

# Diets of children and adolescents

Unlocking current and future gains for human and planetary health



Oslo, Norway | March 4–6, 2020  
**Meeting Report**

Children Eating Well (CHEW) strategic workshop hosted by EAT and UNICEF and supported by the Children's Investment Fund Foundation (CIFF) and the Government of Norway

# Acknowledgements

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The views and opinions expressed in this document are those of the meeting participants and may not represent the views of EAT, UNICEF or any other organization represented.

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# Contents

Acknowledgements	2
<b>KEY MESSAGES</b>	<b>4</b>
<b>EXECUTIVE SUMMARY</b>	<b>7</b>
<b>INTRODUCTION</b>	<b>8</b>
<b>BACKGROUND PRESENTATIONS AND PANELS</b>	<b>11</b>
<b>RESULTS FROM OPPORTUNITY AREA WORKING GROUPS</b>	<b>14</b>
<b>KEY CONSIDERATIONS</b>	<b>17</b>
<b>CONCLUSIONS AND NEXT STEPS</b>	<b>21</b>
Annex A: Programme	22
Annex B: List of participants	24

## LIST OF FIGURES

Figure 1. Food Production within Safe Operating Space for Climate	11
Figure 2. The Four Pillars of UNICEF's Climate and Environmental Sustainability Strategy	12
Figure 3. The Innocenti Framework on Food Systems for Children and Adolescents	13

## LIST OF BOXES

Box 1. Child rights and healthy and sustainable eating	9
Box 2. Why is an agenda on healthy and sustainable eating needed among children?	10
Box 3. Youth: the next generation of changemakers	13
Box 4. EAT-UNICEF Children Eating Well (CHEW) research agenda	20

## KEY MESSAGES

**All children have the right to a healthy diet and sustainable environment.** Yet, children are denied this right because of food systems that do not support the quality of our diets and our climate and environment. In addition to the deprivations they currently experience, children risk inheriting an impoverished world in which they cannot thrive.

Participants strongly agreed about the relevance of the Children Eating Well (CHEW) agenda to place children's needs at the centre of food system transformations for healthy and sustainable diets. This agenda is also at the heart of the Sustainable Development Goals (SDGs) and together with children, we should create trajectories that support their health and development and that of the planet.

Children require a varied diet to meet their high nutrient needs. Infants and young children should be breastfed following international recommendations and receive adequate, safe, and nutrient-dense foods from 6 months of age while continuing breastfeeding. For children, animal-source foods (ASF) are important sources of nutrients, especially where overall diet quality is low.

For all age groups, consumption of ASF should go to a level that is required for nutrition, but not above levels required for the environment. While ASF consumption in some settings are excessive for health and environmental goals, in some low-income settings, it can be insufficient to meet health goals.

Food system transformations for healthy and sustainable diets should capture the benefits not only for diet-related non-communicable diseases in adulthood, but also for the remaining burden of undernutrition in low- and middle-income countries, and their devastating impacts on child survival, growth, and development.

In required food system transformations for children, creating improved food environments should be a major priority. In line with this, the workshop focused on developing approaches in the opportunity areas of affordability, policies, and multi-sectoral, multi-scale collaboration.

**Affordability:** Affordability of safe, nutritious, and adequate foods was identified as an important determining factor of healthy growth and development in children and youth. To promote access and affordability, participants identified a series of public policy and fiscal measures across Ministries that could be introduced. Policy coherence, as well as elevating this issue to national-level discourse, were identified as key measures to successfully advance this agenda and support widespread implementation efforts. Further economic modelling on the health and environmental gains of children adopting a healthy and sustainable diet is needed.

**Policies:** Public policy plays a crucial role in shaping food environments for children and youth and driving systems-level change. Using an adaptation of the Innocenti

Framework on Food Systems for Children and Adolescents, participants identified direct and underlying drivers and influencers of policies to support healthy and sustainable diets for children. These were categorized into the following four determinants: food supply chains, external food environments, personal food environments, and behaviours of caregivers, children and adolescents. The potential of policies that address the triple burden of malnutrition (undernutrition, micronutrient deficiencies, and overnutrition) were identified as promising policy opportunities.

**Multi-sectoral, multi-scale collaboration:** Collaboration across sectors and scales is key to supporting food systems transformation to enable children and youth to adopt healthy and sustainable diets. Cross-departmental collaboration on healthy and sustainable food environments, with a coordinating platform within the Head of State's office, was identified as a promising solution to mobilize government efforts and bridge mandates. The potential role of private sector actors in multi-sectoral initiatives was acknowledged, however, measures to mitigate conflicts of interests and safeguard the scientific integrity of the processes and outcomes are necessary.

The current global climate movement is incomplete without a clear call for food system transformations for healthy and sustainable diets. There are also great opportunities to call for

transitions towards healthy and sustainable food systems based on international youth rights, however, clearer frameworks for how these rights can be championed is needed. Increased capacity and support to youth movements is also required to ensure youth can play an active role.

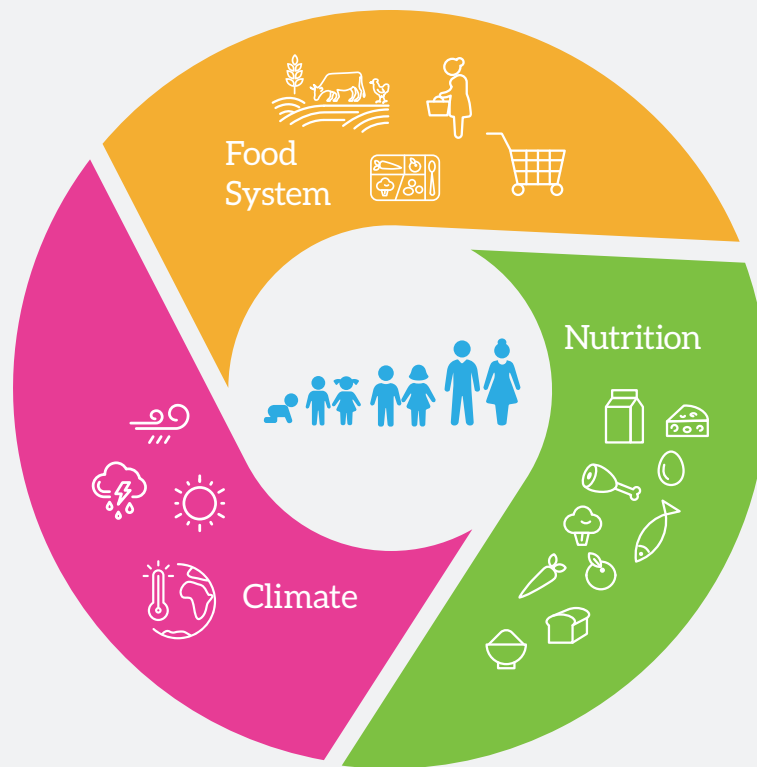
Today's children should be empowered to serve as stewards of the biosphere. Increasing food and nutrition literacy through schools offers specific opportunities, including through teaching about 'food' in curricula to learn about the societal aspects of food in general and environmental and

health benefits in particular. New and innovative technologies adapted to youth's interest and daily life are needed to increase their engagement with food and connection to nature. Opportunities should be created for youth to develop new technologies to improve their food environments.

