Data4Diets: Building Blocks for Diet-related Food Security Analysis

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Presenters:
Jennifer Coates, PhD
Winnie Bell, MSc, MPH

International Dietary Data Expansion (INDDEXX) Project
Friedman School of Nutrition Science and Policy, Tufts University (Boston, USA)
1. Data4Diets: What is it? What is it not?
2. Background and motivation
3. Data4Diets and the International Dietary Data Expansion (INDDEEX) Project
4. Organizing framework
5. Methods of information compilation
6. Data4Diets live: a brief guided tour
7. Q&A
Overview of the INDDEX Project
1. Standardize and streamline the collection and analysis of individual dietary data through technology

2. Improve the design and use of household consumption and expenditure surveys and food balance data;

3. Harvest ‘fit-for-purpose’ indicators and analyses from a range of data sources to guide nutrition and agriculture policy

4. Stimulate global support and country capacity for improved acquisition and use of dietary data
Data4Diets: What is it? (What is it not)?
Data4Diets: What is It?

A resource designed to aid program implementers, policy makers, and researchers to:

• Identify and use diet-related food security **indicators** best suited for a given objective

• Know which **data sources and methods** are preferred.

• Easily access **guidelines and supporting documents**

• Learn from real world analytical **case studies**
Data4Diets: What is it Not?
It is not a repository of dietary data
Data4Diets: What is it Not?
It is not a dietary assessment tool

https://inddex.nutrition.tufts.edu/inddex24
Background and Motivation
1. Food security is multidimensional, yet we have **not yet agreed on the dimensions** or how to measure them.

Different dimensions require **divergent policy and programmatic solutions** so they must be measured separately.

2. Indicators and data sources should be **fit for purpose**:

- Gold standard options are not always essential or even preferred
- Pro’s and con’s must be carefully considered for a **given data use**
“The absence of data on food consumption is one of the most glaring gaps among indicators of nutrition outcomes” (GNR 2014)

“Gaps in the availability and quality of data make it difficult to get a comprehensive picture of what people are eating around the world, but progress has been made in collecting, collating and analysing data, meaning, our understanding of diets is improving” (GNR 2018)

3. Diet and food consumption information is lacking and not always appropriately used

4. Few existing indicator resources offer a dynamic, interactive format
Data4Diets Organizing Framework
“Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” – FAO, 1996

Food Security Dimensions

- Stability
- Sustainability
- Quantity (sufficiency)
- Safety
- Quality (nutritional adequacy)
- Preferability
Food Security Dimensions And Levels

- Quality
- Quantity
- Preferability
- Safety
- Stability
- Sustainability

Global & National
Market/ Household
Individual
Organizational framework of the Data4Diets platform

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<th>Quality</th>
<th>Quantity</th>
<th>Preferability</th>
<th>Safety</th>
<th>Stability</th>
<th>Sustainability</th>
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<td>National, Market (Available)</td>
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<td>Market, Household, Individual (Accessible)</td>
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<td>Household, Individual (Utilizable)</td>
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Methods for compiling information in Data4Diets
Data4Diets: Development and peer review process

- **2016**: Data4Diets work starts with initial review.
- **2017**: Feedback webinar with INDDEX Technical Advisory Group (TAG) and team.
- **2018**: Peer-review by leading experts including TAG & INDDEX team. Beta version released.
- **2019**: Case study portal added and populated.
- **2020**: Official launch of Data4Diets
Data4Diets URL: https://inddex.nutrition.tufts.edu/data4diets

Data4Diets
Building Blocks for Diet-related Food Security Analysis

Food Security Indicators
Detailed information on diet-related food security indicators, organized by food security dimension

Start here

Data Sources and Methods
Common data sources and relevant methods used to produce diet-related food security indicators

Start here

Case Studies
Country case studies illustrating real world application of indicators and data sources

Start here
Indicator selection

• In 2016/2017 reviewed and identified ~300 indicators

• Indicator review included:
  • Food Security Information Network User’s Guide for Existing Indicators
  • ADePT Food Security Module Indicators
  • FAO/WHO GIFT Indicators
  • FAO Food Security Indicators
  • Feed the Future Indicators
  • Global Nutrition Report (2016)

• Ultimately selected 42 diet-related food security indicators after applying inclusion/exclusion criteria
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<th>Indicator Inclusion Criteria</th>
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<td><strong>Scope:</strong></td>
<td><strong>No causes:</strong></td>
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<td>• Captures one or more of the key food security dimensions</td>
<td>• No indicators measuring causes of food insecurity (e.g. empowerment)</td>
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<td>• Measured at the national, market, household, or individual level</td>
<td><strong>No consequences:</strong></td>
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<tr>
<td>• Tested or validated in one or more countries and/or</td>
<td>• No indicators consequences of food insecurity (e.g. anthropometric outcomes)</td>
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<td>• Actively promoted and used by one or more international organizations</td>
<td><strong>No implementation indicators:</strong></td>
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<tr>
<td>• Could be included even if further validation and testing is required, must fill important data gap</td>
<td>• No indicators related to program implementation (e.g. process indicators, coverage indicators)</td>
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Data4Diets: Case Studies for Analysis and Action

- Brazil: Health and environmental impacts of excessive meat consumption [WFR]
- Cameroon: Assessment of national food supply quality [FBS]
- Ethiopia: Tracking nutrition transition trends [HCES]
Data4Diets: A brief guided tour
Data4Diets moving forward

• Data4Diets will remain at Tufts University
• A dynamic resource with periodic updates envisioned
• Currently developing a protocol for soliciting contributions and content updates
  • In the meantime if interested, let us know
• Interested in an internship? Please contact us!
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INDDEX Data4Diets development team

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Q & A
Supplemental Slides
Food Environment Framework by Turner et al. (2019)
FIGURE. CONCEPTUAL PATHWAYS BETWEEN AGRICULTURE AND NUTRITION

Key components of the enabling environment:
- Food market environment
- Natural resources
- Health, water, and sanitation
- Nutrition/health knowledge and norms

Adapted for Feed the Future by Anna Herforth, Jody Harris, and SPRING, from Gillespie, Harris, and Kadiyala (2012) and Headey, Chiu, and Kadiyala (2011).
Questions for discussion

• Examples from attendees of how you have already used, or think you might use in the future, Data4Diets in your own work?