The Healthy Diets Monitoring Initiative: toward the development of healthy diet metrics for national and global monitoring

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Conflict of Interest Disclosure

I have no conflict of interest to report in relation to this presentation.
Unhealthy diets a common cause of all forms of malnutrition and major risk factor for mortality (similar for DALYs)

GBD 2017
Lancet 2019
Large gaps in the data of what people eat

https://doi.org/10.4060/cb8679en
Why so little data?

Poorly articulated business case for investment in data

Lack of consensus on what constitutes a healthy diet and how to measure it

From Lynnette Neufeld
Lots of references...are they equally healthy?

From Lynnette Neufeld
Challenge for global and national assessment and monitoring of healthy diets

- Achieve consensus on sub-constructs, methods, measures, and indicators best suited for global assessment and monitoring
- Have measures and indicators collected in data systems
- Ensure that these are used by countries and adopted in Sustainable Development Goals and other global commitments
## Constructs, measures, indicators

<table>
<thead>
<tr>
<th>Construct</th>
<th>Phenomenon of theoretical interest that is real but may be observable or unobservable (i.e., latent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>Assigns numbers to people or things to represent the relations existing among them to reflect a specific construct</td>
</tr>
<tr>
<td>Indicator</td>
<td>Derived from measure(s) to demonstrate something about a specific construct; implies understanding what is better and worse</td>
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</tbody>
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Edwards and Bagozzi (2000)
Important to distinguish

“Healthfulness of diets”
• A set of core underlying construct and sub-constructs of what constitutes *healthy* for the human body
• Universal (for humans)

“Dietary pattern”
• Way in which foods are combined over a time period
• Highly contextual
• Influenced by access, culture, traditions, etc.
• May be motivated by factors other than (or in addition to) *healthfulness* for humans

From Lynnette Neufeld
Data collection system
Demographic and Health Survey

Method (i.e., instrument)
questionnaire

Measure
food group diversity

Indicator
minimum diet diversity

Interpretation and action
promote animal source foods

Construct:
nutrient adequacy
Sub-constructs of construct of healthy diets

1. **Nutrient intake is adequate**: requirements (for age, gender, life stage etc.) are met for all nutrients, without excess

2. **Macronutrients are in balance**: energy from carbohydrates, proteins, and fats are balanced as per recommendations

3. **Foods are nutrient-dense**: they are rich in nutrients per their energy content

4. **Foods are of a wide variety**: because nutrients and *bioactive components* vary in foods from different food groups

5. **Moderation**: in the intake of foods and nutrients that are associated with chronic diseases

6. **Safety**: free of microbial pathogens, food-borne macro-parasites, toxins, and chemicals

Arimond and Deitchler (2019); Seligman et al. (submitted)
### Which population purposes?

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimation of prevalence</td>
<td>What is the magnitude of the problem?</td>
</tr>
<tr>
<td>Monitoring</td>
<td>How is the situation changing?</td>
</tr>
<tr>
<td>Determination of causes and consequences</td>
<td>Why are they affected and what are effects?</td>
</tr>
<tr>
<td>Early warning</td>
<td>When is action needed?</td>
</tr>
<tr>
<td>Targeting</td>
<td>Who will receive which action?</td>
</tr>
<tr>
<td>Impact evaluation</td>
<td>Has the action made a difference?</td>
</tr>
</tbody>
</table>

Frongillo et al. (2019)
Data produce visibility and inform action

• Nutritional problems invisible without established targets or standardized data collection systems to produce data

• Examples
  – Food Insecurity Experience Scale (FAO, via Gallup World Poll)
  – Family Care Indicators and Early Childhood Development Index (UNICEF, via Multiple Indicator Cluster Surveys)
  – Individual Water Insecurity Experiences Scale (Gallup World Poll)
Getting on global and national action agendas

• What is needed?
  – Clarity about constructs and sub-constructs, purposes, and suitability for purposes
  – Suitable measures and indicators that reflect construct and sub-constructs (valid and cross-context equivalent)
  – Instruments to feasibly obtain measures and indicators
  – Data systems in which to apply the instruments
  – Establish link to health
  – Identify effective interventions

• Child undernutrition vs. healthy diets
Process for moving forward

- Landscape analysis including interviews with experts
- Technical consultation, May 2021
  - Virtual, support by USAID
  - Attended by about 80 experts
  - Report
- Interviews of experts by Rockefeller Foundation, 2022
- Strategic Planning Group jointly led by WHO, UNICEF, and FAO
- Operational planning by TEAM co-chairs and WHO and UNICEF representatives with support from USAID
Process for moving forward

• Analysis produced by Institut de Recherche pour le Développement, October 2022
  – Healthy diet metrics
  – Analysis of suitability of measures and indicators for assessment and monitoring globally and nationally

• Workshop convened in late November 2022 at Bellagio Center supported by Rockefeller Foundation
  – Participants: global and country experts, UN agency officials, IRD and USAID representatives, donors, metric developers
  – Roadmap developed for guiding learning and decision making over the next 2-3 years