**Research and metrics** Available metrics need to be improved to measure diet quality and its links with health-related outcomes (especially related to undernutrition) and sustainability. In addition, further refining the EAT-Lancet diet to the needs of children was identified as a research priority, as

well as modeling the environmental and health gains of changing diets in childhood and examining priority policy options for healthy and sustainable food systems for children.

The **2021 Food Systems Summit** offers an opportunity to mobilize global efforts to improve food systems for children and youth in support of healthy and sustainable diets. The CHEW agenda is uniquely placed to position children's rights and children, adolescents, and youth as agents of change in the Summit agenda.







# EXECUTIVE SUMMARY

## **The urgent need for food system transformation to ensure the health of people and the planet is now globally recognized.**

However, the special dietary and nutritional needs of children have not been sufficiently considered in this agenda, nor the role children and adolescents themselves can play in improving their food environments.

To gain a better understanding of what is required to achieve healthy diets for children and adolescents within planetary boundaries, EAT and UNICEF convened 29 experts from governments, academia, development agencies and youth organisations for the workshop “Diets of children and adolescents: Unlocking current and future gains for human and planetary health” in Oslo, Norway, from March 4–6 2020. During the three-day workshop, participants reviewed the latest evidence on healthy and sustainable diets for children and adolescents, identified research gaps and opportunity areas for action, and explored the role

children and adolescents can play in advancing food systems transformation.

Workshop participants agreed that the **Children Eating Well** (CHEW) agenda is at the heart of the SDGs and that children’s needs should be positioned at the centre of food systems transformations for healthy and sustainable diets. Given children’s high nutritional needs, further exploring the applicability of the *EAT-Lancet* reference diet to children and adolescents was identified as a future research priority.

Three opportunity areas for action were identified – public policy, affordability and multi-stakeholder, multi-scale collaboration – and workshop participants discussed key considerations for advancing healthy and sustainable diets for children within each area. It is necessary to explore the various roles children and adolescents themselves can play in this agenda, and workshop participants agreed that further dialogue and

engagement with relevant youth organizations would be valuable. The UN Food Systems Summit, and the preparation process towards the Summit, was identified as a particularly important opportunity to build global momentum towards the CHEW agenda and ensure the voices and needs of children and adolescents are included in food systems transformations. Workshop participants indicated their willingness to support the advancement of this agenda through their respective organizations.

The organizers will advocate for the inclusion of topics related to healthy and sustainable diets for children and adolescents in their involvement in the UN Food Systems Summit and other upcoming international meetings, consider ways to advance the three opportunity areas for action and to establish greater dialogue with relevant youth organizations, and work to execute the research agenda identified at the workshop.





## INTRODUCTION

**All children have the right to a healthy diet and a sustainable environment.** However, today's food systems are driving pervasive undernutrition and rising rates of overweight, obesity and diet-related diseases among children and adolescents, whilst also being the single largest environmental pressure on earth, threatening the prospects of younger generations and progress towards the SDGs (Box 1).

In the context of the Children Eating Well (CHEW) partnership, UNICEF and EAT aim to transform food systems so that every child has access to sustainably produced and nutritious foods throughout childhood and adolescence (Box 2).

To advance this agenda on healthy and sustainable diets for children, EAT and UNICEF jointly convened a strategic workshop in Oslo from March 4-6 with the following objectives:

1. To arrive at a shared understanding of the scope, ambition and urgency required to achieve healthy diets for children and adolescents within planetary boundaries,
2. To articulate how progress, policies and programs on healthy and sustainable diets among children and adolescents can be advanced in different contexts, and
3. To examine the role of children, adolescents and youth as active agents of change and identify opportunities for engagement and empowerment.

The workshop brought together 29 experts from government, academia, development agencies and other experts across the fields of nutrition, health, agriculture, climate and youth mobilization. The workshop was held over three days, with Day 1 focusing on framing the issue followed by a highly participatory format on Days 2 and 3 to identify specific opportunity areas for impact, outlining action agendas for each area, building a narrative, and identifying opportunities for collaboration, particularly in the lead up to the UN Food Systems Summit in 2021. The workshop agenda and full list of participants can be found in Annexes A and B, respectively.





## BOX 1.

### Child rights and healthy and sustainable eating

Children have the same human rights as adults, but they often need special care and protection that differs from adults. Children depend on adults and adult decision-making to protect their best interests. The Convention on the Rights of the Child sets out the rights that must be realized for children to develop their full potential, free from hunger and want, neglect and abuse. It is the first legally binding international instrument to incorporate the full range of human rights – including civil, cultural, economic, political and social rights. The articles of the Convention are grouped into guiding principles with three categories of child rights:

- Survival and development rights that give children access to health and education resources necessary for the survival and full development of the child. These rights allow children to survive and thrive;
- Protection rights that ensure protection from all forms of abuse, neglect, exploitation and cruelty. These rights ensure that children are and feel safe;
- Participation rights that entitles freedom of expression and participation in decision-making. These rights support children in taking an active role in society.

In their daily lives, children are continuously exposed and vulnerable to the harmful impacts of food systems that do not meet their nutritional needs yet contribute to significant environmental destruction. Because of poverty and exclusion, the most vulnerable children are at greatest risk. A rights-based approach to improving children's access to sustainable and healthy diets is vital to guaranteeing that marginalized and vulnerable populations – who are disproportionately affected by malnutrition, climate change and environmental degradation – have equitable access to nutritious, safe and sustainable food.

Once the concept of 'rights' is introduced in policymaking, the rationale for taking action no longer derives merely from the fact that children have needs but also from the fact that they have rights. Rights-based policymaking highlights the obligations of governments to respect, protect and fulfil these rights for all children, and brings powerful new arguments to overcome attempts to delay, deflect and divide effective policy efforts. In all cases, children's rights – and the best interests of the child – must be at the centre of government efforts to create healthy food environments. As the primary duty-bearers of children's rights, governments should prioritize efforts to address the root causes of poor health among children by ensuring that they have access to nutritious, safe, sustainable and affordable food.

