



Food Systems for Children and Adolescents

Working Together
to Secure
Nutritious Diets

UNICEF
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**INTERIM
SUMMARY REPORT**

A GLOBAL CONSULTATION CO-HOSTED BY:



With the support of the
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WHY IS A FOOD SYSTEMS APPROACH NEEDED TO ADDRESS POOR DIETS OF CHILDREN AND ADOLESCENTS?

Malnutrition, in all of its forms, is a problem of global proportion and requires urgent action. In many parts of the world, most children and adolescents do not receive the diets they need – in quantity, frequency and quality – to survive, grow, and develop to their full potential. Poor dietary diversity, inadequate dietary patterns, and frequent consumption of poor quality foods contribute to this reality. Poor quality diets cut across all age groups from infancy through school-age years and adolescence, as well as across regions and countries, with consequences for undernutrition, overweight and non-communicable diseases.

Food systems are essential to delivering healthy, affordable and sustainable diets, but the nutritional needs of children and adolescents (both of present and future generations) are often not prioritized. Actors across the food system, including food producers and suppliers, typically do not account for the nutritional needs of children and adolescents when determining what foods to grow, produce, distribute, and sell. Processed, less nutritious foods are skilfully marketed and widely available and affordable,

while nutritious foods are often more expensive and unaffordable to many. The food environment often does not lend itself to nutritious diets for children and adolescents, nor is it incentivized to do so. Actors across local, national and global food systems need to be held accountable for providing healthy, affordable and sustainable diets to children and adolescents today and in the future.

To this end, the United Nations Children's Fund (UNICEF) and the Global Alliance for Improved Nutrition (GAIN), in partnership with the Ministry of Foreign Affairs of the Kingdom of the Netherlands, co-hosted a global consultation on children, adolescents and food systems at the UNICEF Office of Research-Innocenti on 5–7 November 2018. The consultation brought together 60 participants from government, development partners, business, and academia from low-, middle- and high-income settings. The consultation aimed to:

1. Develop a **common narrative** around the need for food systems to produce nutritious, safe, affordable, accessible, and sustainable diets for children and adolescents,

2. Validate a **common approach** to elucidate priority actions within the food system to improve diets of children and adolescents, and
3. Develop an **action plan** to improve children and adolescents' diets using a food systems approach.

What is a food systems approach for children and adolescents?

Food systems approaches address the direct and underlying system actors, drivers, and dynamics that affect food, people, and the planet. In preparation for the consultation, a food systems framework for children and adolescents was developed (*Figure 1*).¹ Food systems are made up of and connected by people, and are influenced by their decisions. Actors across food supply chains and food environments, and children, adolescents and their caregivers, play an important role in assuring the diets of children and adolescents. As such, they are central actors in a food systems approach and in the food system framework for children and adolescents.

