

# FIX MY FOOD

Children's views  
on transforming  
food systems



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UNIVERSITY



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for every child

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**Young and Resilient Research Centre**

The Young and Resilient Research Centre is an Australian-based, international research centre that unites young people with researchers, practitioners, innovators and policymakers to explore the role of technology in children's and young people's lives and how it can be used to improve individual and community resilience across generations. [westernsydney.edu.au/young-and-resilient](http://westernsydney.edu.au/young-and-resilient)

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# Executive Summary

Poor diet quality is driving malnutrition among children and adolescents around the world <sup>(1, 2, 3)</sup>. Too many children are unable to access the diverse and quality diets they need to grow and thrive. Diets of most children around the world are characterised by a limited intake of fruit, vegetable, eggs, milk, fish and meat, and/or by a high intake of energy-dense, nutrient-poor processed and ultra-processed foods. Moreover, the triple burden of child malnutrition remains unsolved, particularly in low- and middle-income countries <sup>(1)</sup>. Globally, two out of three young children do not consume a diet of minimal diversity and three in four adolescents in low-income and middle-income countries do not consume enough fruit and vegetables <sup>(2, 3)</sup>. At the same time, in the same settings, children and adolescents often have ready access to cheap, nutrient-poor processed and ultra-processed foods <sup>(2)</sup>.

Simultaneously, climate change is exerting unprecedented and devastating pressure on food systems, a situation that will worsen if not arrested. Yields of major cereal crops will decline with steadily increasing temperatures, and water scarcity will impact the ability of large parts of the world to continue to grow fruit and vegetables <sup>(4, 5)</sup>.

Furthermore, as the world's populations transition to a more processed diet, with a larger intake of meat and animal source foods in some geographies, food systems are negatively – and perhaps irreparably – impacting the natural environment <sup>(6)</sup>. These pressures range from environmental devastation associated with cropland

misuse to unsustainable farming methods (including large-scale agriculture) affecting biodiversity loss and synthetic fertilisers reducing soil quality <sup>(6, 7)</sup>.

Sustainable food systems, which encompass the production, transformation, distribution, marketing, purchasing, and consumption of foods, are critical to ensuring that all children and adolescents are able to access nutritious, safe, affordable, and sustainable foods <sup>(8)</sup>. However, current food systems are failing children and adolescents. The 2019 UNICEF State of the World's Children report highlighted the need for urgent action to radically transform food systems and deliver on children's right to good nutrition <sup>(9)</sup>. Such transformations cannot be piecemeal; rather, a system-wide transformation, grounded in an integrative food systems approach, is required <sup>(10)</sup>. Such food system transformation must support food environments that make children's diets, nutritious, safe, affordable, desirable and sustainable <sup>(11)</sup>.

Governments, civil society organisations, the private sector, and others must prioritise the specific nutritional rights, needs, and aspirations of children and adolescents <sup>(12)</sup> if we are to collectively – and effectively – tackle the challenge of child malnutrition. To shape enabling food systems, the United Nations is urging member states, public and private stakeholders, civil society, development partners, and communities to take bold, decisive, and far-reaching action to transform food systems and support environmental sustainability. The UN Food Systems Summit 2021 aims to identify

efficient and effective ways to build strong and equitable food systems to accelerate efforts to achieve the Sustainable Development Goals.

In 2021, UNICEF partnered with the Young and Resilient Research Centre at Western Sydney University to bring the voices of children to the forefront through participatory food systems dialogues in 18 countries around the world, from Cambodia to Kenya, and from Turkey to the United Kingdom. Over 700 children and adolescents aged 10-19 from significantly diverse backgrounds participated in two-and-a-half-hour workshops to share their lived experiences, insights, and perspectives on food systems. These workshops, designed to be as inclusive as possible, focused on food systems and food poverty and/or on food systems and climate change. In a series of fun, engaging and participatory activities, children answered questions, mapped food systems, and discussed multiple food systems issues with their peers. These workshops helped us to understand children's views and perspectives on food systems; the key challenges to attaining nutritious, safe, desirable, and sustainable food; and how children want food systems to change. Additionally, in May 2021, UNICEF conducted U-Report polls involving 22,561 children and youth in 23 <sup>a</sup> countries who reported on their experiences of food systems and food environments. This report documents the key insights of the 18 food systems dialogues with children, as well as the outcomes of the U-Report polls. Key findings from the dialogues are summarised in this report.

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a Children and youth from 104 countries responded to the original U-Report poll. However, countries where response rates were low (n<10) have been excluded from the analysis.



# KEY FINDINGS

## CHILDREN'S FOOD EXPERIENCES, ASPIRATIONS, AND CONCERNS

Children are knowledgeable about the importance of food and what it means to them and their communities. They understand how food is produced and how it travels from farm to mouth. They are clear about the main barriers – physical and financial – to nutritious, safe, and sustainable diets and are concerned about the links between current food systems, environmental degradation, and climate change.

**1****FOR CHILDREN, FOOD IS LIFE, GROWTH, DEVELOPMENT AND HEALTH, BUT ALSO JOY AND HAPPINESS.**

Most children consider food fundamental to obtaining energy and nutrients and sustaining life. They believe that food is important for survival and is a basic requirement for their growth, development, and health: 78% of U-Report respondents reported that they eat or want to eat healthy foods. Beyond these functional dimensions of food, many children also link food with joy and happiness.

**2****TASTE, SMELL, "HEALTHINESS," AND AFFORDABILITY DRIVE CHILDREN'S FOOD CHOICES.**

Children highlight taste, health, and affordability when describing the foods they prefer. They mention taste, smell, and "un-healthiness" when referring to foods they dislike or try to avoid. Many children would like to eat more "fatty" or "sugary" foods but try to avoid them because of the impact on their health. U-Report data demonstrated that cost and safety of food (32%) followed by taste (25%) were the biggest influence on food choice.

**3****SOME CHILDREN CAN CHOOSE THE FOOD THEY EAT BUT MOST CHILDREN CANNOT.**

Children know the nutritious foods they would like to eat but report that such foods are not available locally or are too expensive. Some children can choose the food they eat but most children cannot because of

seasonal availability and price, or because their parents decide what food to buy and how to prepare food. Parents' roles as the main decision-makers about the foods families eat also reflected in U-Report findings where 78% of respondents listed home as the most common place they consume healthy foods.

**4****PEER INFLUENCE PLAYS AN IMPORTANT ROLE IN THE FOOD CHOICES OF CHILDREN.**

Eating can play a role in socialisation and identity formation during key stages of adolescent development, where children can feel strong pressure to conform to peer-group norms, often resulting in pressure to make certain food choices. U-Report data indicates that children most commonly consumed unhealthy foods when hanging out with friends (37%).

**5****FOR CHILDREN, FOOD AVAILABILITY IS A KEY WEAKNESS IN THEIR FOOD SYSTEM.**

Children understand food production – particularly of local foods – and how food moves from farm to mouth. They believe that poor availability of nutritious foods is due to distance from farming areas, food distribution problems, low stocks in markets, disruption to food production, food seasonality, and natural disasters. In the U-Report polls, 39% children and youth mentioned that they don't have access to healthy foods.

**6****FOR CHILDREN, FOOD AFFORDABILITY – PRICE AND COST – IS THE TOP BARRIER TO HEALTHY EATING.**

Findings from the U-Report show that affordability is a major challenge affecting children's ability to eat healthily: 56% of the 22,561 respondents listed high food prices/cost of food as their top barrier to eating nutritious healthy foods.

**7****CHILDREN ARE CONCERNED ABOUT THE LINK BETWEEN POOR FOOD QUALITY AND ENVIRONMENTAL DEGRADATION.**

Another predominant concern for children is the poor quality of food due to water pollution, chemical fertilizers, and unhygienic markets: 32% of children in the U-Report said the safety of food influenced what they ate. Insights from food poverty and climate change workshops were remarkably similar, indicating that children understand how interrelated food systems and the environment are and how this dependency is affecting their lives and future.

# RECOMMENDATIONS



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## CHILDREN'S CALL FOR CHANGE: FIX MY FOOD

Children express a strong desire to be engaged in dialogue and action to transform their food systems and to address food poverty, food quality, environmental degradation, and climate change. They call on governments and other stakeholders to work with them to create platforms for their ongoing participation in the process of food systems transformation. Children see an urgent need to transform food systems and to reduce their negative impact on people and the environment. Their recommendations pivot around two broad themes: 1) actions to transform food systems and improve the availability, accessibility and affordability of nutritious foods; and 2) actions to reduce the impact of food systems on environmental degradation and climate change.

Children call on political leaders and public and private-sector stakeholders to work across all levels of society to strengthen food systems; from implementing effective regulation of food industries to promoting individual and community behaviour change. Doing so will support people to sustain themselves while also sustaining the environment. For children, the key roles of government are to regulate and support. Children believe that United Nations agencies and the Member States these organisations support should work across public and private sectors to set agendas and lead the holistic change required for the transformation of global and national food systems. Children's solutions for food systems transformation focus on five key areas:

## 01 EDUCATE

Educate children, families, educators, farmers, leaders, and decision makers about nutritious and safe foods, good nutrition, food systems, climate change, recycling, and sustainable development.

## 02 ENGAGE

Listen to children, organise youth forums, elect youth representatives, and use online tools to connect children and young people into debates and action to transform their food systems.

## 03 REGULATE

Enforce policies to ensure food quality, safety and security; regulate food prices; safeguard children from harmful food marketing practices; control the use of chemicals and preservatives; promote natural, organic, and minimally-processed foods; and penalise and disincentivise companies that produce, package, or distribute food in environmentally-destructive ways.

## 04 INVEST

Invest in sustainable foods for all children by: securing access to nutritious, safe, affordable, and sustainable food and safe drinking water; improving food waste management; incentivising local production of nutritious foods and support the rights and practices of indigenous peoples; enhancing food facilities (e.g. markets) and infrastructure (e.g. roads); and supporting social safety nets – food, vouchers, or cash – that ensure access to nutritious foods for children living in poverty.

## 05 REDUCE

Reduce the impact of food systems on the environment by empowering communities to grow their own produce and learn more about sustainability; reducing plastics over-use, deforestation and environmentally destructive methods of food production; promoting and supporting sustainable farming as a vocation for young people through education, investments and financial incentives; and favouring local food production and accessible farms and markets (i.e. “from far away to being close”) to secure enough local, affordable, and nutritious food for all children and their families.



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# INTRODUCTION

1.0

Every child has the right to nutrition <sup>(1)</sup>. The quality of food eaten by children and adolescents determines their health and development. Meeting a child's optimal nutritional requirements for physical and cognitive growth has been shown to increase lifelong health and economic productivity. This in turn lays the foundation for thriving communities <sup>(2)</sup>. However, internationally, children and adolescents consume poor quality diets and experience malnutrition in all its forms <sup>(3)</sup>.

**Children are calling for urgent action to transform their food systems.**



Image: ©UNICEF Netherlands/2021

Childhood and adolescence (10–19 years) are periods of rapid growth. Children require quality nutrition to survive, grow, and develop <sup>(3, 13)</sup>. Moreover, the period of childhood through to adolescence is a key window where lifelong healthy eating behaviours are formed <sup>(8)</sup>.

However, globally, children and adolescents are among those most deeply affected by malnutrition in all forms. Over 149.2 million children younger than five years are short for their age (stunted); 45.4 million children under five years globally are wasted <sup>b</sup>; and more than 300 million children and adolescents between the ages of five and 16 are overweight <sup>(1, 14)</sup>.