## BOX 2

### Why is an agenda on healthy and sustainable eating needed among children?

- **Child rights imperative.** Unhealthy and unsustainable diets undermine the rights of every child.
- **Unique dietary needs.** Children require a high diversity of foods and foods of higher nutrient density than adults. Globally, only one in three young children consume a diet that meets minimum criteria for dietary diversity. The poor quality of children's diets is a major threat to a child's ability to survive, grow, and thrive.
- **Lifelong preference setting.** In utero and during childhood and adolescence, lifelong taste preferences and dietary habits are shaped, thus making these periods crucial to support healthy and sustainable diets.
- **Disproportionate burden.** Although children are least responsible for the design of current food systems and climate change, they will bear the greatest burden of related negative impacts.
- **High cost of inaction.** Because of climate change and environmental degradation, this is the first time a global generation of children will grow up in a world made far more dangerous and uncertain. At the same time, the unresolved burden of undernutrition and growing burden of obesity and diet-related non-communicable diseases will result in massive individual and societal costs.
- **Equity.** Addressing the challenges of healthy and sustainable eating globally is imperative for protect the most vulnerable children in countries most heavily affected by climate change
- **Building on existing knowledge and policy advances.** Important advances have been made to characterize healthy and sustainable diets for the general population alongside required food system transformations and to identify priority actions to improve dietary quality for children in food systems. Building on these efforts, the importance of healthy and sustainable diets for children now needs to be explored.
- **The opportunity of youth engagement.** Young people are engaged and inspired to take action to help address climate change. However, despite the detrimental effects of food systems for human and planetary health, food system transformations have not been a focus of youth engagement and climate action. Showcasing the synergies between both issues could encourage youth activism and engagement on the important issue of food systems transformation to support healthy diets within planetary boundaries.
- **Children as part of the solution.** As the future stewards of this planet and its biosphere, children should be empowered to understand the crucial role of food for human and planetary health.
- **Diets and nutrition as climate resilience.** Well-nourished children are more resilient to the negative effects of climate change and pandemics such as COVID-19. Investments in healthy and sustainable diets for improved nutrition are therefore an investment into climate resilience and coupled with improvements in food hygiene and safety standards alongside protection of natural habits may prevent future pandemics akin to COVID-19.

# BACKGROUND PRESENTATIONS AND PANELS

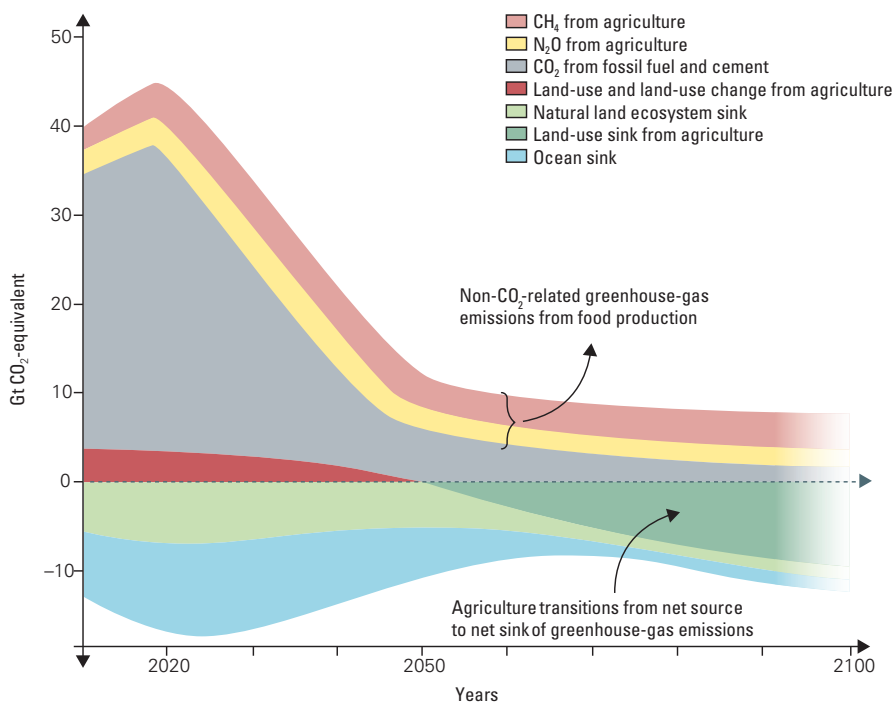
## Setting the tone

The workshop was opened by Aksel Jakobsen, State Secretary at the Norwegian Ministry of Foreign Affairs, who emphasised the importance of adopting a food systems agenda to improve the health and well-being of children worldwide. The State Secretary outlined how children and adolescents are increasingly facing multiple burdens of malnutrition. Despite declines, 149 million children under the age of 5 currently suffer from stunting and almost 50 million from wasting, in addition to 340 million children that suffer from the hidden hunger of deficiencies of vitamins and minerals. At the same time, the prevalence of overweight and obesity is increasing rapidly. The State Secretary highlighted Norway's efforts to improve this situation, with the newly launched action plan on sustainable food systems and the first strategy specifically designed to combat

non-communicable diseases (NCDs) in low- and middle-income countries (LMICs).

Sudhvir Singh (EAT) and Roland Kupka (UNICEF) further outlined the background and rationale for the workshop, highlighting how food systems are not meeting the nutritional needs of children and are a significant driver of environmental destruction, including greenhouse gas emissions, loss of biodiversity, deforestation, and the depletion of both marine systems and fresh water resources. Sudhvir Singh presented results from the EAT-*Lancet* Commission on Food, Planet, Health, the first study to propose dietary guidelines and environmental boundaries for healthy and sustainable food systems (Figure 1). These universal boundaries allow for alignment across sectors, but should be adapted to individual, local and national contexts. The Commission

highlights that changes in eating habits and food production, as well as reductions in food waste, are both necessary and feasible to feed a future population of 10 billion people a healthy diet within planetary boundaries. These changes have important context specific implications, including opportunities for certain vulnerable populations to increase meat consumption. Roland Kupka subsequently shared the key pillars in UNICEF's approach to climate change and UNICEF's priorities for engagement in food systems (Figure 2), which is informed by the Innocenti Framework on Food systems for Children and Adolescents (Figure 3). The speakers concluded that the workshop aims to bring together the dimensions of food systems, nutrition, and climate for children and adolescents.



**Figure 1. Food Production within Safe Operating Space for Climate**  
 Source: Willett W, Rockström J, Loken B, et al. (2019). Food in the Anthropocene: the EAT *Lancet* Commission on healthy diets from sustainable food systems. *Lancet* 393: 447–92.

