DIETARY DIVERSITY INDICATORS

What are they? What do they measure?

Kristen Cashin
September 8, 2014
Objectives

• Discuss “What can dietary diversity tell us about an individual or a household?”

• Review two common dietary diversity indicators:
  – Household Dietary Diversity Score (HDDS)
  – Minimum dietary diversity of children 6–23 months of age
Dietary Diversity

• Number of different types of foods or food groups consumed by a person or household over a specific time period

• Proxy for:
  – Household food access/socioeconomic status
  – Dietary quality
Common Dietary Diversity Indicators

• To measure **household food access:**
  – Household Dietary Diversity Score (HDDS)

• To measure aspects of **diet quality:**
  – Minimum dietary diversity (children 6–23 months)
  – Women’s Dietary Diversity Score (women 15–49 years)
  – Minimum dietary diversity indicator for women (women 15–49 years)
Common Dietary Diversity Indicators

• To measure **household food access:**
  – Household Dietary Diversity Score (HDDS)

• To measure aspects of **diet quality:**
  – Minimum dietary diversity (children 6–23 months)
  – Women’s Dietary Diversity Score (women 15–49 years)
  – Minimum dietary diversity indicator for women (women 15–49 years)
Household Dietary Diversity Score
HDDS

• Number of different food groups consumed by a household in the previous day
  – Any member of the household
  – Reported as average for program area

• Proxy for household food access/socio-economic status
  – Does not measure household or individual dietary quality
**HDDS**

- Based on 12 food groups:
  - Cereals
  - Roots and tubers
  - Vegetables
  - Fruits
  - Meat, poultry, offal
  - Eggs
  - Fish and seafood
  - Pulses, legumes, nuts
  - Milk and milk products
  - Oils/fats
  - Sugar/honey
  - Miscellaneous
HDDS Tabulation

• Step 1: Calculate each household’s dietary diversity score as a simple sum. Values range from 0 to 12.

• Step 2: Calculate the average HDDS for all households in the sample population.
HDDS Target Setting

• Programs seek to increase average HDDS in their program areas

• No objective cutoffs or recommended HDDS scores:
  – Dietary diversity is context-specific

• Two recommended approaches to set targets:
  – Base target on average HDDS of top wealth tercile
  – Base target on average HDDS of households with the highest diversity
Minimum Dietary Diversity (children 6–23 months)
Minimum Dietary Diversity (children 6–23 months)

• Proportion of children 6–23 months of age who received foods from four or more food groups during the previous day

• Based on seven food groups:
  • Grains, roots, and tubers
  • Dairy products (milk, yogurt, cheese)
  • Eggs
  • Other fruits and vegetables
  • Legumes and nuts
  • Flesh foods (meat, fish, poultry, liver/organ meats)
  • Vitamin A-rich fruits and vegetables
Minimum Dietary Diversity (children 6–23 months)

• Proxy measure for dietary quality of complementary feeding (micronutrient adequacy of diet)
• Developed by WHO Working Group on Infant and Young Child Feeding Indicators
• Defined and validated using 10 data sets from developing countries in Africa, Asia, and Latin America
  – Food group diversity positively associated with micronutrient adequacy of diet
Minimum Dietary Diversity
(children 6–23 months)

• One of 15 indicators introduced by WHO in 2008 to assess infant and young child feeding practices

• Component of WHO “Minimum Acceptable Diet” indicator for children 6–23 months
Minimum Acceptable Diet

• Combines indicators of dietary diversity and meal frequency to assess quantity and quality of infant and young child feeding
  – Proportion of breastfed children 6–23 months of age who had at least the minimum dietary diversity and minimum meal frequency during the previous day
  – Proportion of non-breastfed children 6–23 months of age who received at least 2 milk feedings and had at least the minimum dietary diversity and minimum meal frequency during the previous day
Comparing the Dietary Diversity Indicators

**HDDS**
- Household-level indicator
- Assesses socioeconomic status/food access
- 12 food groups
- Data collection is list based

**Minimum Dietary Diversity**
- Individual-level indicator
- Assesses dietary quality
- Seven food groups, based on micronutrient density/children’s needs
- Data collection is free recall
Comparing Dietary Diversity Indicators

HDDS Food Groups (12)
- Cereals
- Roots and tubers
- Vegetables
- Fruits
- Meat, poultry, offal
- Eggs
- Fish and seafood
- Pulses, legumes, nuts
- Milk and milk products
- Oils/fats
- Sugar/honey
- Miscellaneous

Minimum Dietary Diversity Food Groups (7)
- Grains, roots, and tubers
- Legumes and nuts
- Dairy products (milk, yogurt, cheese)
- Flesh foods (meat, fish, poultry, liver/organ meats)
- Eggs
- Vitamin A-rich fruits and vegetables
- Other fruits and vegetables
Resources


• Working Group on Infant and Young Child Feeding Indicators. 2007. *Developing and Validating Simple Indicators of Dietary Quality of Infants and Young Children in Developing Countries: Further Analysis of 10 data sets.* Report submitted to FHI 360/FANTA.

This presentation is made possible by the generous support of the American people through the support of the Office of Health, Infectious Diseases and Nutrition, Bureau for Global Health, U.S. Agency for International Development (USAID) and the Office of Food for Peace, under terms of Cooperative Agreement No. AID-OAA-A-12-00005, through the Food and Nutrition Technical Assistance III Project (FANTA), managed by FHI 360. The contents are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the United States Government.