

MINIMUM DIETARY DIVERSITY - CHILDREN (MDD)

Outcome indicator, Cluster indicator, DEVCO indicator

Indicator Phrasing

English: % of children 6 - 23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day and night

French: % d'enfants âgés de 6 à 23 mois ayant consommé des aliments et boissons appartenant à au moins cinq des huit groupes d'aliments définis le jour ou la nuit précédents

Portuguese: % de crianças com idades compreendidas entre 6-23 meses que consumiram alimentos e bebidas de pelo menos cinco a oito dos grupos definidos durante o dia e noite anterior

Czech: % dětí ve věku 6 - 23 měsíců, které v uplynulém dni a noci konzumovaly jídlo a nápoje z alespoň 5 potravinových skupin

What is its purpose?

Minimum dietary diversity indicator assesses the proportion of children 6-23 months of age who have consumed at least five out of eight pre-defined food groups the previous day or night. It is an indicator of a diet's micronutrient adequacy, an important dimension of its quality.

How to Collect and Analyse the Required Data

Collect the following data by conducting individual interviews with the primary caregivers of a [representative sample](#) of children aged 6 - 23 months.

1) The enumerators should first check whether the previous day was a **special day** (e.g. religious festival or celebration) when the child ate an unusually varied or limited diet – if so, they should not proceed with collecting dietary data as it is likely that it will not reflect a typical diet.

2) Next, the enumerators should **administer the “Liquid Questionnaire” and “Open Recall Questionnaire for Foods”** available on pages 26 - 30 of the WHO/UNICEF guidance (see attached below). If your survey does not ask whether a child was breastfed yesterday, this **must be added to your questionnaire**, as breast milk counts as one of the food groups.

As the WHO/UNICEF questionnaire guidance explains, the enumerators should always ask about the first food / fluid that a child consumed during the previous day and then proceed with asking about any subsequent foods / fluids. All the types of consumed food / fluids must be recorded. If the composition of a meal is not fully clear (e.g. porridge with or without milk), the enumerator must **ask clarifying questions**.

When all the meals are classified into relevant food categories, the enumerators should ask whether

the child ate any **snacks** that were not mentioned (as these are often forgotten). As a next step, they should **ask about all the food categories that were not mentioned** by the respondent (gradually, one by one). For example, if the respondent did not mention that a child ate eggs, the enumerator should ask: *“Just to make sure, did [child’s name] eat any eggs yesterday during the day or the night?”* This will help you reduce the risk of some foods or fluids being forgotten.

3) The next step is to **convert the food categories used in the two questionnaires into the food groups** used by the Minimum Dietary Diversity indicator. Annex 8 of the WHO/UNICEF guidance (see attached) provides guidance on how the food categories listed in the questionnaire correspond to the eight food groups used by the indicator.

4) **Count the number of children whose diet consisted of at least 5 food groups** (i.e. reached Minimum Dietary Diversity).

5) To **calculate the indicator’s value**, divide the number of children whose diet consisted of at least 5 food groups by the total number of surveyed children (excluding those for which the caregiver could not provide the required information). Multiply the result by 100 to convert it to a percentage.

Disaggregate by

Disaggregate the data by gender, [wealth](#) and age group.

Important Comments

1) According to WHO/UNICEF (see guidance below), consumption of any amount of food or beverage from a food group is sufficient to “count” - i.e. **there is no minimum quantity**.

2) Dietary diversity is prone to **seasonal differences**. Do your best to collect baseline and endline data from the same period of year; otherwise, it is very likely that it will not be comparable. **Do not collect data during the fasting periods** (such as pre-Easter or Ramadan) and during the **fasting days**.

3) When training the enumerators, **practice extensively** which meals belong to which food group (allocate at least 3 hours full of examples and exercises). For example, while pumpkin flesh belongs to Vitamin A Rich Foods, pumpkin leaves belong to Dark Green Leafy Vegetables (see more examples in the FAO guidelines below + take advantage of the **training guidance** provided in chapter E of WHO/UNICEF’s publication below).

4) This indicator relies on accurate age assessment. Since people often do not remember the exact dates of their children’s birth, the enumerators should **always verify the child’s age**. This can be done by reviewing the child’s birth certificate, vaccination card or other document; however, since many caregivers do not have such documents (and since they can include mistakes), it is essential that the enumerators are able to **verify the child’s age by using local events calendars**. Read FAO’s Guidelines (see below) to learn how to prepare local events calendars and how to train enumerators in their correct use.

5) Well-designed, long-term (3 years or more) projects have a chance to **increase the average dietary diversity by 1 "point"**; for short-term projects, an increase by **0.5** of a "point" is the maximum, realistic increase you can expect.

6) Note that the previous version of this indicator was updated in 2017 to reflect the **inclusion of breast milk as an 8th food group** (see WHO/UNICEF guidance below). Among the advantages of including breast milk as another food group is that the data can be compared across breastfed and non-breastfed groups of children. When **interpreting the indicator data**, pay attention to the extent to which changes to dietary diversity are happening due to children receiving more (or less) diverse food versus due to more (or fewer) children being breastfed.

7) If the caregiver is taking care of **two children aged 6 - 23 months** (from the same household) and household sampling has been used, then data should be collected for both children. If a list method has been used and children have been identified as the primary sampling unit, then data should only be collected for the sampled child.

Access Additional Guidance

- FAO (2013) [Guidelines for Measuring Household and Individual Dietary Diversity](#)
- WHO/UNICEF (2021) [Indicators for Assessing IYCF Practices](#)