## Discussion paper

A discussion paper was developed specifically for this workshop by researchers from the Johns Hopkins Bloomberg School of Public Health and the World Food Programme<sup>i</sup>. to review the latest scientific evidence relating to children, malnutrition, food systems and climate and sustainability. The results from the paper were presented by Dr Saskia de Pee. The paper

<sup>i</sup> Marshall, Q; Miachon, L; de Pee, S; and Bloem, M. (2020). Achieving healthy diets within environmental limits for children and adolescents. Unpublished

emphasized that even though there have been a large number of ground breaking reports on sustainable healthy diets, furthering our understanding on linkages between health, food systems, and environmental sustainability, a review of recent key reports and publications indicates that there has been insufficient attention to meeting the nutritional needs of special groups, including infants, young children, and adolescents, especially related to undernutrition in low- and middle-income countries.

The paper reviewed the unique nutritional needs of children and adolescents, emphasizing that, infants, young children, and adolescents require nutrient-dense foods to meet their nutrients needs of which animal-source foods (ASF) is a specifically important source. This was identified as a source of tension, as the reference diet recommended by the *EAT-Lancet* Commission include few ASF due to their large environmental impact. LMICs face particular constraints in achieving healthy and sustainable diets, including demographic changes, climate vulnerability and

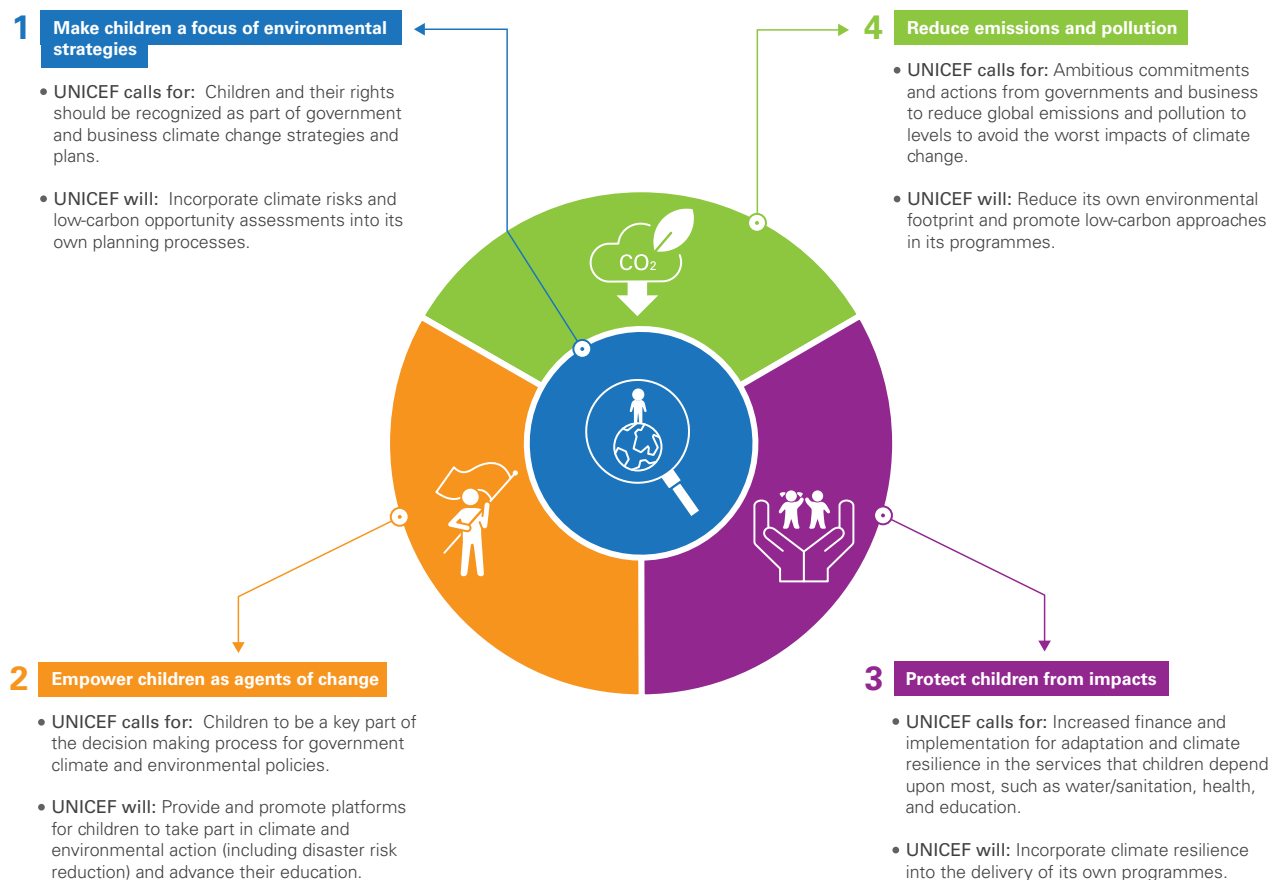


Figure 2. The Four Pillars of UNICEF's Climate and Environmental Sustainability Strategy

Source: UNICEF. An Environment Fit for Children. UNICEF's Approach to Climate Change. New York: UNICEF, 2019.



lack of affordability of nutritious and sustainable diets.

The discussion paper recommended interventions to target food supply chains, food environments and consumers, including among others 1) shifting agricultural priorities towards producing healthy foods that can address both nutrient deficiencies and the risk of chronic diseases, to prevent the expansion of crop land while meeting the demands of a growing population, 2) introducing fiscal measures such as subsidies for nutritious foods and taxes for

energy-dense, nutrient poor foods, and 3) adapting sustainability targets for children’s and adolescents’ healthy diets for each country, including in national dietary guidelines.

It is clear that tackling malnutrition among children and adolescents is key to achieving their full potential and reduce non-communicable diseases later in life. Dietary recommendations need to balance nutrition, health, access and environmental targets; however, these need to be tailored to the specific local and country

context. An unprecedented collaboration across academic disciplines over the past years have increased our understanding of the complex linkages between people, planet and food, but reports are rarely found to include nutritionally vulnerable groups and undernutrition in discussions about food systems, nutrition and the environment.

