

## 11. Minimum Diet Diversity for Women and girls of reproductive age (MDD-W)



<b>VERSION</b>	V3.0 – 2023.05
<b>INDICATOR CODE</b>	11
<b>INDICATOR TYPE &amp; AREA</b>	<p><b>Type:</b> Outcome corporate indicator (CRF under SO.1 &amp; SO.2 &amp; SO3)</p> <p>Reported in APR &amp; ACR</p> <p>2. Nutrition</p>
<b>INCLUDED IN CSP LOGFRAMES</b>	Yes
<b>APPLICABILITY</b>	<p><b>Mandatory:</b></p> <p>Under all outcomes if malnutrition prevention programmes are being implemented. This includes wasting prevention and/or Social Behavioural Change (SBC) programming implemented for more than 6 months targeting women and girls of reproductive age.</p> <p><b>Note:</b> This indicator is one of the three recommended dietary indicators for nutrition-sensitive programming targeting women and girls of reproductive age.</p>
<b>TECHNICAL OWNER</b>	Nutrition (NUT)
<b>ACTIVITY TAGS</b>	<p>*Prevention of Stunting (STUN)</p> <p>*Prevention of Micronutrient Deficiencies (PMD)</p> <p>*Prevention of Acute Malnutrition (PREV)</p> <p>Also recommended to select the nutrition sensitive marker for nutrition sensitive programmes</p>
<b>UNIT OF MEASUREMENT &amp; ANALYSIS</b>	Percentage of women and girls of reproductive age (15-49 years)
<b>DEFINITION</b>	<p>MDD-W is a dichotomous indicator of whether or not women 15 to 49 years of age have consumed at least five out of ten defined food groups the previous day or night. It is a food group diversity indicator that reflects one key dimension of diet quality – micronutrient adequacy – summarized across 11 micronutrients: vitamin A, thiamine, riboflavin, niacin, vitamin B-6, folate, vitamin B-12, vitamin C, calcium, iron and zinc.</p> <p>It calculates the percentage of women and girls of reproductive age (15 – 49 years) who reached minimum dietary diversity. Minimum dietary diversity is defined as consumption of 5 or more food groups out of 10 in the last 24 hours.</p>
<b>RATIONALE</b>	<p>The percentage of women and girls of reproductive age (WRA) who achieve this minimum of five food groups out of ten in a population can be used as a proxy indicator for higher micronutrient intake (more adequate). In other words, a higher prevalence of MDD-W among a group of WRA is a proxy for better micronutrient adequacy in a given population. MDD-W can inform programmes addressing maternal nutrition.</p>

## 2. NUTRITION

### DATA SOURCE

A survey conducted among the beneficiary population, such as Post Distribution Monitoring (PDM), is the most common. Representative sample size should be used appropriately.

It is highly recommended that MDD-W is also included in any household assessment, such as Comprehensive Food Security and Vulnerability, Emergency Food Security Assessment, or any other population-based representative survey.

### DATA COLLECTION TOOL

The electronic version of the questions for this indicator can be found in [Survey Designer](#) in the **Nutrition** Module **Minimum Dietary Diversity for Women (MDD-W)** sub-module or by selecting the indicator **Minimum diet diversity for women and girls of reproductive age (MDD-W)**.

### SAMPLING REQUIREMENTS

A significant representative sample needs to be generated if a survey is conducted. The following guidance on sample size determination can be adopted for the MDD-W indicator:

- Population size is the number of individuals (i.e., WRA) enrolled in the program at the survey time.
- Expected prevalence of the indicator: use previous prevalence if available, and if unknown, 50% can be used.
- Non-response: 10%
- Design effect: if cluster sampling is done, the design effect needs to be considered. This can be based on previous results and set at 1,5 if no information is available. Take note of guidance on design effect for situations where the design effect needs to be increased or decreased due to the homogeneity of the surveyed population.
- Confidence interval highly recommended being 95%.

### INDICATOR CALCULATION

To calculate this indicator:

$$\frac{\text{\# of women and girls of reproductive age who reached minimum dietary diversity}}{\text{Total \# of women and girls of reproductive age}} \times 100$$

Scripts in [R](#), [STATA](#) and [SPSS](#) and [sample data](#) are available on [github](#) for the survey version of this indicator.

