is a core component of food systems, influencing what producers grow, what markets sell, and what households decide to prepare and serve. Increasing consumer demand for healthy diets can transform food systems, improving access to safe, affordable, and nutritious foods, but it is particularly challenging for lower-income consumers.

What this adds:

We identified a need for better metrics of consumer demand for healthy diets among lower-income consumers in low- and middle-income countries, learning from our experiences in Bangladesh and Burkina Faso. We need a shared understanding of consumer demand that focuses on standardised, user-friendly metrics along the programme impact pathway, allowing programme staff to easily analyse and apply any findings.

conomists define consumer demand as the quantity of a good that consumers are willing and able to purchase at various prices during a given period (Sullivan & Sheffrin, 2003). While there is no common definition of consumer demand for healthy diets, it can be influenced by the food environment: availability, affordability, convenience, and desirability (Turner et al., 2018).

USAID Advancing Nutrition conducted a desk review of efforts to increase consumer demand for healthy diets among rural, low-income consumers. We found gaps and differences in how programmes measure such demand. This lack of clear metrics limits how programmes can adapt activities and build a strong evidence base by comparing efforts across different interventions. We applied behavioural theory to determine and test a set of programme-level metrics that practitioners can use to track and evaluate consumer demand generation across programmes. We then worked with

two programmes to test those metrics, in Bangladesh and Burkina Faso.

Understanding the gaps

To understand existing knowledge gaps for estimating consumer demand for nutrient-rich foods among public sector nutrition implementers, we first reviewed published literature and programme reports.

We identified three factors within personal food environments that influence consumer demand. Food product attributes (e.g., colour, taste, odour, quality, safety), consumer attributes (e.g., attitudes, beliefs, taste preferences, agency to make decisions), and vendors (e.g., trusted relationships with consumers).

We also identified a wide range of metrics that could be used to assess activities that aim to generate consumer demand. Private sector actors measure demand for nutrient-rich foods using production and sales. Some report the amount of product produced, while others report the amount of prod-