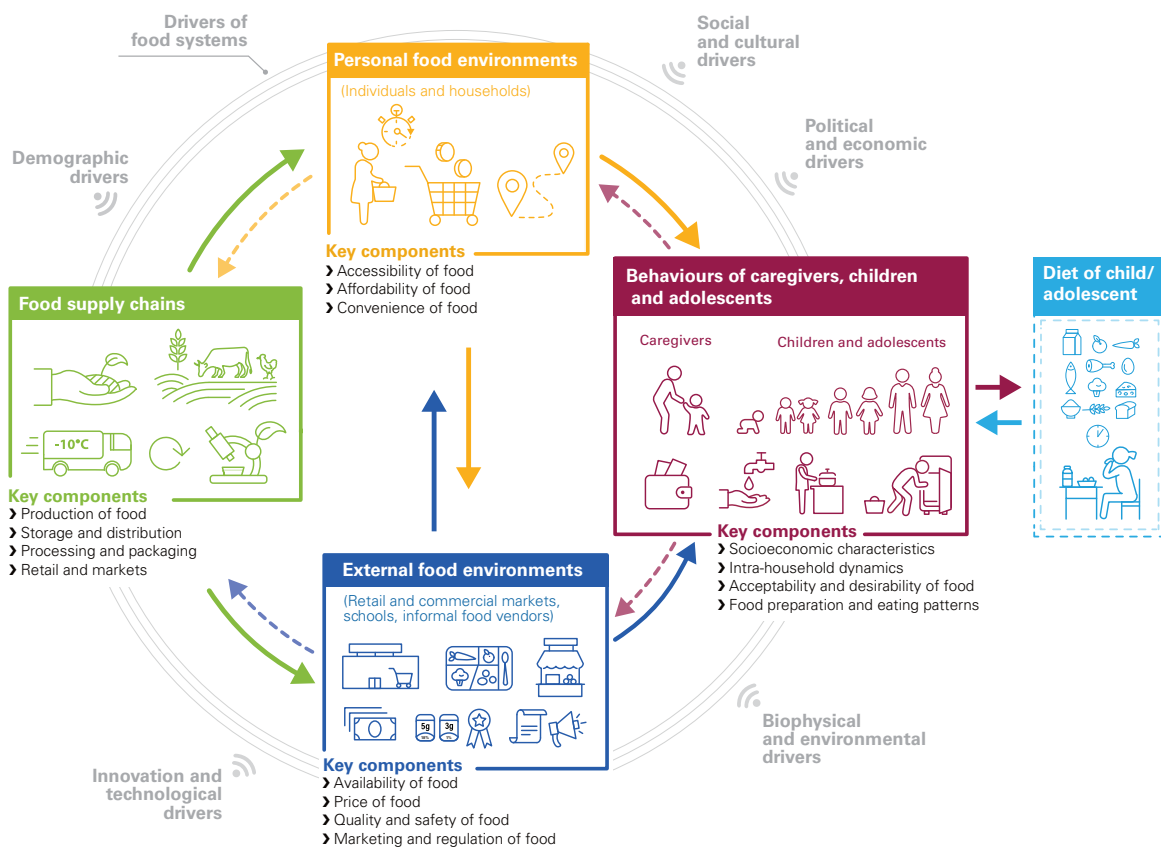


Figure 3. The Innocenti Framework on Food Systems for Children and Adolescents

Source: UNICEF, GAIN. Food systems for children and adolescents. Working together to secure nutritious diets. New York: UNICEF; 2019



## RESULTS FROM OPPORTUNITY AREA WORKING GROUPS

Throughout the remainder of workshop, participants explored the various dimensions of healthy and sustainable diets for children following highly participative facilitation techniques. Through these discussions and group work, a number of opportunity areas for action emerged, including defining healthy and sustainable diets for children, the affordability of such diets, the role of youth as agents of change, public policy and legislation, the role of private sector actors, nutrition literacy and education, as well as multi-sectoral and multi-scale engagement. The most prominent and promising entry points for action identified

were 1) affordability of healthy and sustainable diets, 2) public policy, and 3) multi-sectoral and multi-scale engagement. In group work, participants aimed to further refine their understanding of the opportunity area, develop an action agenda that builds on existing initiatives, describe research, policy and advocacy opportunities, define the potential scale of impact, and how children and youth would be engaged on the area.

### **Affordability**

Nutritious and safe foods are critical determining factors of healthy growth and development in children and youth. While unaffordability of

nutritious foods is a major barrier to diet quality, the increased cost of sustainably-produced foods further reinforces economic barriers to achieving healthy and sustainable diets, particularly in low- and middle-income countries.

In exploring affordability as an indicator of nutrition and health outcomes, participants identified two metrics that could help inform targeted food policy and fiscal measures. The first being relative cost of nutritious foods in comparison to staple foods to assess household food purchasing decisions and consumption

choices. This metric is indicative of health outcomes as calorie-dense foods are often cheaper than whole, unprocessed foods, and are linked to increases in overweight and obesity. The second metric is the absolute cost of a basket of healthy foods. Comparisons across different geographic regions, as well as against the absolute cost of a basket of unhealthy food and that of a healthy and sustainable foods could help rationalize stronger economic policy to subsidize nutritious foods.

As a cross-cutting issue, participants identified policy and fiscal measures across ministries to support food affordability. Within the Ministry of Finance, policies to support subsidies for healthy and sustainable foods, as well as taxation of unhealthy foods were identified as promising fiscal measures. Further investments into food and vegetable production, environmentally friendly ASF production, as well as food-related infrastructure could also help decrease food production costs and increase affordability as a result. Within the Ministry of Social Welfare, participants identified social protection programmes as a promising entry point to promote food and nutrition security, such as through food stamps or fruit and vegetable prescriptions. Finally, through the Ministry of Education, the use of procurement policies, supported by strong regulatory measures in schools could help support child and youth access to healthy and affordable foods. Cross-departmental collaboration allows governments to mobilise action across sectors and leverage different financial and policy instruments for greater impact. Ultimately, the importance of elevating this issue to national-level

discourse on food and nutrition as well as promoting cross-sectoral collaboration and policy coherence were highlighted as opportunities to improve the affordability and accessibility of healthy, nutritious and sustainably produced foods. Further economic modelling on the health and environmental gains of children adopting a healthy and sustainable diet could be explored as a next step.

### Public Policy

Public policy plays a crucial role in shaping the food environment for children and youth and driving systems-level change. Participants highlighted the role and potential of policies jointly addressing the triple burden of malnutrition and climate change, thus fostering environments that promote both planetary and population health. While offering great promise, participants agreed that identifying the proper combination of policies that support both healthy and sustainable diets may be challenging. This can be attributed to the – at times – competing or conflicting agendas. For example, a tax on sugar-sweetened beverages may be a top priority for advocates working on childhood overweight prevention yet feature low on the list for those working on environmental sustainability. Similar examples are numerous, and apply in both directions: taxes on red meat or country of origin policies are possible priorities from the environmental sustainability perspective that would not necessarily be the most relevant action for the nutrition community. Clear processes are needed to align priorities and identify co-benefits when defining common policy asks.

To gain an understanding of the existing policy landscape,

participants suggested conducting a food systems assessment to understand how current policies are coherent with, or constrain, healthy and sustainable diets. This could serve as a starting point to identify the most salient policy opportunities on national and local as well as municipal level. Building on the food systems assessment, efforts to identify relevant knowledge and evidence gaps, such as ways to anticipate and avoid unintended consequences (e.g. substitutions in the supply chain) or methods for assessing consumer response, could further inform appropriate policy options.