In many parts of the world, children cannot access enough food to meet their basic nutritional requirements. In other parts of the world, as diets are more profoundly shaped by urbanisation and globalisation, food production, processing, and distribution are promoting children's over-consumption of cheap, energy-dense, nutrient-poor foods and the low intake of fruits, vegetables, and whole-grains <sup>(3)</sup>. These challenges are compounded by children's increased exposure to food marketing and advertisements that encourage the consumption of ultra-processed foods <sup>(15)</sup>. Increased consumption

of poor-quality foods, along with decreased physical activity, has led to an accelerating rate of global childhood overweight and obesity, threatening long-term health outcomes for all children and their communities <sup>(16)</sup>. Further, as they grow, children often gain increased autonomy over their food decisions. In food environments outside the home, especially in schools and among peers, they must navigate the complex interplay of peer pressure and parent gatekeeping, which can result in sub-optimal dietary choices <sup>(14)</sup>.

Given children's increased exposure to poor diets, sub-optimal food environments, and harmful practices shaping food systems, significant challenges to children's nutrition urgently need to be addressed <sup>(2)</sup>. Targeting the structural drivers – production, distribution, and consumption – of food systems through policies, services, and actors will be paramount to ensure children's access to good quality diets <sup>(9)</sup>.

b See <https://www.who.int/publications/i/item/9789240025257>

Amidst these challenges, it is becoming increasingly obvious that climate change is compounding existing pressures on food systems, with devastating effects. For example, water scarcity is curbing the capacity to grow fruit and vegetables in large parts of the world, and current modelling indicates that rising temperatures will dramatically impact the yields of major cereal crops in the coming years <sup>(4, 5)</sup>.

If climate change is impacting food systems, current food systems, in turn, are accentuating processes of climate change. As food systems become more complex and the world's population transitions to a more highly processed diet, food systems are negatively – and perhaps irreparably – impacting the natural environment <sup>(5)</sup>. These pressures range from environmental devastation associated with cropland misuse, to unsustainable farming methods (including large-scale agriculture) affecting biodiversity loss, and synthetic fertilisers reducing soil quality <sup>(6, 7)</sup>.

Sustainable food systems, which encompass the production, processing, marketing, and purchasing of foods, are critical to ensuring that all children can access nutritious, safe, affordable, and sustainable foods <sup>(8)</sup>. However, current food systems are failing children and adolescents. Unless action is urgently taken to address the dynamics between climate change and food systems, existing vulnerabilities within children's food systems will only worsen.

Children are more vulnerable than adults to the impacts of both food insecurity and climate shocks within their food systems. Extreme weather events, such as droughts

c See <https://fridaysforfuture.org>

d See <https://actions4food.org/en/>

and floods challenge the capacity of communities to feed themselves <sup>(17)</sup>. In times of drought or high-water scarcity, children are less able to secure access to clean water and food, while floods cause contamination of water supplies and foods, increasing water borne viruses <sup>(18)</sup>.

Children and young people, sensitised to these and other pressures on their food systems, are calling on governments and other stakeholders to address food poverty and climate change. Through movements such as *Fridays for Future* <sup>c</sup> and *Actions for Food* <sup>d</sup>, children and young people are mounting significant action, highlighting the important role they play in increasing resilience within their communities <sup>(17)</sup>.

Even so, far too often, the interests of children are marginalised in the decision-making processes geared towards food systems transformation.

**To promote effective and sustainable change in children's diets, it is paramount that the needs of children and adolescents are centred in food systems <sup>(12)</sup>.**



Image: ©UNICEF Netherlands/2021

The *2019 UNICEF State of the World Children* report highlighted that action to transform food systems must be a key priority in the global response to child malnutrition <sup>(9)</sup>. Action must reflect the core role of food systems in ensuring good nutrition for children and adolescents.. Action needs to strengthen the supply and demand of quality foods, improve children's food environments and protect children from marketing and advertising of unhealthy foods, and leverage the role of key supportive systems <sup>(9)</sup>.

Leaving children out of decision-making processes to drive food systems' transformation is a short-sighted and potentially dangerous omission. As the United Nations Food Systems Summit launches bold new actions to transform food systems and support environmental sustainability <sup>(19)</sup> in 2021, UNICEF is committed to engaging children in the food systems discussion and ensuring that children's insights and experiences inform Member State commitments for food system transformation. To translate this commitment into action, UNICEF and Western Sydney University's Young and Resilient Research Centre designed and facilitated participatory workshop-based dialogues with school-age children and adolescents from 18 countries in UNICEF's seven regions.

Understanding how children eat, what they eat, the key challenges they face to attaining quality, sustainable food, and how they want food systems to change is paramount for a truly child-centred food system. The UN Food Systems Dialogues investigated how children and adolescents in 18 countries experience food poverty and climate change within their food systems.

Through a series of creative and participatory activities, children explored key issues and shared their views on how food systems need to work better for children. Children's outputs were analysed by the Young and Resilient Research Centre team.

Alongside the workshops, UNICEF also carried out U-Report polls with over 22,000 young people in more than 20 countries. This report brings together the qualitative workshop data with the quantitative data from the U-Report poll to offer a portrait of children's perspectives on food and the urgent transformations they are calling for.

We hope this report can help prompt urgent and coordinated action to instigate the necessary system-wide transformation. The magnitude of the collaborative effort that underpinned the mobilisation of over 700 children and adolescents around the world to participate in the UN Food Systems Dialogues suggests that all of us together – leaders, policy makers, community leaders, non-government organisations (NGOs) and children themselves – need to act, collaborate and commit to ensure a healthy diet for every child, everywhere.



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Image: ©UNICEF/UN06997/Lynch

# METHODOLOGY

# 2.0

## Between June and August 2021, UNICEF’s Country Offices in Bangladesh, Cambodia, China, Egypt, Ethiopia, Ghana, Guatemala, Indonesia, Kenya, Mexico, Nepal, the Netherlands, Nigeria, State of Palestine, Sri Lanka, Turkey, United Kingdom, and Zimbabwe conducted extensive dialogues with school-age children and adolescents.

These workshop-based dialogues used a distributed data generation method pioneered by the Young and Resilient Research Centre and successfully used in several international projects since 2014, including the *Food and Me* project<sup>(20)</sup>. The distributed data generation methodology involves partner organisations – in this instance, UNICEF Country Offices and their partners – implementing workshop-based, qualitative activities with children to explore their perceptions and lived experiences. The process is flexible enough to accommodate individual and/or group activities<sup>(21)</sup>. A flexible implementation framework supports adaptation and administration of the methodology across countries, communities, and cultural contexts. The Young and Resilient Research Centre team developed a comprehensive manual, trained in-country facilitators, and provided technical support to manage and collate inputs through the online platforms.

Children and adolescents aged 10–19 participated in the workshops. UNICEF Country Offices sought to engage children from diverse socioeconomic and cultural backgrounds. Children completed a series of fun and interactive activities, working in groups to respond to questions, carry out creative exercises like drawing, and participate in discussions. Each activity was designed to capture participants’ experiences of food and the challenges to food systems in their own words.

These methods generated diverse forms of data for analysis, from paper-based surveys to diagrams, drawings, written text, and digital photographs.

To adhere to COVID-19 public health protocols in the diverse countries in which we engaged with children, workshops were implemented either in a digital or face-to-face mode. Digital workshops used the Zoom online conferencing platform and Miro, an online whiteboarding tool that enables children to post sticky notes, draw, write, and respond to questions in real time. The face-to-face version used a classic workshop setup in a single room with tables, markers, and paper-based worksheets. Where children met face-to-face to participate in the workshops, they were required to comply with physical distancing requirements and to follow good hygiene practices. Activities were identical for both the digital and face-to-face versions of the workshops. Nine of the countries chose to implement digitally and nine opted for the face-to-face version.

Upon completion, workshop responses were translated where needed from the local language to English and uploaded to a secure data facility. These were coded using a variety of quantitative and qualitative methodologies that aimed to give prominence to children’s voices and draw out the rich insights they offered. The findings provided here uphold this child-centred approach.

Quotes from participants and workshop facilitators have been used to illustrate analyses and findings in this report. In some instances, quotes have been lightly edited for clarity; for example, minor corrections to spelling or grammar have been made to aid readability or to correct transcription errors. Content has not otherwise been altered. Quotes are identified by country of origin. Participants completed workshop activities in groups and so quotations cannot be attributed to individual participants.

The methodology was approved by the Western Sydney University Human Ethics Committee (# H14363), with support mechanisms provided for children and protocols strictly adhered to.



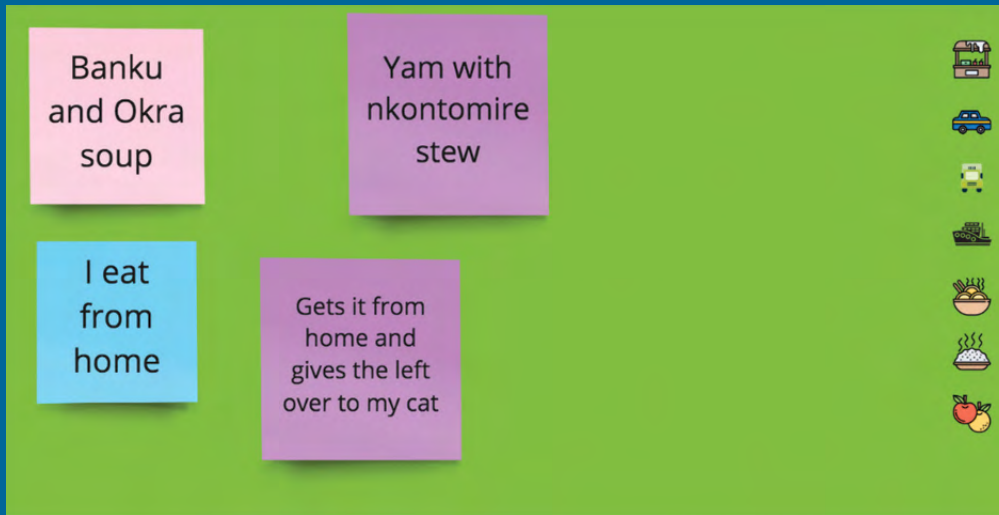


Image: ©UNICEF Ghana

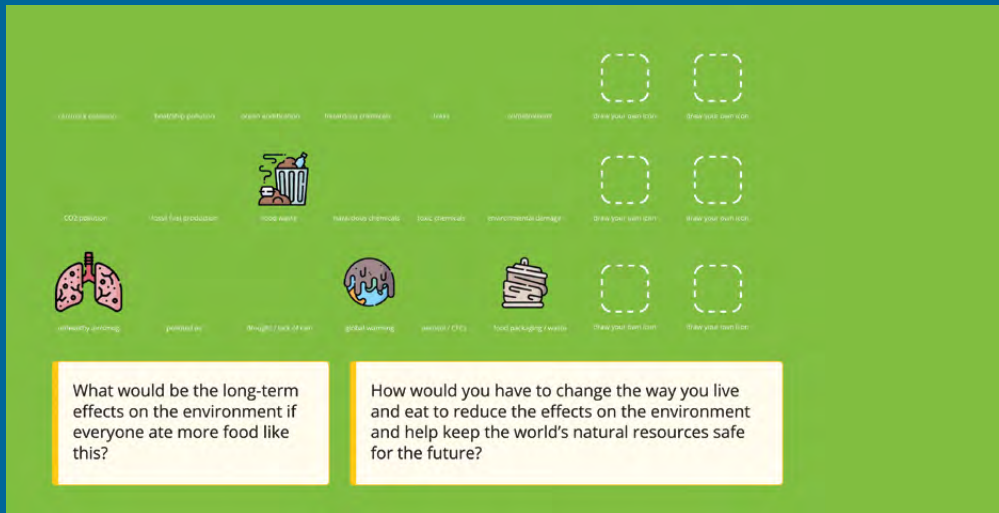


Image: ©UNICEF Sri Lanka

## METHODOLOGY AT A GLANCE

Workshops in 18 COUNTRIES around the world

700+ CHILDREN AND ADOLESCENTS aged 10-19 from diverse backgrounds

DIGITAL AND FACE-TO-FACE versions provided, to account for COVID-19

Workshops used CREATIVE, FUN EXERCISES in small groups

Activities captured children's EXPERIENCES with food, CHALLENGES to food systems, and their SUGGESTIONS on the best way to improve them