The Innocenti Framework on Food Systems for Children and Adolescents

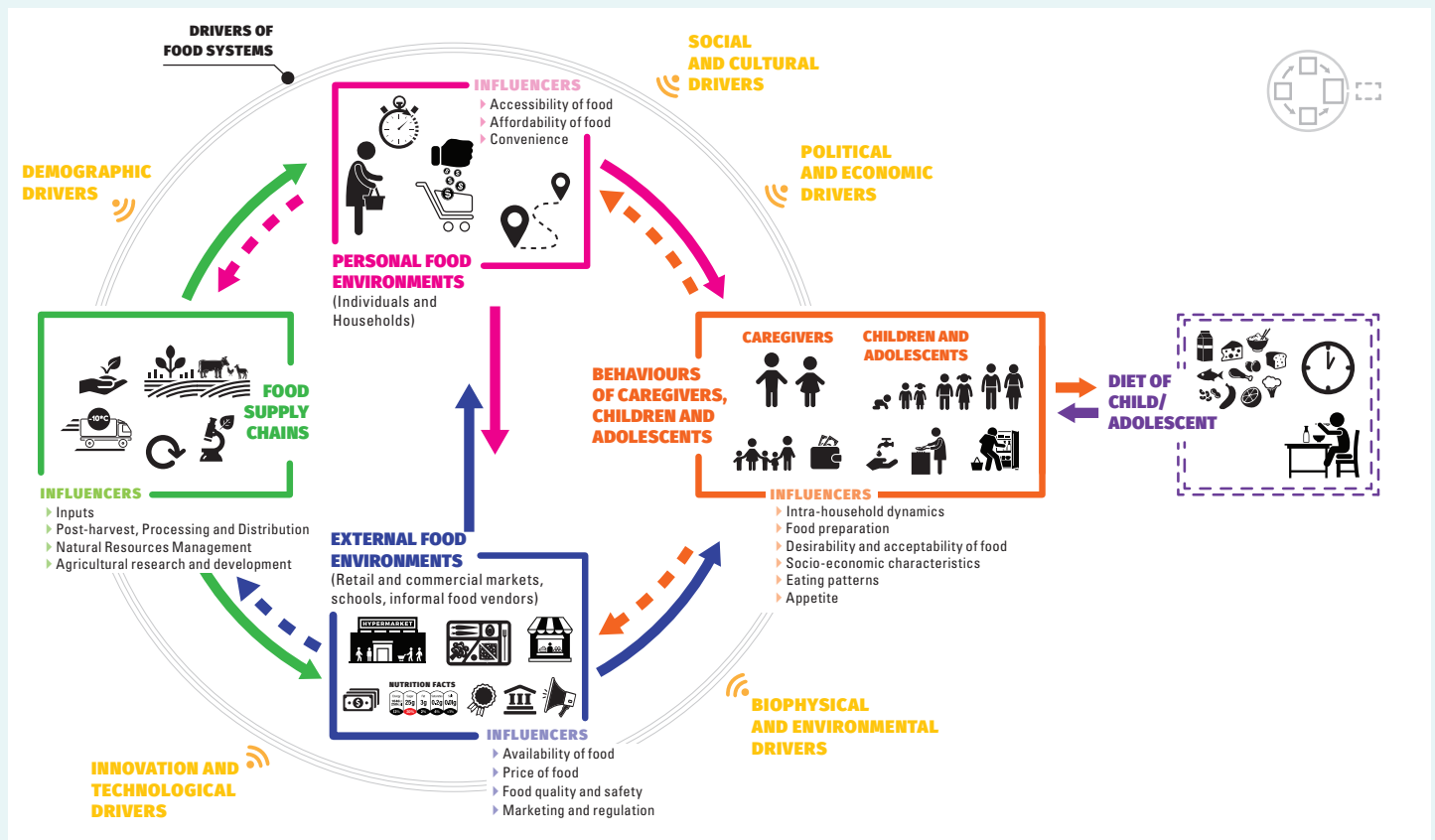


Figure 1. The Innocenti Framework on Food Systems for Children and Adolescents.²

Elements of the Framework

The Innocenti Framework comprises of elements including a set of drivers plus four determinants (food supply chains, external food environments, personal food environments, and behaviours of caregivers, children and adolescents), which together shape children and adolescents' diets. These are described in additional detail below.



Drivers are underlying, structural factors that impact the functionality of food systems, and that need to be put in place for the food system to be able to deliver nutritious, safe, accessible, affordable and sustainable diets. They include: (1) **demographic drivers** (urbanisation, population growth, migration); (2) **political and economic drivers** (leadership, policies, trade); (3) **innovation and technological drivers** (technology, infrastructure, investment); (4) **biophysical and environmental drivers** (climate change, natural resource management); and (5) **social and cultural drivers** (norms, traditions, and underlying social dynamics).

Drivers of Food Systems



Determinants of food systems

The four determinants represent the processes and conditions in the food system, from production to consumption, that are necessary to improve the diets of children and adolescents. For each determinant, the framework identifies a list of *influencers*. Influencers are the more immediate and individual-level factors that determine the extent to which a determinant contributes or fails to contribute to delivering healthy, affordable and sustainable diets. They can be viewed as entry points to make the food systems more nutrition-focused.

