

# DIETARY DIVERSITY INDICATORS

What are they? What do they measure?

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# 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

- Swindale, Anne and Bilinsky, Paula. 2006. *Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide (v.2)*. Washington, DC: FHI 360/FANTA (<http://www.fantaproject.org/monitoring-and-evaluation/household-dietary-diversity-score>).
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