Image: ©UNICEF Mexico/2021

## U-REPORT POLL METHODOLOGY

UNICEF also gathered information for this report using a U-Report poll. The United Nations Food Systems Summit (UNFSS) U-Report poll was applied as a quantitative method to complement the qualitative methodological reach of the youth dialogues. A poll was launched from the U-Report Global and country-specific platform and was available between 28th May and 18th June 2021. By asking six questions, the survey gathered information on children's and young people's perspectives about how food systems can be transformed to ensure nutritious, safe, affordable, and sustainable diets for everyone <sup>e</sup>:

**What do you think about eating healthy?**

**What is your top problem/barrier to get healthy foods?**

**When you buy food what influences your decision?**

**What is the place where you eat most healthy foods?**

**What is the place where you eat most unhealthy foods?**

**If you could change something about the food system around you, what would you change?**

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<sup>e</sup> U-Report is a messaging programme for adolescent, youth, and community participation. It's a key tool to share information, raise awareness, and collect quantifiable data on specific areas that impact children, including the most vulnerable. Responses received are analysed in real-time, mapped, and displayed on a public dashboard. For more information, visit [www.ureport.in](http://www.ureport.in). U-Report poll data reflects the information provided by the respondents, and is not statistically representative of young people globally, or in any specific country or region. U-Report as a community does not have a goal of statistical representativeness among its membership and no sampling stratification was employed. Post-stratification weighting was not applied during the analysis of this poll. U-Report data should not be used as a single source of information to make decisions, but rather should be used to complement more statistically robust methods of gathering data. UNICEF values the voices of young people and seeks to recognise their experiences and views, and the data are considered a reliable reflection of the information the respondents have provided to U-Report.



Image: ©UNICEF/UN0367835

# KEY FINDINGS

# 3.0

# 3.1 Children's food experiences and aspirations

Centring children's needs, aspirations and entitlements within food systems is key to positively transforming the diets of children across the globe. Yet we rarely pause and ask children how they view food. To develop a truly child-centred food system, we need to consider how children perceive and navigate their food environments, deciding what to eat, where to eat, and where to buy it <sup>(12, 22)</sup>.

Workshops began with children in small groups describing what food means to them and why it is important. The purpose of this activity was to identify what children find appealing about food and what their aspirations are around eating. Information from the activity has shown that, across participating countries, children placed great importance on food. Children saw food as essential for health, enabling growth, giving energy, and preventing disease, as well as providing a source of joy and connection with their communities.

## 3.1.1 VIEWS ON FOOD

Most children consider food fundamental to obtaining energy and sustaining life. Food is important for survival and is a basic requirement for growth and health. Beyond these functional dimensions of food, many children also link food with joy and happiness.

### Food is health

Children expressed that food is key to their survival, growth, and development. Children were generally informed about the nutritional benefits of food. They also identified the micro and macronutrients they derive from their food as essential for their growth and development.

" This food can be in the form of carbohydrate, protein, mineral, fat, vitamin, etc. in which each of them has their own roles for the body."

(Indonesia)

" Food is not only basic but necessary for living beings. From it we extract essential nutrients to live."

(Guatemala)

Children frequently described food as "fuel": a way to obtain and replenish energy, and essential for survival and daily activities.

" Food is to man as fuel is to motor car. If the car runs out of fuel, the engine stops. Man who does not eat anything will soon die of lack of nutrients."

(Kenya)

" [Food is] fuel to live off."

(Netherlands)

" Food is something that can replenish energy, fill our bellies, keep us alive and having nutrition."

(China)

" Food is the energy force of a person and is a fundamental aspect for the human being."

(Nepal)

Almost universally, children recognised the importance of maintaining good overall health by eating healthy foods, particularly vegetables and whole-grains. Children mostly understood the link between unhealthy foods and disease. They highlighted the need to avoid sugars and unhealthy fats in preventing diabetes/obesity and promoting oral health.

“ [I eat healthy] to avoid obesity.”

(Sri Lanka)

“ Oranges... contain vitamin C for boosting immunity. [This is] important more so in this corona[virus] period.”

(Kenya)

“ [Unhealthy food] might lead to develop symptoms of diabetes.”

(Bangladesh)

“ Cotton candy, it’s unhealthy. It causes teeth decay and damage. contains a lot of sugar.”

(Egypt)

### Food is joy and connectedness

Beyond the functional dimensions of food, children also discussed how food brings them joy. They emphasised that food reflects their identity, place, and culture, and how sharing food facilitates connection with others. Overall, children saw food as a symbol of unity and humanity that was important for their mental and physical health and wellbeing.

“ Food is love (basis for life).”

(Nepal)

“ [Food is about] connecting, because you often eat with other people, and it starts a conversation.”

(Netherlands)

“ [Food is] a joyful thing.”

(Turkey)

“ Food is more than just what we eat, food is what defines us and a major social factor that brings us together as some foods represent cultures and it brings people together when they come together to eat.”

(Kenya)

### 3.1.2 DRIVERS OF FOOD CHOICES

Children highlighted taste, health, and affordability when talking about foods they liked. Children mentioned taste, smell, and the “healthiness” of the food when talking about foods they disliked. When asked about foods they would like to eat but couldn’t, children often noted that nutritious foods were simply too expensive to buy, or not always available locally. They reported that, though they would like to eat more “fatty” or “sugary” foods, they avoid these because of the impact this would have on their future health. Some children said they could choose the food they ate, but others said they could not, primarily because of seasonal availability, price, or parents being the key decision makers for buying food and overseeing food preparation. Children reported that their food likes and dislikes are shaped by the individual properties of specific foods, and that these often influence their food decisions.

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China/2021

## Peer influence

In China and Zimbabwe, children talked about how the perceived popularity of foods could influence their food choices, noting such perceptions could be driven by peer pressure or deliberate marketing campaigns. Those responses highlight the important role that eating can play in socialisation and identity formation during key stages of adolescent development, where children can feel strong pressure to conform to peer-group norms and to be seen to fit in with popular others. In Zimbabwe, for instance, children reported the stigma attached to certain foods that were perceived as “not cool enough” and the embarrassment associated with buying them.

“ [There is] stigma attached to certain health foods.”

(Zimbabwe)

“ Some foods are not cool enough and it’s embarrassing to be seen buying them.”

(Zimbabwe)

In China, children noted that the quality of food products sold online could vary considerably, and that there is a need for greater regulation of digital marketing.

“ [There is a] huge difference between products and the advertisement. The dishonesty of sellers. The mismanagement of [digital] platforms.”

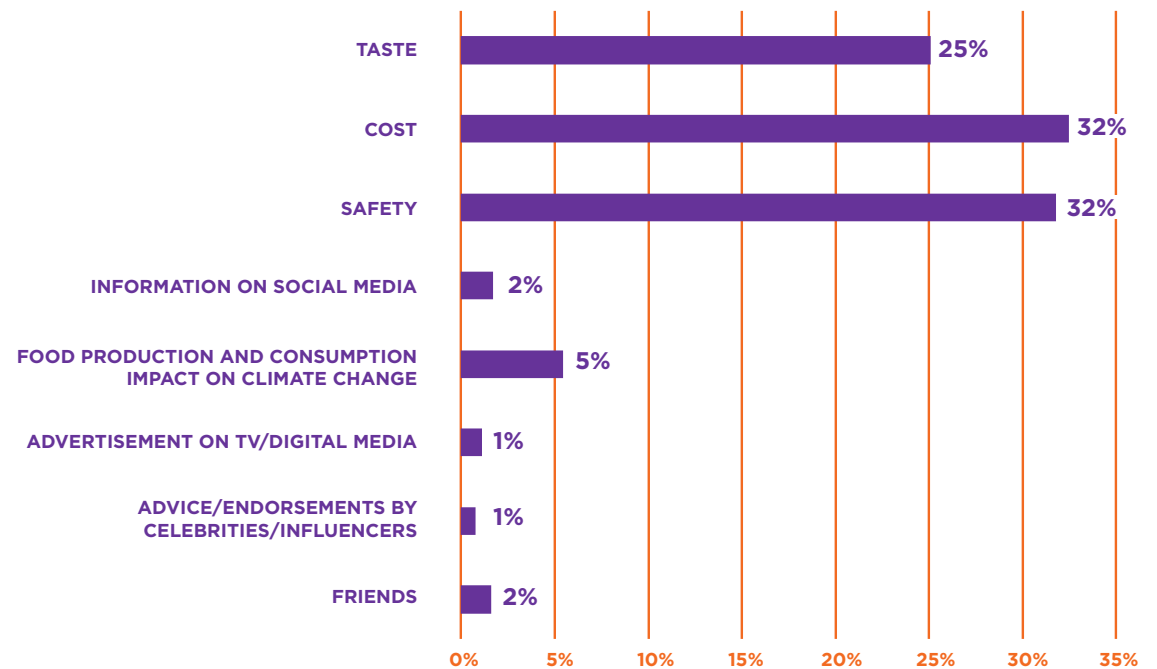
(China)

## SPOTLIGHT: Children and their food environments – A summary of U-Report data

Personal and external food environments are where children interface with the complexities of their food systems <sup>(9)</sup>. While the elements of supply and demand in food systems shape food environments, actions such as regulation of food advertising and mandatory front-of-pack labelling can help create food environments that enable quality, nutritious diets for children <sup>(9)</sup>.

To gain insight into how children make food choices and navigate their food environments, in May 2021, U-Report conducted a poll with 22,561 school-age children and young people aged 5–24 years in 23 countries around the world. Below, we outline what the data tells us about how children are experiencing food environments. This is central to enabling food systems that are supportive of their dietary needs <sup>(9)</sup>.