Using an adaptation of the *Innocenti Framework on Food Systems for Children and Adolescents*, participants identified direct and underlying drivers and influencers of policies to support healthy and sustainable diets for children. These were categorized into the following four determinants:

**Food supply chains:** Within the agricultural sector, improving production efficiency for fruits, vegetables, nuts/seeds and other nutritious foods, offering production subsidies on health-promoting foods, and improving food storage and transportation to minimize crop wastage and promote food safety throughout the value chain were identified as potential solutions. Policies to reduce direct and indirect support to sugar production, as well as reducing tariffs on imported fruits and vegetables were also identified as supply side actions having strong potential to improve access to healthy and sustainable diets.

### External food environments:

Participants identified policy opportunities within the retail



space to improve availability, price and marketing of healthy and sustainable foods for children. Such opportunities include encouraging markets to sell fruits and vegetables at affordable prices through land use, and electricity and clean water policies, as well promoting healthy and sustainable food procurement in schools. Additional entry points include taxing sugar-sweetened beverages, restricting marketing of unhealthy foods, and using labelling to help consumers identify unhealthy foods. Further efforts to explore how these entry points could simultaneously address sustainable diets, thus encouraging triple-duty action, could be explored as an outcome of this workshop.

**Personal food environments:**

Participants agreed that insight into factors that influence family purchasing and consumption decisions could help inform the selection of viable policy options to promote ease of access, availability and convenience of healthy and sustainable foods. Policies that provide targeted support to vulnerable families to enable healthy food purchases, such as nutrition-sensitive social protection programmes, could help address health inequities by improving personal food environments for vulnerable populations.

**Behaviours of caregivers, children and adolescents:**

Policies anchored in Social and Behaviour Change Communication

that promote the adoption and maintenance of behaviours that encourage healthy and sustainable diets could be explored.

To strengthen accountability and maximize policy impact, participants reinforced the importance of strong implementation, enforcement, and upstream monitoring. Further analysis of triple-duty policy actions could be explored as a follow-up to the workshop.

**Multi-sectoral, multi-scale collaboration**

Meeting the Sustainable Development Goals (SDGs) and ensuring that all children are able to adopt a healthy and sustainable diet requires collaboration across sectors and across different departments within the government. Globally, there are a growing number of platforms that facilitate multi-sectoral collaboration, of which Scaling Up Nutrition (SUN) is a good example. Since 2010, the SUN Movement has worked collaboratively with governments, businesses, civil society, donors and the United Nations (UN) to end malnutrition in all its forms. SUN also recently launched a toolkit to support the design and management of multi-sectoral and multi-stakeholder platforms.

Platforms facilitating collaboration across different departments within the government are less frequent and often face challenges such as siloed structures, strong

decentralization, and lack of common goals and priorities. Some countries also face the challenges of having to balance conflicting national and donor priorities. Establishing a cross-cutting and coordinating platform on healthy and sustainable food systems within the Head of State's office was raised as a potential solution, having showed promising results for nutrition in the context of the SUN movement in some countries. The importance of identifying common goals and win-win solutions that cut across departments and create accountability, as well as establishing a robust monitoring and evaluation framework, were also highlighted as key measures. Participants recognized that these were valuable examples of how to build better platforms for collaboration but emphasised that deeper and more structural changes will be necessary. This would require a long-term process of changing the way in which governments operate, as well as people's mindsets.

The inclusion of private sector actors in multi-sectoral initiatives and platforms can be valuable. However, to mitigate conflicts of interest and safeguard the scientific integrity of the policies and outcomes, clear regulations and guidelines regarding private sector participation needs to be put in place.





## KEY CONSIDERATIONS

While there is a growing consensus about the environmental and health gains of children and youth adopting healthy and sustainable diets, participants noted that successful development and implementation of initiatives to support healthy and sustainable diets for children must acknowledge and account for the following considerations.

### **Local context**

Local food cultures, traditions and norms play an important role in shaping the dietary practices of a nation. While global nutrition guidance provides a framework for countries to follow, national and municipal governments have a role to play in adapting this

guidance to meet local needs. Throughout the workshop, the importance of adapting policies, guidance and messaging to the local context was highlighted when 1) determining what constitutes a healthy and sustainable diet for children, 2) identifying priorities and trajectories of change, and 3) developing advocacy strategies and public messaging.

Participants also recognized that political and public willingness to support measures that promote healthy and sustainable diets for children differ by region. This was best illustrated by discussions on the role of ASF in supporting both child health and environmental sustainability. While representatives from higher-income countries

suggested that widespread efforts to reduce the consumption of ASFs would likely be accepted, other representatives from regions where ASF are considered integral to the local food cultures recognized the opposition that would likely be faced. These discussions thus showed why variations across local, national and regional contexts must be taken into account. Local framing of the issue ultimately helps policymakers, advocates and other experts acknowledge local nutrition needs and issues, while simultaneously promoting food sovereignty.

### **Building consensus**

Throughout the workshop, participants identified numerous

frameworks, policies, and guidance that could be adapted to support healthy and sustainable diets for children. While some synergies exist within this literature, the significant lack of consensus promotes inconsistent government action and policies to address this issue. Building consensus could help unify constituencies in the actions taken to support healthy and sustainable food environments for children and youth.

### **The role of youth**

Many young people are engaged to take action to help address climate change. Inspired by leading figures such as Greta Thunberg, youth are taking to the streets to demand change and to protect the future of their generation and the planet. Food system priorities for youth climate movements are often different across LMICs and high-income countries. In LMICs, the emphasis is often on improving production and farming practices and increasing climate resilience, while in high-income countries the focus is often on the end of the value chain such as changing consumer demand. Even though the challenges with our current food system are recognized by youth climate movements, there is huge potential to make the link between climate action and the need for healthy and sustainable diets more explicit. However, youth movements and organizations often lack sufficient capacity and resources and most of the work is executed on a voluntary basis. Supporting youth organizations that can take an active and engaged role in this agenda would therefore be key going forward (*Box 3*).

Participants at the workshop reflected on the role of youth within the CHEW agenda and

acknowledged that youth can be engaged as both recipients of this agenda, and as active participants and champions. Although active youth involvement is often preferred, the type of engagement should be contingent on the goal and scope of the initiative. Participants also highlighted the need to meet young people at their own platforms and fora and highlighted several relevant conferences and initiatives that can be valuable for EAT and UNICEF to engage with.

The school curriculum and the school environment were identified as immediate opportunity areas for impact. Education can be better used to teach children about healthy and nutritious diets and environmental sustainability, of which the active use of the outdoor school space can be better leveraged for activities such as gardening and food production. New and innovative technologies and engagement strategies adapted to youth's interest and daily life should be developed to increase their engagement with food and connection to nature.