DEMOGRAPHIC
DRIVERS



Food supply chains comprise actors and activities that play a role in taking food from production to consumption, and eventually to the disposal of its waste. Food chains can be long and represent more than what is produced on farms. This offers multiple opportunities along the different stages of the supply chain – production, storage, distribution, processing, packaging, retail and markets – to maximize nutrition ‘entering’ and minimize nutrition ‘exiting’ the value chain.⁴ Costs to shift and maintain production practices can be high for producers, and support to align production practices with healthy, affordable and sustainable diets for children and adolescents cannot fall on producers alone.



Food environments refer to the physical, economic, political and socio-cultural context by which consumers interact with food systems to procure, prepare and ultimately consume food.⁵ The **external food environment** includes the retail and commercial markets, schools, and informal vendors, among others, where consumers interface with food. It reflects aspects related to availability, food price, marketing and advertisements, and vendor and product properties (e.g., vendor hours, food offered, etc.). Though individual consumers often have less control over their external food environment, they can influence it through demand and advocacy.

INNOVATION AND
TECHNOLOGICAL
DRIVERS



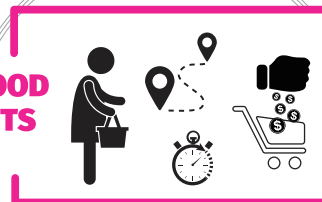
SOCIAL AND CULTURAL DRIVERS

POLITICAL AND ECONOMIC DRIVERS

Personal food environments depict the individual and household level factors that consumers bring to the food environment, such as purchasing power, access, convenience and desirability, and inform why people choose to procure the foods that they do. They complement dimensions of price, availability, and vendor properties in the external food environment.

PERSONAL FOOD ENVIRONMENTS

(Individuals and Households)



Behaviours of caregivers, children and adolescents

refer to the food procurement, preparation, supervision, and eating practices of children, adolescents and their caregivers.

Caregivers are often gatekeepers for the diets of infants and young children, acting as a buffer between food environments and young children's diets. They are responsible for procuring and preparing foods for, and supervising eating practices of young children. Older children and adolescents, on the other hand, are more autonomous. They do not necessarily rely on caregivers as gatekeepers. They often procure and prepare food for themselves (and, sometimes, others in their family), and interact directly with their food environments.

Eating behaviours are the consumption practices of children and adolescents. They reflect what and how children eat, and are influenced by children and adolescents' eating patterns, taste preferences, appetite, level of physical activity, as well as psychosocial factors.

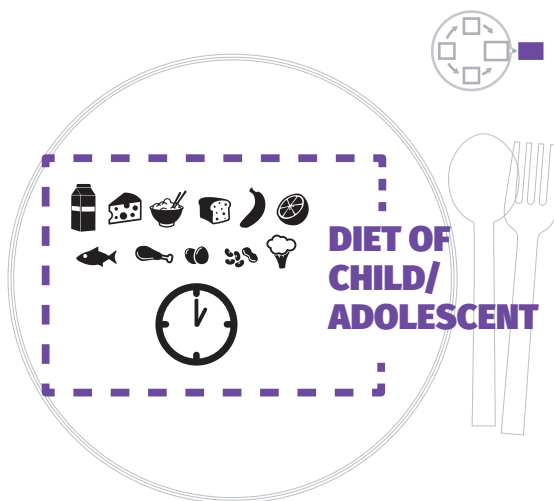
BEHAVIOURS OF CAREGIVERS, CHILDREN AND ADOLESCENTS



BIOPHYSICAL AND ENVIRONMENTAL DRIVERS

The interactions

Central to the framework are the arrows that connect the different determinants. The interactions show how the different determinants link to one another, but also how they reinforce one another, both positively and negatively, through feedback loops throughout the system. For instance, the food supply chain must provide nutritious foods so that those foods can be available in the food environment from which food providers purchase foods; the demands, needs, and preferences of caregivers, children and adolescents also influence the external food environment and the food supply chain.



The combination of these elements (all of the drivers, determinants, influencers and interactions of the framework) culminate into the diets of children and adolescents. The **diets of children and adolescents** also feed back into the system by influencing and reinforcing the behaviours of caregivers, children and adolescents.