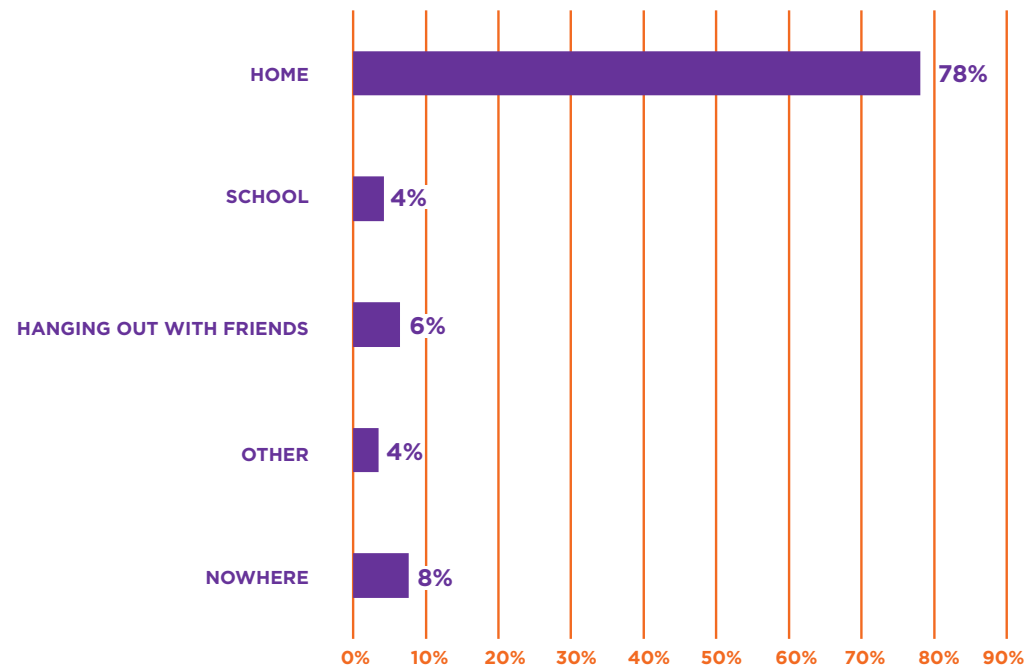
## When you buy food what influences your decision?



### Personal factors and influence on food choices

For the children participating in the U-Report poll, cost, food safety and taste played a bigger role in food decisions than reported by adolescents in the *Food and Me report* <sup>(20)</sup>. In the U-Report poll, children and young people reported that cost (32%) and food safety (32%) were the greatest influence on their food decisions, followed by taste (25%). They also reported impacts on climate change as a factor in their food decisions (5%), but peers (2%) and advice or endorsement by celebrities/influencers (1%) had limited influence on food choices for U-Report respondents.

## What is the place where you eat most healthy foods?



### Food environment and influence on eating choices

From U-Report findings, 78% of children and young people identified they eat healthy foods at home and 37% said they eat unhealthy foods outside the home with friends. The *Food and Me* <sup>(20)</sup> report also found that adolescents most commonly consumed minimally processed food in the home and tended to eat ultra-processed foods when socialising with friends outside the home.



## 3.2 Barriers to sustainable food

**Food poverty has many antecedents. In these workshops, children told us about a range of barriers and challenges that impede their ability to consume both the foods they prefer to eat and foods that are healthy, nutritious, and sustainable. Children generally understood that many of the foods they and their families consume go through different stages or processes before they become available in their communities and households. Children thus recognised that broader food systems influence and support the foods they can access and eat.**

Children mapped a food system around them, visualising the journey from growers and producers to their local communities and into their own households and families. Overall, they demonstrated a deep understanding of food production, especially when it was a local staple food or meal. For children, the key weakness in their food systems relates to availability. Children think that poor availability is due to minimal stock in markets, distance from farming areas, and problems with food distribution. Access to food is also significantly affected by poverty and disruption to food production by change of season or natural disasters.

Another important concern was the poor quality of food due to water pollution, use of chemical fertilisers, and unhygienic market conditions. Children's concerns highlight how interconnected food systems are, with economic (e.g. high food prices) and environmental (e.g. flooding, low crop yields) factors frequently overlapping. Indeed, responses from the food poverty workshop and the climate change workshops were remarkably similar, demonstrating all too vividly how

interrelated climate change and food systems are and how that interrelationship is affecting children's lives and futures.

One way of describing a food system is as a series of different, interconnected steps through which food travels before it becomes available to consume. Different factors can influence the completion of any of the steps in the system, but this also means that each of those steps can impact the efficiency and success of the system overall (or, alternatively, degrade or break down the system). Based on their strong understanding of food systems, children also recognised these systems can be vulnerable at specific places. Children identified critical barriers within systems, where they saw challenges occurring. Children also pinpointed challenges at the local level; barriers that directly affected food consumption in their families and communities and their own personal choices about consumption.

This section steps through these barriers, which range from broad problems like food availability to local and individual issues such as family customs, affordability, and taste preferences.



Image: ©UNICEF Nigeria/2019/ApochiOwoicho



Image: ©UNICEF Netherlands/2021

### 3.2.1 PERSONAL AGENCY AND HOUSEHOLD NORMS

For the children in these workshops, personal agency – freedom to choose what foods they ate – was fairly evenly split across most countries between those who said they had choice and those who said they did not. However children in Nigeria and Kenya overwhelmingly reported they had little choice over the foods they ate, while those in Indonesia strongly affirmed they could choose. Children in Kenya specifically described choice in the context of the coronavirus pandemic, which we discuss further later in this report.

“ The participants do not often eat what they like as the culture does not encourage parents to seek their opinion on what kind of food [is] to be cooked at home... They believe the parents will not ask about what they want before cooking because they are seen as children that are not contributing financially to the up-keep of the family.”

(Nigeria, workshop facilitator report)

“ I can [choose what to eat], my family doesn't force what food I should eat.”

(Indonesia)

“ Yes and no. If I buy food myself or if I ask if we can eat a certain dish. No, because my parents determine what we eat for dinner or what is in the cupboard.”

(Netherlands)

### 3.2.2 INFLUENCE OF HOUSEHOLD NORMS

In some countries, cultural and family norms play a large part in determining if children can choose foods or not. Children's responses suggest that customary hierarchies associated with parent-child relationships, and how those relationships prescribe decision-making, play a major role in food choices. Children report they have little say in food choice because their parents naturally assume control and responsibility of household decision making, performing a gate keeper role. In other words, parents' preferences and opinions take precedence over children's. For example, children cannot choose the foods they eat if parents do not agree with children's choices or parents believe food to be unhealthy. Adults' traditional roles as primary breadwinners and/or food preparers also gave them authority over family food choices: Children said that the food purchaser or the cook (rather than the child) has the right to choose.

**Image:**  
©UNICEF Cambodia/2021/Daravatey Seng



“ I can't [choose what to eat] because the family does not allow it.”

(China)

“ Children and adolescents are not taken into account in decision-making.”

(Mexico)

“ [Children have] no choice because we are not bread winners, so parents choose for what is within budget.”

(Zimbabwe)

Some children did suggest they occasionally have opportunities to choose foods, but also that those opportunities were naturally influenced by factors such as access, availability, and cost.

“ Depending on the availability, we get to choose the foods we eat and sometimes our mother cooks our requested dishes based on the availability.”

(Bangladesh)

“ [We have] freedom to a limit. There is a price for the fruits and outside factors [like] availability and price.”

(Palestine)

“ Sometimes I have a say in what's made at home. But I also have my own choice when I am out, so I have a very different diet to others in my family.”

(United Kingdom)



**Image:** ©UNICEF Bangladesh/2021



**Image:** ©UNICEF Netherlands/2021



Image: ©UNICEF Cambodia/2021/Daravatey Seng

### 3.2.3 AVAILABILITY

The main food-systems' vulnerability voiced by children was the poor availability of foods. While "poor availability" appears to be a simple concept, children's knowledge about the factors underlying poor availability showed a sophisticated understanding of food systems.

#### Infrastructural constraints

Children discussed how availability can be influenced by a wide range of factors, including minimal stock in markets, lack of adequate sites of production, distances foods must travel from farming areas, and problems in food distribution channels. In Nigeria, for example, children were particularly concerned about problems with road infrastructure and called for better food production and storage facilities. Children elsewhere also acknowledged the significant effects of complex sociostructural factors ranging from poverty to infrastructure degradation.

" [There is] less production in farms, [and] a lack of quality plants/seeds."  
(Nepal)

" Road conditions/transportation means delays and more time spent on transportation from rice fields to homes or stores or mill factories."  
(Cambodia)

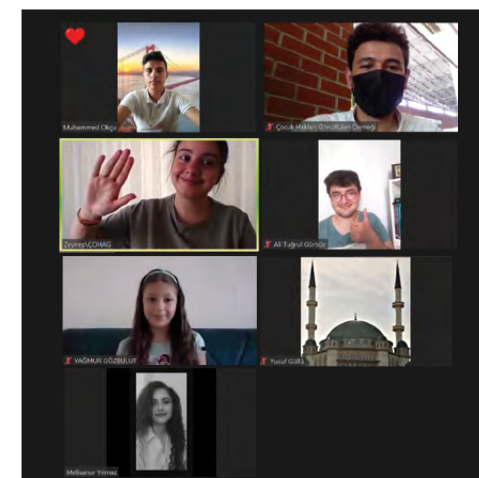
" Marine products are a significant Omega-3 source. Being aware of their vitality frustrates me. Our city is not sufficiently developed in marine products."  
(Turkey)

" Inappropriate distribution systems result in spoiled or expired milk. Vehicles to distribute milk do not work properly."  
(Indonesia)

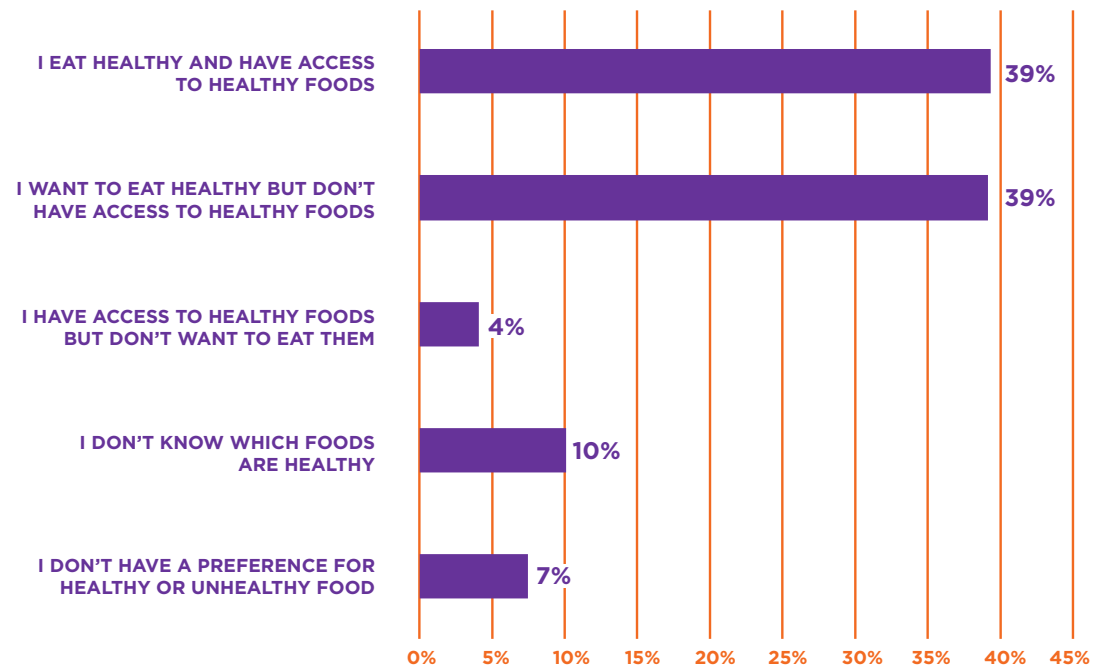
" Bad road networks make it difficult to transport farm produce from the farm to the markets or [to] factories, leading to post-harvest losses."  
(Nigeria)

" Because it needs to be transported after we harvest it, which costs a lot of money."  
(Netherlands)

Image: ©UNICEF Turkey/2021



## What do you think about eating healthy?



In the U-Report poll, when asked “what do you think about eating healthy,” 39% of children and young people stated they eat healthy and have access to healthy foods. However, the same percentage (39%) responded that they wanted to eat healthy but did not have access to healthy foods. These findings suggest that access to healthy food remains a barrier to choosing and consuming it.