### **Defining healthy and sustainable diets for children**

The discussion paper by Marshall et al. set the stage for an engaging discussion among the participants on the ideal healthy and sustainable diet for children and adolescents. Participants also acknowledged the lack of data on the current diets of children and adolescents worldwide, and how they can feasibly change, both locally and nationally. Further exploring the applicability of the *EAT-Lancet* reference diet to children and adolescents was identified as a future research priority. Specifically, participants discussed whether the intake ranges for different

food groups recommended by the EAT-Lancet Commission meet nutrient requirements of children and adolescents, and whether the recommended ranges need to be further tailored to children and adolescents.

In line with other discussions, participants noted that achieving healthy and sustainable diets has important context-specific implications, including opportunities for certain vulnerable populations to increase ASF consumption, notably in some LMIC countries. Considering the local and country-specific context was therefore identified as key to identify priorities, determine the appropriate direction of change, and develop guidance on healthy and sustainable diets.

Several participants emphasized that despite some prevailing research gaps, there is a strong evidence base for targeted action and mobilization around healthy and sustainable diets for children. Furthermore, the urgency of this agenda was highlighted, given that children and young people are increasingly affected by climate change and its links to malnutrition (*Box 3*).

### **Food for a sustainable and resilient biosphere**

Line Gordon, Director of the Stockholm Resilience Centre, provided valuable insights into the workshop through a presentation showing how human action has substantially altered the planet and biosphere and put its resilience at risk. The planetary boundaries provide a framework to help us understand the planet's capacity to sustain human living and represent the safe operating space inside which we have an opportunity to change. We are currently outside





### BOX 3

#### Youth: the next generation of changemakers

Historically, children have been excluded from decision-making processes that affect them most. Through organized movements, children are now exercising their right to express their views, as outlined in Article 12 of the Convention on the Rights of the Child<sup>1</sup>, demanding to be listened to in matters that affect their life and future.

Through collective and organized action, youth are positioned to drive change like never before. This is best exemplified by the *Fridays for Future* movement, which has brought unprecedented attention and action to address the effects of climate change, which will have the greatest impact on generations of children and youth to come. While there is no organic and active global youth movement linking food systems and climate change, youth advocacy initiatives routed in food security, shifts to plant-based foods, deforestation, climate action, and healthier food environments have seen traction and increasing success. One example is *Bite Back 2030*, a youth-led organization in the U.K. working to ensure every child has equal access to a good diet and promoting healthy food environments. Further efforts to draw attention to the linkages between climate change and food systems could drive greater collective action.

Policymakers, business leaders, and those in a position of power have a responsibility to meaningfully engage and empower youth on matters

that affect them, particularly when it comes to fostering a food and climate environment that allows them to thrive. The following strategies can support meaningful youth engagement:

- **Meet and listen to youth where they are.** Meeting young people in their fora and allowing them to set the agenda will enable decision makers to get an understanding of children and youth's priorities and interests when it comes to healthy and sustainable diets. This can be done by meeting with youth organizations to discuss what they see as their role in food systems transformation, as well as what matters to them most in this agenda.
- **Advocate for youth involvement in policymaking, multilateral processes and fora, and other decision making and influential settings.** Avoid tokenistic involvement of select youth representatives, in select portions of the agenda. Remember that one youth does not represent the voices and lived experiences of young people from different ethnic, geographic, and socioeconomic backgrounds.
- **Support ongoing youth movements that both directly and indirectly support food systems transformation to a healthier and more sustainable food future for children and youth.** It is important to acknowledge that such a movement cannot be enforced.

## BOX 4

### EAT-UNICEF Children Eating Well (CHEW) research agenda

Based on the workshop discussions and evidence needs, a CHEW research agenda is being developed. A series of scientific papers are being explored to disseminate the thematic findings from the workshop, build on evidence and knowledge gaps, and further analyse opportunity areas for action. These include the following:

1. Diets of children and adolescents: Unlocking current and future gains for human and planetary health.
2. Achieving healthy diets within environmental limits for children and adolescents: A review of the evidence.
3. Defining healthy and sustainable diets for children: Analysis of the EAT-Lancet diet.
4. Environmental and health gains of changing diets in childhood: A modelling study.
5. Healthy and sustainable food systems for children: Analysis of policy options

the safe operating space for some of the variables (e.g. nitrogen and phosphorus use) and food system change has a key role to play in improving this situation. Identifying solutions that meet multiple goals and build resilience across scales will be key going forward. The global production system has changed significantly over the past decades and today, is characterised by increased connectivity and intensification, less diversity and a domination of a few powerful actors. Line Gordon emphasised the need to engage with the private sector and highlighted how ocean stewardship has emerged through a series of Keystone Dialogues involving scientists and seafood companies as an example for inspiration.

#### Trade-offs

Even though there are clear synergies between the food and sustainability agendas, any significant advancement in securing healthier and sustainable diets for children will require trade-offs. A clear understanding of the syndemic relationship between food systems and the environment (i.e. how food impacts the planet and vice versa) will be important to identify interventions

with the greatest potential for mutual benefit. The role of the Anthropocene in decreasing food biodiversity and the cost of food production on the environment were identified as two clear examples of the interlinkages between food and the planet. Policymakers could benefit from clear processes to identify co-benefits to introducing policies and interventions that address both the health and sustainability angle of food systems transformation for children and youth. Much like the workshop aimed to bring together experts at the intersection of food, nutrition and sustainability, efforts to secure healthy diets within planetary boundaries will require cross-departmental mandates and cross-sectoral collaboration. Ultimately, participants acknowledged that while it will be challenging to identify the proper combination of interventions that support both healthy and sustainable diets for children, this is also an opportunity for innovation and to strengthen collaboration across both sectors.

#### Metrics

Throughout the workshop, participants noted that important gaps in data and literature, as

well as the lack of metrics were a significant barrier to measuring the impact of policies and interventions that support healthy and sustainable food systems, particularly for children. This data is crucial to assessing the effectiveness and overall success of a policy intervention, as well as potential for duplication in different settings, such as LMICs, or with a different subset of the youth population. Beyond assessing policy impact, metrics on health outcomes, dietary habits, food security and others are valuable in gaining an overall understanding of children's diets and broader food environments, as well as shifts to healthier and sustainable diets.



# CONCLUSIONS AND NEXT STEPS

**The CHEW strategic workshop “Diets of children and adolescents: Unlocking current and future gains for human and planetary health” brought together 29 academic experts, policymakers and representatives from development agencies and youth organizations, across the fields of nutrition, health, agriculture, climate and youth mobilization.**

Over three days, the participants reviewed the latest evidence on healthy and sustainable diets for children and adolescents, identified research gaps and opportunity areas for action, and explored the role children and adolescents can take in advancing food systems transformation.