How can a food systems approach improve children and adolescents' diets?



A food systems approach engages actors at all levels of the system to reshape it and ensure that the food system delivers healthy, affordable and sustainable diets to all children and adolescents by securing:⁶

- An agricultural sector that delivers food for healthy and affordable diets, sustainably,
- Food supply chains that deliver healthy foods in ways that are economically viable and that support decent livelihoods,
- Food environments that make healthy diets available, affordable, acceptable and appealing,
- Children and adolescents wanting and being able to eat healthy diets (and consequently, developing preferences for those diets in the long-term), and
- Children and adolescents eating healthy diets.

A food systems approach can identify policy and programme levers and partnerships across the food system, and can illuminate how those actions connect and reinforce one another to improve the diets of children and adolescents.

In addition to the common narrative and conceptual framework developed at the meeting, in order to put a food systems approach into action for improving children and adolescents' diets in a given country or setting, there is a need to develop analytical tools that can guide the identification of specific (contextual) policy and programme actions at the country level to improve the diets of children and adolescents.

Additionally, public and private sector actors at global and regional levels need to:

- Develop clear and easy to understand guidance on healthy diets for children and adolescents, to address malnutrition in all its forms;

- Develop and enforce evidence-based mandatory standards for nutrition that are aligned with guidelines for healthy diets for children and adolescents;
- Develop and enforce principles of engagement with private sector actors that produce food and beverages consumed by children and adolescents, that seek the best interest of children and adolescents and that avoid conflict of interest;
- Identify the incentives and disincentives that encourage actors across food supply chains and food environments to protect, promote and support healthy diets for children and adolescents;
- Determine research priorities to fill data and information gaps related to what children and adolescents eat, how they make their food choices, in addition to documenting better practices and lessons learned in improving children and adolescents' diets.

The experiences and expertise of the multiple stakeholders, including those present at the meeting as well as those of in-country stakeholders and implementation partners can help to identify actionable levers for positive change for children and adolescents in the food system. Food systems approaches have already been integrated into existing international commitments, and making children and adolescents central to the food system can build on these commitments. By integrating a food systems approach for children and adolescents into global strategies, we can make food systems work better to secure healthy, affordable and sustainable diets that support optimal growth and development in children and adolescents.

This interim summary report will be followed by a full meeting report and will be represented in UNICEF's State of the World's Children 2019 report (February/March 2019). Additional dissemination of findings will also occur through a peer-reviewed journal supplement (anticipated December 2019).

All of the materials that were developed for the meeting can be accessed at:
<<https://www.unicef.org/nutrition/food-systems.html>>.

Endnotes

- 1 The framework was developed by Jessica Fanzo (FAO, Johns Hopkins University), Ahmed Raza (FAO) and Elizabeth Fox (Johns Hopkins University) in collaboration with Saul Morris (GAIN), Nita Dalmiya (UNICEF), Roland Kupka (UNICEF), Arnold Timmer (GAIN), and Joyce Greene (GAIN). The figure graphic was developed by Nona Reuter (UNICEF). Feedback from two rounds of external review by experts on child and adolescent nutrition, as well as feedback during the Innocenti meeting, were incorporated in this version of the framework.
- 2 Feedback from the Innocenti meeting integrated into this version of the framework.
- 3 High Level Panel of Experts (HLPE). 2017. Nutrition and food systems. Committee on World Food Security, Rome.
- 4 Downs S & Fanzo J. 2016. Managing Value Chains for Improved Nutrition. Good Nutrition: Perspectives for the 21st Century.
- 5 Adapted from HLPE, 2017, and Turner et al. 2017. Concepts and methods for food environment research in low- and middle-income countries. Agriculture, nutrition and Health Academy Food Environments Working Group (ANH-FEWG), London, UK
- 6 Based on Corinna Hawkes' presentation at the Innocenti meeting: "Towards an Action Plan for a Food-Systems Approach to Improve the Diets of Young People: How do we identify effective food systems solutions?"

Acknowledgements

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