## Seasonal changes

Most children consider pollution, and disruption in food production due to seasonal and climate change or natural disasters, along with food availability, major vulnerabilities in food systems. Children recognised that seasonality broadly affected the availability of certain foods. However, there were also some differences in children's views between, and occasionally within, countries about seasonal variations (e.g. children from the United Kingdom said their seasonal changes in diet are more related to flavours/preference rather than availability of foods, while in Ghana children noted the scarcity of foods in certain geographic locations during the rainy season).



Image: ©UNICEF China/2021

“ It’s easier to obtain milk during [the] rainy season compared to [the] dry season. Weather and humidity differences can affect the availability of cow feed and cow’s productivity.”

(Indonesia)

“ During [the] dry season, it is hard to access... some... foods, such as fish and vegetables. But during [the] rainy season there are more fish, and we can plant more vegetables. These foods are grown and available differently.”

(Nepal)

“ Certain fruits [are available at different times of the year]. Also [in] summer, I tend to be less hungry so will have lighter meals.”

(United Kingdom)

“ Natural disasters create food vulnerability. Foods get polluted.”

(Sri Lanka)

“ [Lack of water is a vulnerability]. Rainfall change from one season to another season [affects] water accessibility and availability.”

(Cambodia)

“ Every season has its limitations, and the prices change accordingly. [It’s] not organic if [it’s] not seasonal.”

(Palestine)

## Polluted environments

Most children are concerned about the excessive use of chemicals in food production, pollution, and climate change, and feel that these human actions impact food systems, and make them more vulnerable. For example, children expressed concerns about poor quality food due to water pollution and the use of artificial fertilisers.

“ 1. The contamination of [the] marine environment has polluted the seafood. 2. There is [a] decline in... seafood production 3. There is extinction of marine life 4. The influence of biological diversity [means the ocean is vulnerable].”

(China)

“ Use of pesticides [is a health risk], consumption [means chemicals end up] in empty stomachs.”

(Bangladesh)

“ High unpredictability and uncertainty of weather patterns affect[s] yields caused by climate change.”

(Zimbabwe)

“ [I cannot eat dairy] because it is bad for the environment.”

(Netherlands)

### 3.2.4 AFFORDABILITY

Children recognised poor affordability as a vulnerability for food systems, and particularly so in countries in the global South. Just as with availability, children demonstrated a rich appreciation of the varied and complex factors underlying affordability, as well as the interconnections between affordability and broader socio-economic and political structures. At a local level, many children described the fundamental role of affordability in driving families' food choices.

“ There’s usually rice available throughout the year. The other ingredients such as tomatoes, onions etc. become scarce from time to time. Though, [when] they are available they become quite expensive.”

(Ghana)

“ Because of our economic difficulties, we cannot get whatever we wish.”

(Bangladesh)

“ We eat these foods because we are poor and they are affordable to find and access (rice, soup with vegetable, and fish).”

(Cambodia)

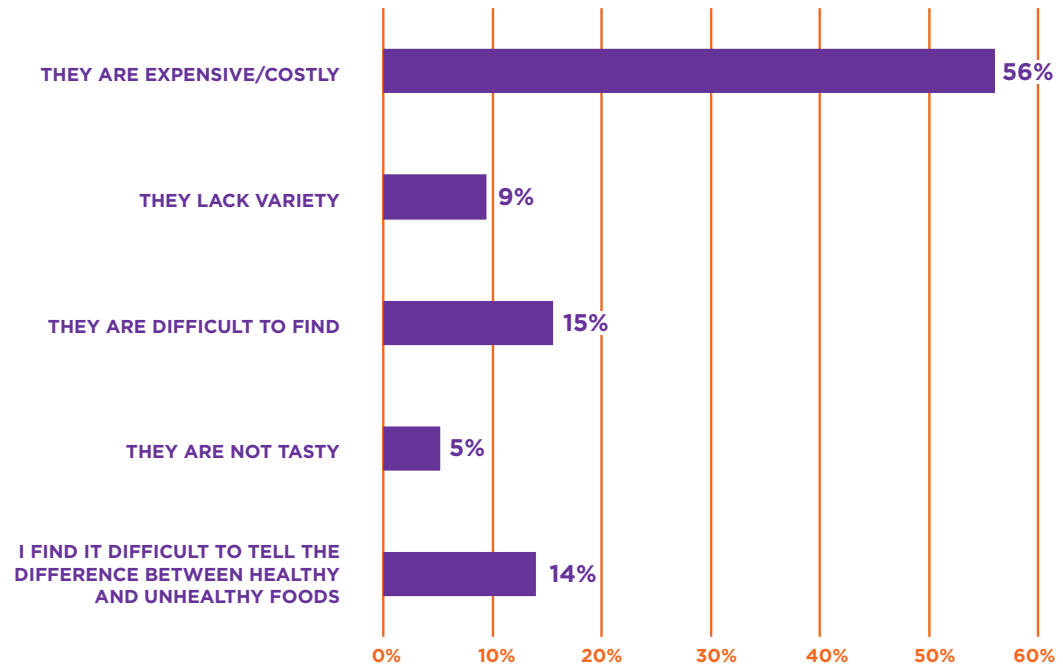
“ The price keeps fluctuating every week. So, we eat the food that is less expensive. [We eat] the same food every day and that is not healthy.”

(Ghana)



Image: ©UNICEF/UN0506822/Saroni

What is your top problem/  
barrier to get healthy foods?



Findings from the U-Report poll showed that affordability was a major challenge affecting children’s ability to eat healthily. Indeed, of the more than 22,000 children and young people who responded to a question about barriers to healthy eating, 56% identified expense or cost as the top barrier to getting healthy foods.





Image: ©UNICEF Kenya/2021

## Impacts of poor affordability of food on consumers and food producers

Children talked about the socioeconomic factors impacting affordability of foods for the consumer, as well as the food producers. Children expressed that distance from where the food is grown to where it is sold, market variations, and poor socio-economic status impacts the cost and affordability of food items.

“ Sometimes [food] is very expensive due to the distance of the route between the farm and the market.”

(Guatemala)

“ Sometimes the price [of food] rises because the product is in short supply or because gasoline has risen.”

(Guatemala)

“ Economic instability [is a barrier]. Parents do not have enough money to buy the food [that is] regarded as a luxury.”

(Zimbabwe)

Children in Kenya and Ethiopia were particularly concerned about the vulnerability of food producers, describing the specific need to safeguard farmers against financial vulnerability. Children in these two countries also highlighted the relationship between economic and political contexts, and how vulnerabilities and instabilities in both systems interconnect. Children recognise how long-standing issues related to socioeconomic structure (e.g. low wages) affect the production and availability of diverse, healthy, and nutritious food by constraining the capacities of farmers to grow enough food. Children referenced how political representation, laws and policies, and governmental intervention shape the livelihoods of farmers. They also saw their national governments as playing key roles in influencing positive change in those areas. Some children in Guatemala reported similar concerns.

“ What needs to change is the treatment of farmers who grow [the] different types of food we require, as others are paid low wages, which can't satisfy their own needs and even the needs of the farm itself.”

(Kenya)

“ [There needs to be] a national fund of livestock farmers to support them in the event of a natural disaster emergency.”

(Guatemala)

“ Maintain stable prices for both sellers and consumers, just so no one loses.”

(Guatemala)

## SPOTLIGHT: The pandemic

Children in Kenya focussed part of their activities specifically on the coronavirus pandemic and its consequences for food choices. They took a broad view of those consequences, describing general social and economic effects and how they related to food and food systems. Children noted that the pandemic had curtailed food distribution and so affected people's ability to access healthy foods. They also highlighted the consequences of job losses, lockdowns, roadblocks, and other pandemic-related measures for people's incomes and, consequently, for the production and consumption of healthy foods.

“ In school, we go by the menu, so we don't have a choice. At home, rarely do we have a choice depending on the cost availability.”

(Kenya)

“ COVID has affected my diet because the country is under lockdown. So, it's difficult to transport food. Your parents cannot afford to buy your favourite foods because they are not in [a] job. Food becomes expensive because many want money. Farmers could not afford to buy seeds.”

(Kenya)



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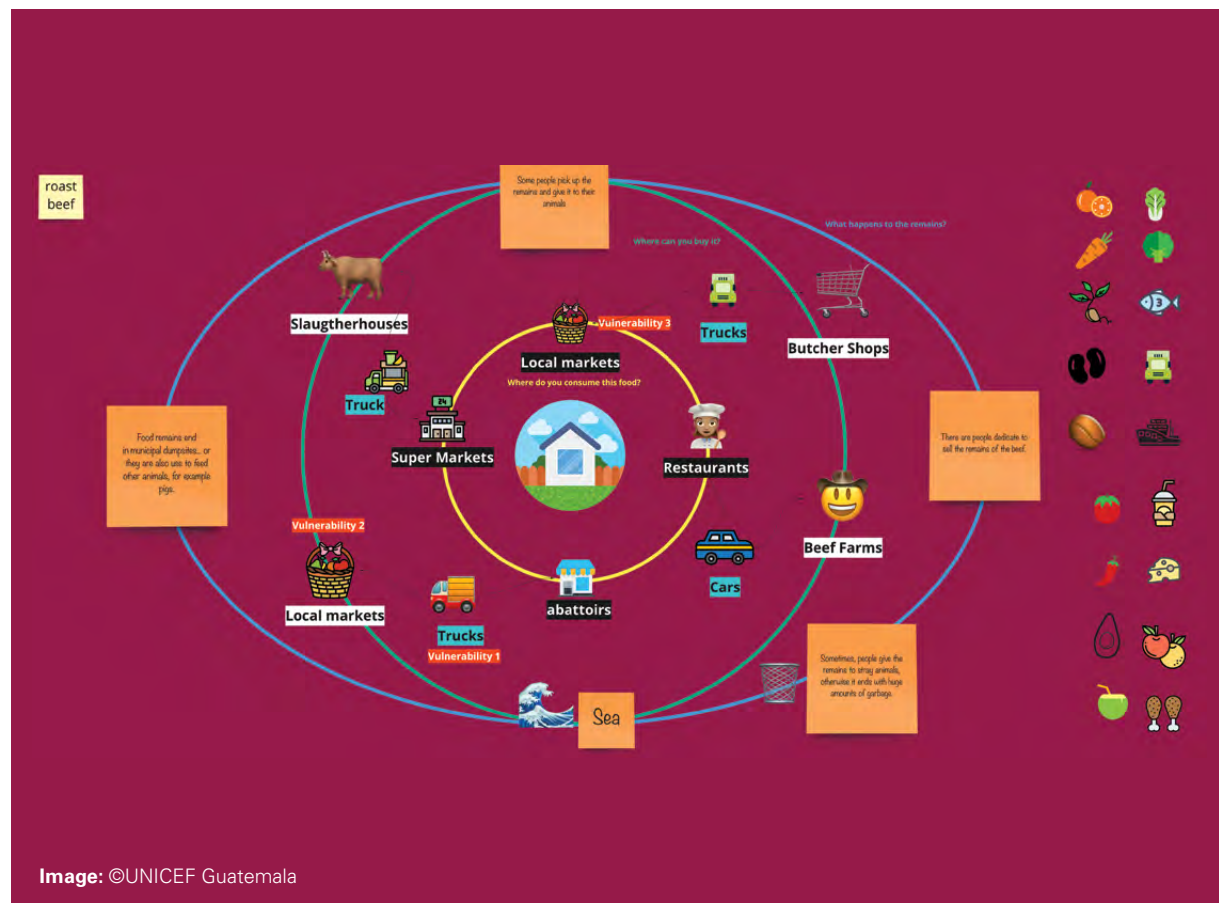


Image: ©UNICEF Nigeria/2019

# CHILDREN'S PERCEPTIONS OF THEIR FOOD SYSTEMS

4.0

For their food maps children chose a food they would like to eat more of, sketching where it was produced, purchased, and eaten, and how it moved from the farm to the mouth. Their maps presented thoughtful and robust insights about how food systems influence the food on their plates. They generally had a strong understanding of where and how raw produce was grown, processed, packaged, and transported to different places within their food environments.