Workshop participants agreed that achieving healthy and sustainable diets for children and adolescents is at the heart of the SDGs and an important agenda that is yet to be globally recognized. Securing children and adolescents’ right to healthy, adequate, safe and sustainably produced food is crucial and must be at the centre of global efforts.

Three opportunity areas for action were identified at the workshop – public policy, affordability and multi-scale, multi-stakeholder collaboration – and key considerations within each area for advancing healthy and sustainable diets for children and adolescents were explored. It was emphasised that successful food system initiatives should take a systems approach, address the triple burden of malnutrition and environmental sustainability, consider and adapt

to local contexts and needs, and include appropriate metrics and systems for monitoring and evaluation.

Children and adolescents themselves can play various roles in this agenda and it was agreed that closer collaboration and engagement with relevant youth organisations and movements are needed. The potential for better highlighting the need for food systems transformation in current youth climate movements is huge. Youth organisations and movements engaged with food systems and climate change lack sufficient resources and capacity and need to be given space in decision-making bodies at the country level to co-share the national agenda, as well as at the international level to help guide efforts and priorities.

Given the scale and scope of the challenges that lie ahead, the organisers call for an extensive mobilization of all sectors of society to ensure children and adolescents’ right to healthy diets and a sustainable environment is fulfilled. The UN Food Systems Summit and the preparatory processes leading up to the Summit were identified as important opportunities to mobilise global efforts. EAT and UNICEF will work towards ensuring that the special needs of children and adolescents will be taken into account during the Summit. Similar efforts will be made at other relevant events, such as EAT@Home, a series of digital engagements and convenings that will be conducted by EAT in fall 2020.

EAT and UNICEF will consider ways to advance the three opportunity areas for action and to establish greater dialogue and collaboration with relevant youth organisations. Further opportunities for advocacy and engagement will also be explored. Both agencies have already started to advance the research agenda identified at the workshop and are in contact with interested authors and publishers.

Since the workshop, the unfolding of the COVID-19 pandemic further underscored the need for resilient, inclusive and sustainable food systems. In particular, these systems need to consider the needs of the most marginalized and vulnerable, and ensure that children do not become the hidden victims, bearing the brunt of the long-term impacts of this crisis.


# ANNEX A: PROGRAMME

## Diets of children and adolescents:

### Unlocking current and future gains for human and planetary health

Oslo, Norway | March 4-6, 2020

Day 1: Wednesday, March 4 <sup>th</sup> From Framing to Opportunity Areas for Action	
	
<b>12:00</b>	<b>ARRIVAL</b> <i>registration, light lunch, and time to mingle</i>
<b>12:45</b>	<b>Session 1: Why we're here and what brings us together</b> <i>Welcome - Aksel Jakobsen, State Secretary, Norwegian Ministry of Foreign Affairs</i> <i>Introduction - Roland Kupka (UNICEF) and Sudhvir Singh (EAT)</i>
<b>13:45</b>	<b>Session 2: Framing and Scope</b> <i>Setting the scene – Saskia de Pee (WFP) presents, with conversation starters from Rina Agustina (University of Indonesia), James Garrett (CGIAR), Olav Kjørven (EAT) and Anna Herforth (Harvard University) opening to a fishbowl dialogue</i>
<b>15:00 BREAK</b>	
<b>15:30</b>	<b>Session 3: Moving towards an integrated and impactful action agenda</b> <i>From small groups to plenary to define common opportunity areas for impact</i> <i>Fabrice DeClerck (EAT)</i>
<b>17:00</b>	<b>Session 4: Day one wrap up</b> <i>Moving from opportunity areas to an action agenda</i>
<b>End of Day 1 Programme</b>	
	
<b>19:00</b>	<b>DINNER</b> <i>Interactive cooking workshop at Kulinarisk Akademi, Vulkan 5, 0178 Oslo</i>
Day 2: Thursday, March 5 <sup>th</sup> From Opportunity Areas to an Action Agenda	
<b>9:00</b>	<b>Session 5: Taking stock and planning the day ahead</b> <i>A systems perspective: strengthening resilience and acknowledging trade-offs –</i> <i>Line Gordon (Stockholm Resilience Centre)</i>
<b>10:00</b>	<b>Session 6: Children, adolescents and youth as drivers of change for sustainable and healthy eating</b> <i>Two cases: UNICEF &amp; Seble Samuel (CGIAR)</i> <i>Panel: UNICEF; Seble Samuel (CGIAR); TBC Dejan Bojanic (Save the Children Sweden); Elin Bergstrom (EAT) moderated by Biz Ghormley (EAT)</i>
<b>11:00 BREAK</b>	

<b>11:30</b>	<b>Session 7: Deep dive #1 – opportunity areas for impact and progress</b> <i>Four groups unpacking, developing action agendas, defining the effort of balance (research, action, policy, advocacy, mobilization), etc.</i>
<b>13:00 LUNCH</b>	
<b>14:00</b>	<b>Session 8: The Reality Check – Stories from the Frontline (practitioner experience from working across the system)</b> <i>Fireside conversation with Tausif Janjua (Ministry of Health, Pakistan), Germana Leyna (Tanzania Food and Nutrition Centre), Austen Davis (Norad), and moderated by Lynnette Neufeld (GAIN)</i>
<b>14:45</b>	<b>Session 9: Continue deep dive #1</b>
<b>15:30</b>	<b>Session 10: Pulling together action agendas for challenge and support across the group</b> <i>Reflections and wrap up: Patrick Caron (CIRAD)</i>
<b>17:15</b>	<b>Session 11: Day two wrap up</b> <i>Moving from an action agenda to collaboration and narrative</i>
<b>End of Day 2 Programme</b>	
	
<b>19:30</b>	<b>DINNER</b> <i>GROW dinner, first EAT-Lancet inspired restaurant, Vulkan 22, 0175 Oslo</i>

<b>Day 3: Friday, March 6<sup>th</sup> From Action Agenda to Collaboration and Narrative</b>	
<b>9:00</b>	<b>Session 12: Taking stock and planning the day ahead</b>
<b>9:30</b>	<b>Session 13: Collaboration – empowering and active youth led ecosystem</b> <i>Exploring why, who and we collaborate to accelerate impact. Defining what success looks like.</i>
<b>10:45 BREAK</b>	
<b>11:15</b>	<b>Session 14: Squaring the circle</b> <i>Wrap-up, next steps, our commitments.</i>
<b>End of Day 3 Programme</b>	

# ANNEX B: LIST OF PARTICIPANTS

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