Shaping food systems for children

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Why do food systems need a special focus on children?
Key reasons why food systems need to focus on children’s diets.

• Diets of children are vastly inadequate from early childhood through adolescence
• Children are special; not small adults
• Children’s nutritional needs are not a priority to food systems
• Food system approaches can be useful to improve diets and nutrition of children
• Existing food system frameworks do not sufficiently reflect children
The inadequacy of children’s diets starts in early childhood and continues through school-age and adolescence.

Only 1 in 4 toddlers are fed a minimum number of food groups per day (diet diversity).

50% of adolescent girls in low- and middle-income countries do not eat 3 meals per day; most skip breakfast.

40% of adolescent girls in Latin America and the Caribbean consume fast foods daily.

46% of adolescents in East Asia and the Pacific do not eat enough fruits and vegetables daily.
Food environments do not support nutritious diets for children
Food Systems for Children and Adolescents

Working Together to Secure Nutritious Diets

UNICEF Office of Research
Innocenti
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Why are children 0-4 years not receiving the diets they need for optimal growth and development?
### Age-specific characteristics of children <5 years

<table>
<thead>
<tr>
<th></th>
<th>0-5 months</th>
<th>6-23 months</th>
<th>24-59 months</th>
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</thead>
<tbody>
<tr>
<td><strong>Physiological changes</strong></td>
<td>Rapid growth and development</td>
<td>Slowing growth</td>
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<td><strong>Autonomy</strong></td>
<td>Low</td>
<td>Medium</td>
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<td></td>
<td>Limited motor skills</td>
<td>Begins feeding self</td>
<td>Feeds self</td>
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<td><strong>Taste preferences</strong></td>
<td>Sweet, umami; aversion to sour and bitter</td>
<td>Foods with post-ingestive benefits (e.g., energy-density of foods)</td>
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<tr>
<td>(biological)</td>
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<tr>
<td><strong>Taste preferences</strong></td>
<td>Amniotic fluid, breast milk, formula</td>
<td>Sensitive to caregiver aversions; energy-dense foods</td>
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<tr>
<td>(conditioned)</td>
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<td><strong>Psychosocial factors</strong></td>
<td>Difficulty with concept formation/classification</td>
<td>One-dimensional judgements (can begin indicating what do/do not want to eat); low attention span</td>
<td>Heightened neophobia</td>
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</tbody>
</table>
Caregivers are key gatekeepers of young children’s diets

- Social norms and traditional practices, knowledge and experiences of caregivers might not align with behaviors that support healthy diets for children
- Interactions with other caregivers (e.g., fathers, grandmothers, siblings)
- Own eating practices and preferences
- Constraints on caregivers’ time, skills, flexibility, income, decision-making power, access to resources
- Convenience of foods: a key driver, particularly in low-income families
Physical-environmental factors: availability, affordability, accessibility

• Poor availability of nutrient-dense and affordable foods for infants and young children
• Increased availability of commercially produced ultra-processed foods, sugar-sweetened drinks, street foods
• Access to foods in markets, shops and vendors

Photo Source: Emiliana Sabo 2015/Indonesia
Physical-environmental factors: advertising and marketing

Source: Barquera, S. 2018
The food systems framework for children is a useful conceptual tool

→ Put children at the heart of a systematic dialogue on food systems.  
→ Identify levers to encourage systems change for better diets.
**Influencers**

**Inputs**
Access to seeds, traditional varieties, fertilizers and extension services.

**Post-harvest, processing and distribution**
Aflatoxin control, fermentation, drying, fortification, product reformulation and storage and transport infrastructure (including cold chains)

**Natural resources management**
Soil quality, agricultural biodiversity, resilience to heat, drought, pests and diseases, water and energy use.

**Agricultural research and development**
Innovation, Entrepreneurship
EXTERNAL FOOD ENVIRONMENTS
(Retail and commercial markets, schools, informal food vendors)

INFLUENCERS

Availability and accessibility of food
Presence of and proximity to markets and food outlets

Price of food
Monetary value of food

Food quality and safety
Level of processing, shelf-life packaging and food composition

Marketing and regulation
Promotional information, branding, advertising, sponsorship and labelling
Food Systems for Children and Adolescents

With the support of the Kingdom of the Netherlands

**Influencers**

- **Accessibility of food**
  Distance to nearby market and food outlets, daily mobility, mode of transport, space and place

- **Affordability of food**
  Purchasing power

- **Convenience**
  Relative time and effort of preparing, cooking and consuming food and time allocation
Influencers

Intra-household dynamics
Feeding and care practices, intra-household food distribution, and level of agency or control on household expenses

Food preparation
Culinary knowledge and skills, relative time and effort spent on cooking and preparing food; WASH practices

Desirability and acceptability of food
Preferences, tastes, desires, attitudes, culture

Socio-economic characteristics
Education and literacy
Next steps for UNICEF

1. Build on what we have done already

2. Identify **priority actions** to contribute to shape food systems for children:
   - Identify levers within the food system to improve children’s diets
   - Adopt a systems approach (food, health, social protection) to children’s diets

3. Develop advocacy and KM strategy to advance food systems for children approach
   - UNICEF’s State of the World’s Children 2019
   - UNICEF’s Nutrition Strategy (2020-2030)
For more information: stay tuned...

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