Children's food system maps primarily showed how local, minimally processed foods – such as grains, fruit, milk, and meat – arrive on their plates. Most children identified the origins of raw food as a farm or the sea, and showed how these foods pass through minimal processing, such as grain milling, before ending up on their plates. Some children mapped ultra-processed foods, such as ketchup, soft drink, burgers, ice cream and bottled juices, as part of their food system. These products were largely seen to originate in factories rather than from farms.

## Mexico

Children mapped the production of the soft drinks they drink, as well as *tlayuda*.

" [Coca-Cola] is produced at the factory, then distributed by trucks, then it goes to grocery stores, restaurants, supermarkets and houses. It is classified as a 'bottled and sugary drink'."

" For Tlayuda, corn is produced, it is distributed by walking, truck and intermediaries. It then goes to retail, which includes restaurants, grocery stores and the streets."

## Nepal

Children explained how, to make *daal*, seed needs to first be purified before being sent to the mill for grinding.

## Bangladesh

Children explained the intricacies of rice production – from farming in rice fields to husking, milling, packaging, and sale. They noted that waste by-products of this process are used to feed animals.

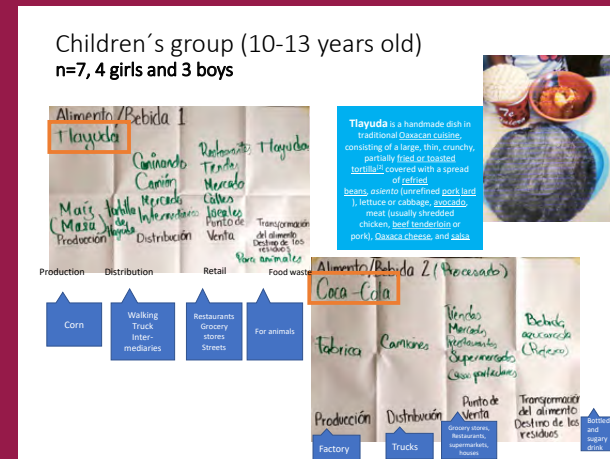


Image:  
©UNICEF Mexico



Image:  
©UNICEF Nepal

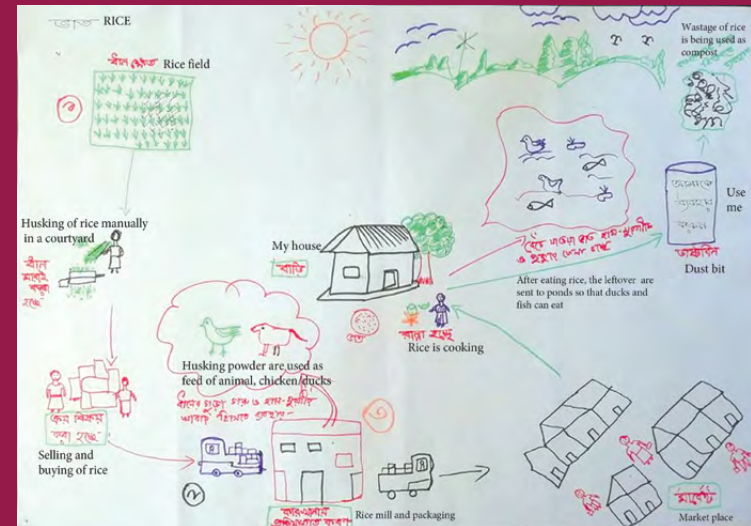


Image:  
©UNICEF Bangladesh



Image: ©UNICEF Ethiopia

## Ethiopia

Children explained complex processes of food production, noting that animals often play a part in these processes.

" Food is grown – camels are used in production process – car takes it to vegetable market – sometimes millet is produced – labourer takes it home – used to make things like injera. Waste is fed to domestic animals like cats and goat."

(Ethiopia)

Nearly all children reported they purchased minimally processed foods, such as vegetables, fruit, grains, oil, and flour, from a variety of stores, shops, or markets, and prepared meals at home. Children mentioned that they did not regularly buy ultra-processed foods, such as soft drinks, juices, chocolate, and takeaway foods like pizza, but if they wanted to eat these foods then they got these products mostly from bakeries, supermarkets, takeaway vendors, hotels, and restaurants.

In some countries, like Guatemala, children indicated that the food is grown within the home surroundings and goes "straight from the yard to the pot." Children from the African sub-continent (Kenya, Ethiopia, Zimbabwe) reported that the food they eat was sourced from a wide variety of places, including shops, stores, markets, caravans, and via non-government organisation donations. Some indicated their families more commonly buy straight from the farm or the distributor, as opposed to buying from a market or store.

# 4.1 Concerns related to the food systems and climate change

Children frequently highlighted “global warming,” “environmental damage,” and “CO2 pollution” as key concerns on their food maps. They also identified events like droughts impacting the growth of food within their food systems, suggesting they were aware of the impact of the changing climate on their food systems.



Image: ©UNICEF Egypt

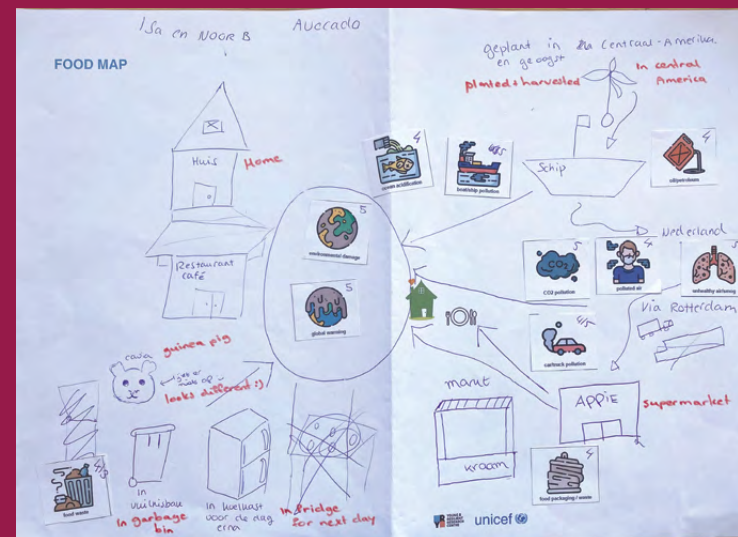


Image: ©UNICEF Netherlands

Overall, children’s food maps highlighted the complex nature of the food systems that influence their diet and nutrition and, in turn, how those food systems impact the changing climate. While children readily acknowledged that climate change impacts their food systems (see section 3.4: Barriers to sustainable food), children also raised concerns about how food production and distribution practices might be contributing to environmental degradation and climate change.

## 4.1.1 FOOD MILES<sup>f</sup>

Children in both low-income and high-income countries are primarily concerned about the distances their food travels and the impact this has on environmental degradation and climate change. They were aware of the complexities of food distribution, discussing the great distances their food can travel. Children showed concern about how the transportation of food via boats, ships, trains, and planes, especially over large distances, contributes to air and water pollution. Children also highlighted that the reliance on trucks, lorries, and vans to move food from farms to markets also contributes to “polluted air.” Simultaneously, children raised concerns with “ocean acidification.”

## 4.1.2 USE OF CHEMICALS IN FARMING AND PROCESSING

Some children showed a good understanding of how the use of chemicals in farming and food processing contributes to environmental degradation. Children in Zimbabwe, for example, were concerned about how food factories use and dispose of hazardous chemicals, while children in Cambodia pointed out that “the rice farm uses pesticide and chemical substances.”

**“ Farmers using harmful substances as fertilisers: It’s easier to find them as opposed to clean organic ones.”**

(Sri Lanka)



Image: ©UNICEF United Kingdom



Image: ©UNICEF Zimbabwe

<sup>f</sup> Food miles is a term to measure the distance that food travels from where it is grown or raised to where it is consumed.



### 4.1.3 MANAGING FOOD WASTE

Another common concern for children was harmful disposal practices around food waste. Their most immediate concerns were with the waste produced at the end of the food journey, in the home or at restaurants. They highlighted plastic water bottles and other plastic food packaging going to landfill (Bangladesh and Palestine), rubbish being thrown into the street (Mexico), and burning trash that pollutes the air (Egypt).

Children also highlighted various positive food waste disposal practices at play inside and outside their home environments.

#### Inside the home

Children discussed several common ways that food waste is managed in their households. In particular, they highlighted how households dealt with leftovers from family meals. They reported consuming leftovers fresh for a subsequent meal. However, some children reported that leftovers were preserved – using methods such as smoking or drying – for later consumption.

“ Leftovers are stored for future consumption.”

(Kenya)

“ Leftovers are stored safely and eaten later.”

(Ghana)

Feeding leftovers to pets and household animals was another common household solution to food waste. Food scraps are both given fresh to animals or further processed and used as animal feed.

“ The food waste is fed to animals.”

(Mexico)

“ Food waste is converted into fertiliser and used as cattle fodder.”

(Indonesia)

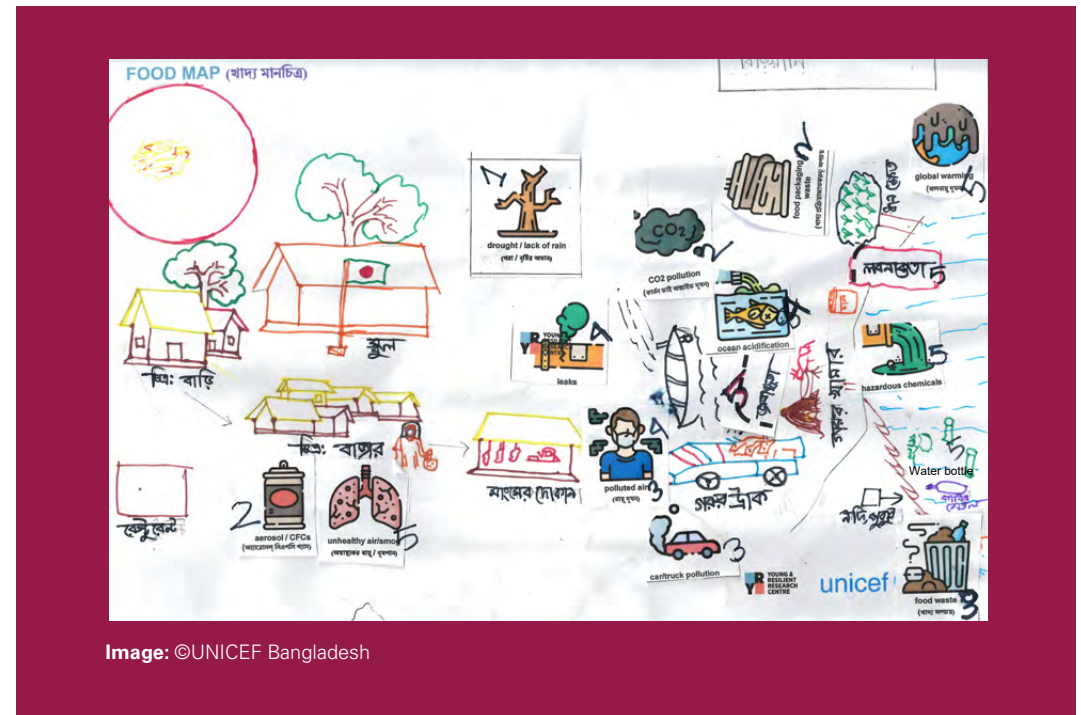


Image: ©UNICEF Bangladesh

Image:  
©UNICEF  
Egypt/2021

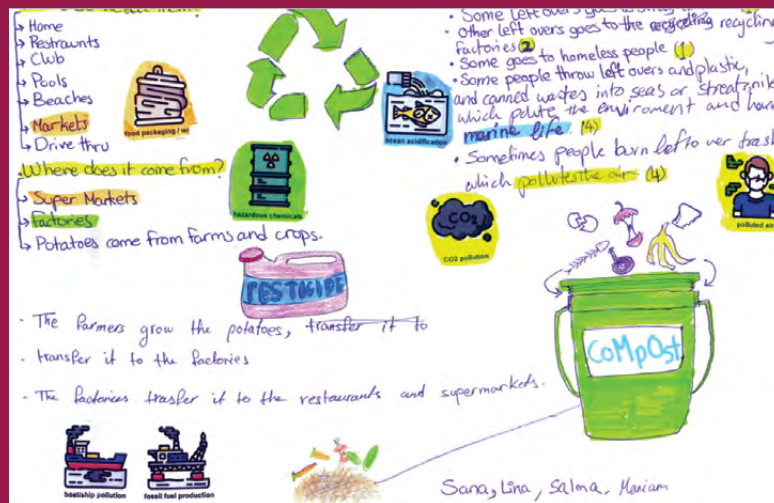


Image:  
©UNICEF  
Indonesia



Children reported that their households compost scraps generated during food preparation, as well as leftover foods. Organic outputs from composting are used as a garden fertiliser. Children's families also gather and grow seeds from compost.

“ Food is composted [for fertiliser].”

(Zimbabwe)

“ Seeds from compost were replanted.”

(Palestine)

### Outside the home

Many children reported that, outside the home environment, waste could be processed via recycling management systems in their communities. They also highlighted how some members of their communities on-sell food waste products, thereby reducing landfill, while others repurpose waste to create new commodities.

“ There are people dedicated to sell the remains of the beef.”

(Guatemala)

“ Waste could be turned into handicrafts.”

(Indonesia)

“ Waste is recycled.”

(China)



Image:  
©UNICEF/UNI77339/Pietrasik

## RECOMMENDATIONS: CHILDREN'S CALL FOR CHANGE

# 5.0

Children engaged in a plenary discussion where they were asked to convey key messages to leaders, decision makers, and other stakeholders. Overall, children felt these agents have collective responsibility for ensuring food security, environmental preservation, and food equality. For children, that responsibility also meant understanding people's difficulties, with special consideration for places and groups that experience greater insecurity and marginalisation. While children are deeply concerned about the problems affecting their local food systems – from climate impacts to distribution issues and food safety – they are also hopeful about the future and offered a number of practical ways to make food and food production more nutritious, safe, and sustainable. Children recognised their own role in this transformation, but also suggested that interventions and accountability need to occur at all levels of society. Their recommendations include personal commitments from themselves and their families, as well as actions required from their communities and governments.

“ We are the future of the country and we want the government to engage us in different aspects of food systems.”

(Ethiopia)



Image: ©UNICEF/UNI65063/Sabella

# 5.1 Strengthen food systems holistically

Children highlighted the role of governments in improving foods, food environments, and food practices. They want governments to be accountable for establishing and enabling food systems. Children believe governments should *support building capacities of communities and food producers*, calling on leaders to enhance community activities and local food production by providing crucial infrastructure, training, and funding. Suggestions ranged from upskilling farmers in environmentally sustainable food production to ensuring adequate roads for transport and space for local markets. Individuals and communities are already working to find new ways to nourish themselves – but the government needs to get behind these initiatives and remove roadblocks to achieve success.

Children have called on governments to *regulate food, food production, and food environments*. Children want: production to be sustainable and not contribute to climate change; food to be nutritious, affordable, safe, and free of harmful chemicals; and organic produce to be promoted. Children suggested that stricter guidelines and legislation need to be established, and that food companies that ignore these regulations should be held accountable. This resonates with successful interventions in diversifying food production that began at the food industry level rather than individual consumers <sup>(23)</sup>.

Children believe that Member States and supporting organizations like the UN have a unique role to play in working across public and private sectors to set agendas and lead the holistic change required for our food systems.

Four key recommendations emerged from the children's discussions:

## Educate producers and consumers

Develop programs to teach people about climate change, environmental protection, recycling, and food systems; raise awareness of food inequality and show people the benefits of nutritious and sustainable practices, like eating seasonally.

“ Further promote [information] about climate change, the food systems, and the 2030 Sustainable Development Goals, so that the world community is more aware of the condition of the earth.”

(Indonesia)

“ [Government should] create a website that shows graphs of water, air and land pollution and how they are growing or becoming less.”

(Egypt)

“ Children should be educated more about healthy food, where it comes from and what the consequences are of producing certain products.”

(Netherlands)

“ Food systems should be incorporated into the education curriculum.”

(Ethiopia)

“ Send experts to schools to educate the pupils and students.”

(Nigeria)

“ To make children eat healthier, you could maybe make videos that are easy to follow... hopefully they will start a conversation about it with their parents and friends.”

(Netherlands)

### Engage children in food systems decision-making

Listen and respond to children and young people; create offline (e.g. forums) and online (e.g. platforms) spaces for them to share their views; collaborate with them; and involve them as government intermediaries.

“ I hope [the] UN continues to invite youths from various countries to participate in every activity because youths are the future leaders of nations. Let youths learn how to protect the world.”

(Indonesia)

“ We are the future of the country and we want the government to engage us in different aspects of food systems.”

(Ethiopia)

“ Engage young people [using] ads on social networks, because it is the place most visited by young people, [and they] are the ones who are most interested in a change [and in] thinking about their future and what will happen when they grow up. ”

(Guatemala)

### Regulate to protect food systems

Regulate food prices; create policies to ensure food security; safeguard children from unhealthy food; establish laws to tackle global warming; reduce environmentally destructive methods of food production; promote mechanisms to hold food producers accountable; recommend auditing programs to ensure compliance; promote strategies to address plastic waste and deforestation; and control the use of preservatives and chemicals/pesticides.

“ UN intervention to countries must be more aggressive. For example, an international Environmental Impact Analysis seems to need to be agreed. Auditing food producers must be conducted from upstream to downstream.”

(Indonesia)

“ Establish firm and clear regulations on agricultural land use and use of chemicals in agriculture and policies to reduce plastics for food packaging.”

(Cambodia)

### Invest in sustainable foods for all

Ensure access to clean water and safe, sustainable, and nutritious food for all; promote sustainable food production by strengthening infrastructure and improving distribution; collaborate to build infrastructure and implement programs that make food more sustainable, affordable and accessible, especially for those most impacted by food poverty, climate change and existing marginalisation (e.g. indigenous communities).

“ Support access to nutritious foods for low-income and vulnerable population.”

(Indonesia)

“ Defend the rights of indigenous people.”

(Guatemala)

“ Strengthen the supply chain of foods.”

(Bangladesh)

“ You should lower the tax on healthy products and make taxes higher for unhealthy products.”

(Netherlands)

“ Modern ways of farming should be introduced.”

(Ethiopia)

## 5.2 Reduce the impact of food systems on the environment

In the workshops, children completed a concentric circles activity, based on the socio-ecological model, to generate concrete suggestions for change at different levels of society. In the innermost circle, children were asked how they and their families could minimise the impact of the food they eat on the environment. In the next circle, they suggested how their community could accomplish the same task, then moved onto farmers and food companies and, finally, government and international organisations. We summarise their recommendations for minimising the environmental impact of food production, distribution, and consumption below.

### Actions me and my family can take

- **Reduce the impact of food miles:** buy and consume locally grown produce; use electric vehicles for food transport.
- **Adopt sustainable eating patterns:** eat less processed food; eat more fruits and vegetables; eat according to season; eat less in general.
- **Grow your own food:** plant seeds; make compost; produce organic fertilisers; use conservationist methods; don't cut down trees.
- **Prepare food sustainably:** make your own food; don't waste food; don't cook with firewood.
- **Manage waste effectively:** reduce plastic use; recycle packaging; use eco-friendly materials; sort waste into organic and inorganic; dispose of food waste properly.

“ Choose food that is grown on a nearby farm.”

(China)

“ Use bottles for food storage instead of polythene bags.”

(Nigeria)

“ Use food wastes for healthy plant fertilization (plant at home).”

(Egypt)



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## Actions my community can take

- **Support each other to make sustainable changes:** regulate our diets; use public transport; save energy (e.g. bike more, fly less); buy from environmentally sustainable businesses; maintain vehicles to reduce pollution.
- **Promote community gardening:** plant trees; compost; reuse food waste; replant seeds from food that is eaten; use manure to fertilise.
- **Take collective action:** create political change through protest, rallies, and petitions; engage in collective challenges (such as plastic-free diet, a 30-day vegan initiative); organise community volunteer trash clean-ups.
- **Create necessary infrastructure and governance:** create a waste bank to recycle/reuse items; set up food markets; certify food sellers as safe; build wastewater treatment plants; educate all on the benefits of a clean environment.
- **Demand sustainable local businesses:** influence local businesses to: use environmentally-friendly packaging; reduce chemicals and pesticides; sell less processed food; limit industrial pollution.

" Create a joint garden which is planted from the seeds of the remaining fruit after consumption, and the rest is used for fertiliser."

(Indonesia)

" Influence business to sell eco-friendly foods [and] make their methods of food [production] more ecologically positive."

(Egypt)

" No more battery chickens! [literally: 'bloated chickens', in Dutch 'plofkippen'.]"

(Netherlands)



Image: ©UNICEF Egypt/2021



## Actions farmers and food companies can take

- **Reduce unsustainable practices:** avoid chemicals; limit plastics; reduce pollution; don't burn trash or rice straw; minimise deforestation.
- **Adopt sustainable practices:** use clean energy, such as solar power; use organic farming methods; grow seasonally; rotate crops; use bio-safe fertilisers; deploy catalytic converters.
- **Ethical labour and animal use:** promote fair trade; eliminate child labour or provide better working conditions for children who work; eliminate battery farming; feed animals healthy diets; give animals enough space to move.
- **Manage waste:** reduce or reuse waste; dispose of animals carefully; ensure chemicals do not enter the water supply or otherwise affect people.
- **Invest in new technologies and foods:** invest in green technologies; invest in meat substitutes and promote healthy alternatives.

“ Create transparency in the use of food ingredients that are not safe for families and the environment.”

(Indonesia)

“ Factories can put the chemical wastes in an isolated element made especially for chemical wastes rather than throwing these wastes in ocean or rivers.”

(Egypt)

“ Preserve trees that are growing on farmland as it provides nutrients [for the soil].”

(Nigeria)

## Actions government and international organisations can take

- **Advocate for, adopt, and enforce increased regulation:** enforce waste management rules; control chemicals and plastics; regulate transport to reduce effects, such as fossil fuel, pollution; set quotas for water use; monitor companies' practices; incentivise businesses and enforce compliance through fines and laws.

“ Monitor factory to ensure proper manage[ment of] wastes and punish for not compliance.”

(Cambodia)

“ Invent incentives to use ecological products (monetary, influential, promoting, etc) and reward... businesses who comply.”

(Egypt)

- **Provide assistance and infrastructure:** support environmentally friendly farms and factories; support renewable energy; support proper waste management; invest in new technologies, farming facilities, recycling plants; preserve indigenous seeds; and promote local food initiatives.

“ Develop technology to support farmers... to produce better quality and quantity.”

(Indonesia)

- **Educate producers and consumers:** educate people on food production and climate change in culturally sensitive ways, from seminars to street theatre; educate farmers and food producers about food safety; raise awareness about sustainable practices.

“ Inform the people and give tips about the environment and about (CO2) emissions. Listen more to the people and their ideas.”

(Netherlands)

“ The government is able to encourage producers to reduce or abandon non-eco-friendly packaging materials.”

(Indonesia)

## SPOTLIGHT:

### How do children want to be engaged in the necessary transformation?

We asked children the best way to engage them in realising the necessary change. What did they say about how governments and others can ensure that children's insights and perspectives are heard, acknowledged, and actioned?

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Children suggested:

- Leverage social media, including dedicated spaces on platforms for children's voices
- Establish and fund child-led bodies, such as student councils/parliaments and youth representatives
- Create mechanisms for the direct participation of children in government/parliament
- Ensure there are people inside government and relevant organisations and institutions who are assigned to listen to children and young people
- Use workshops, open forums, panels, conventions, meetings, drawing competitions, and other formats to capture children's needs, rights, ideas, and aspirations
- Engage children in news, journalism, and public debate
- Promote opportunities for children to share thoughts via letters, email campaigns, and websites, and respond to their demands
- Use research methods like consultations, surveys, questionnaires, and interviews to find out what children think
- Visit schools to hear directly from children

We note here that *infrastructure* is key: children need platforms, spaces, channels, and outlets to express their views. Such infrastructure allows children to convey their needs and wishes. But by itself, having these views expressed is insufficient – they must be heard and actioned. Children thus stressed *direct contact* with government, whether through child-led bodies, participation in parliament, or open forums. These avenues allow children to interact directly with those in power, those who can make change happen.



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# CONCLUSION

6.0



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Overall, the food systems dialogues allowed us to engage children in meaningful conversations on food, food environments, and food practices. Through a participatory, qualitative methodology, the workshops with more than 700 children from 18 countries successfully provided a safe space for them to share their lived perspectives on food systems, and to voice their expectations to policymakers, governments, and stakeholders for a responsive, inclusive, and sustainable food system. These dialogues have identified pathways that may be used by the Member States and other stakeholders to ensure sustainable food systems.

Children spoke about parents preparing meals for them at home, about local delicacies they enjoyed, and about being able to eat a variety of different foods. But children also highlighted how difficult it was to obtain certain foods, whether because markets were too far away, or prices were too high. Some children had a limited range of foods due to poverty; others spoke of a local food environment dominated by ultra-processed foods or high-fat, high-sugar snacks.

Many children displayed a deep knowledge of local foods and a desire to eat more locally and sustainably. Some wanted to purchase foods from local markets and local farms. Others wanted to reduce environmental impacts by consuming less meat and shifting to vegetarian alternatives. Several groups of children called for growing their own produce in local gardens. It is evident that children desire more autonomy and control over what they eat by shaping how it is produced. Many children expressed concern over the pollution created by long-distance food distribution, and the high amounts of packaging, chemicals, emissions, and food waste which is a by-product of our current systems.

While there are many issues at play here, a cross-cutting theme was a strong desire to bring food production, distribution, and consumption closer together. Children are of the opinion that food should be closer to them, it should be created by local farmers who care for the community, their animals, and the land. It should travel short distances and be manufactured in environmentally friendly ways. Children expect that governments should be accountable for ensuring and certifying food safety, and it should be certified as safe by relevant government agencies. In addition, it should be sold by local traders at fair and fixed prices.

Most children feel that the existing food systems have failed to consistently provide nutritious, sustainable food – and some dimensions of the food systems are even harmful to this goal. Children identified a disconnect between desired food practices and existing food practices – between what they want to eat and what they actually eat. In some settings, children’s ability and willingness to eat healthy is constrained by food poverty accentuated by unaffordability, poor availability, and accessibility to healthy foods. Children want diversity in their diet and in the food they eat, but the price of the commodity makes it out of reach.

In these workshops, children were bold in raising their voices and demanding change. Children stressed that food systems need to be rethought and reworked – overhauled for the 21st century. Certainly, this is not an easy mission. It will require a concerted effort from civic and regional government, from food production companies, from schools, and from the farming and logistics sectors, amongst others. Yet this “great food transformation”<sup>(7)</sup> needs to get underway. The health, nourishment, and flourishing of future generations depend on it.

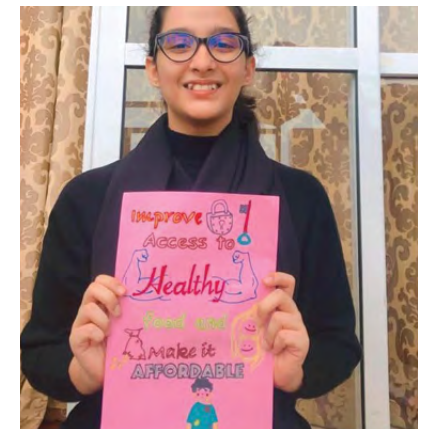


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# REFERENCES

1. UNICEF. *Nutrition, for Every Child: UNICEF Nutrition Strategy 2020–2030*. New York: United Nations Children's Fund (UNICEF); 2020
2. Aguayo V, Morris S. Introduction: Food systems for children and adolescents. *Global Food Security*, 2020;27, 100435. doi: 10.1016/j.gfs.2020.100435
3. Kupka R, Siekmans K, Beal T. The diets of children: Overview of available data for children and adolescents. *Global Food Security*, 2020;27, 100442. doi: 10.1016/j.gfs.2020.100442
4. Challinor A, Watson J, Lobell D, Howden S, Smith D, Chhetri N. A meta-analysis of crop yield under climate change and adaptation. *Nature Climate Change*, 2014;4(4), 287-291. doi: 10.1038/nclimate2153
5. Dangour A, Mace G, Shankar B. Food systems, nutrition, health and the environment. *The Lancet Planetary Health*, 2017;1(1), e8-e9. doi: 10.1016/S2542-5196(17)30004-9
6. Fanzo J, Bellows A, Spiker M, Thorne-Lyman A, Bloem M. The importance of food systems and the environment for nutrition. *The American Journal Of Clinical Nutrition*, 2020;113(1), 7-16. doi: 10.1093/ajcn/nqaa313
7. Willett W, Rockström J, Loken B, Springmann M, Lang T, Vermeulen S et al. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet*. 2019;393(10170):447-492.
8. Fox E, Timmer A. Children's and adolescents' characteristics and interactions with the food system. *Global Food Security*, 2020;27, 100419. doi: 10.1016/j.gfs.2020.100419
9. UNICEF. *The State of the World's Children 2019: Children, Food and Nutrition – Growing Well in a Changing World*. New York: United Nations; 2019. <https://doi.org/10.18356/a4da4811-en>.
10. Fears R, Canales C, Meulen V, Braun J. Transforming Food Systems to Deliver Healthy, Sustainable Diets—the View from the World's Science Academies. *The Lancet Planetary Health* 2019;3 (4): e163–65. doi: 10.1016/S2542-5196(19)30038-5.
11. UNICEF. *Food systems for children and adolescents: working together to secure nutritious diets*. New York: UNICEF; 2018.
12. Hawkes C, Fox E, Downs S, Fanzo J, Neve K. Child-centered food systems: Reorienting food systems towards healthy diets for children. *Global Food Security*, 2020;27, 100414. doi: 10.1016/j.gfs.2020.100414
13. Canavan C, Fawzi W. Addressing Knowledge Gaps in Adolescent Nutrition: Toward Advancing Public Health and Sustainable Development. *Current Developments In Nutrition*, 2019;3(7). doi: 10.1093/cdn/nzz062
14. Raza A, Fox E, Morris S, Kupka R, Timmer A, Dalmiya N, Fanzo J. Conceptual framework of food systems for children and adolescents. *Global Food Security*, 2020;27, 100436. doi: 10.1016/j.gfs.2020.100436
15. Scully M, Wakefield M, Niven P, Chapman K, Crawford D, Pratt I, et al. Association between food marketing exposure and adolescents' food choices and eating behaviors. *Appetite*, 2012;58(1), 1-5. doi: 10.1016/j.appet.2011.09.020
16. Global Nutrition Report. *Global Nutrition Report*. Bristol: Development Initiatives. 2020. [https://globalnutritionreport.org/documents/566/2020\\_Global\\_Nutrition\\_Report\\_2hrssKo.pdf](https://globalnutritionreport.org/documents/566/2020_Global_Nutrition_Report_2hrssKo.pdf).
17. United Nations (UN). *Step-by-step guide for convenors of independent dialogues*. New York: United Nations; 2021.
18. UNICEF. *The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index*. New York: United Nations Children's Fund (UNICEF), 2021
19. United Nations (UN). *2021 Food Systems Summit*. New York: United Nations; 2021.
20. Fleming CA, Oliveira JDD, Hockey K, Lala G, Schmied V, Theakstone G, Third A. *Food and Me. How Adolescents Experience Nutrition Across the World. A Companion Report to The State of the World's Children 2019*. Sydney: Western Sydney University and United Nations Children's Fund (UNICEF); 2020. doi: 10.26183/26f6-ec12

21. Third A, Lala G, Moody L, Theakstone G. Children's Views on Digital Health in the Global South: Perspectives from Cross-National, Creative and Participatory Workshops. In: Lupton, D, and Leahy, D. *Creative approaches to health education*. London: Routledge; in press.
22. Neve K, Hawkes C, Brock J, Spires M, Isaacs A, Squires CG, et al. Understanding Lived Experience of Food Environments to Inform Policy: An Overview of Research Methods. London: Centre for Food Policy; 2021.
23. Dwivedi S, Lammerts van Bueren E, Ceccarelli S, Grando S, Upadhyaya H, Ortiz R. Diversifying Food Systems in the Pursuit of Sustainable Food Production and Healthy Diets. *Trends In Plant Science*, 2017;22(10), 842-856. doi: 10.1016/j.tplants.2017.06.011



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# FIX MY FOOD

Children's views  
on transforming  
food systems



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