### DATA ENTRY IN COMET

Data is recorded in COMET in the logframe

### DISAGGREGATION FOR DATA ENTRY IN COMET (MANDATORY)

#### Mandatory disaggregation for data entry in COMET

Target groups, modality, residence status, and activity tags.

#### Recommended Disaggregation

- Selected geographic characteristics (e.g., by province or region, food system typology or by agro-ecological zone);
- Socioeconomic or household characteristics (e.g., urban versus rural households, by wealth quintile, age subgroup, level of education);
- Food insecurity status;

Decisions regarding appropriate disaggregation will be specific to the survey and context and depend on the objectives, sampling, and sample sizes.

<b>FREQUENCY OF DATA COLLECTION/ DATA ENTRY IN COMET</b>	<p>Data must be collected at least once per year in the same season. Ensure that the baseline data was collected at the beginning of the programme. If the programme is required, data can be collected across each season. This ensures a fuller understanding of seasonal patterns in diets and serves as an important baseline if repeat measurements occur in different seasons.</p>
<b>BASELINE ESTABLISHMENT</b>	<p>It is recommended to conduct a baseline survey. A new intervention baseline should be established three months before or three months after the start of the activity (see the guidance for <a href="#">Minimum Monitoring Requirement</a>).</p>
<b>TARGET SETTING</b>	<p><b>Annual target:</b></p> <p>The proportion of Women and Girls of Reproductive Age (15-49 years) who reached Minimum Dietary Diversity for Women (MDD-W) has increased compared to the previous year's value. See comment end of CSP target. If uncertain, it's recommended to target an increase of 10%.</p> <p><b>End of CSP Target:</b></p> <p>The target at the end of the CSP is to increase the MDD-W value compared to the baseline. Only general guidance can be provided for setting targets for Minimum Dietary Diversity for Women (MDD-W), as it is not possible to recommend universal targets. A target is a specific, planned level of a result to be achieved within a specific timeframe, with a given level of resources.</p> <p>Setting targets is not an exact science. It is rare that a specific, single value is the only acceptable expected value for an indicator target. An acceptable range is usually used. Targets should be ambitious, but achievable given the project's inputs and timeframe.</p> <p>The percentage of increase should thus be determined based on local context; baseline value; type of intervention implemented and its theory of change or impact pathway; scientific evidence on the impact of this type of intervention, if available; timeframe and season (especially relevant to MDD-W); ongoing interventions in the same area and/or events that may affect the desired outcome.</p>
<b>RESPONSIBLE FOR DATA COLLECTION</b>	<p>M&amp;E / VAM officer together with Nutrition Unit.</p>
<b>INDICATORS COLLECTED &amp; ANALYSED AT THE SAME TIME</b>	<p>Depending on the objective of the presentation of MDD-W results, some other indicators may be useful to be collected at the same time including geographic characteristics (e.g. by province or region, food system typology or by agro-ecological zone); socioeconomic or household characteristics (e.g., urban versus rural households, by wealth quintile, age subgroup, level of education); Food Consumption Score (FCS); Food Consumption Score for Nutrition (FCS-N); Minimum Acceptable Diet (MAD), if applicable.</p>
<b>COMPLEMENTARY QUALITATIVE RESEARCH</b>	<p>Qualitative approaches should be used, including Focus Group Discussions to complement quantitative data to establish reasons for the performance of the indicator. Qualitative data can, in addition, inform required actions and recommendations for improvement</p>
<b>DECISIONS DATA CAN INFORM</b>	<p>This data helps WFP target interventions towards those most at risk that is, women and girls of inadequate diets and prioritize areas with the highest prevalence of low dietary diversity.</p> <p>The indicator can guide WFP in tailoring interventions to address the specific dietary gaps identified. For example, if the data reveals low consumption of certain food groups, WFP can design programs (e.g., nutrition education and social behaviour change interventions) that focus on promoting the availability, accessibility, and consumption of those food groups.</p>

## 2. NUTRITION

An increase in the percentage represents an improvement in diet quality. If no change is registered, or targets are not achieved, or a decline is seen, a review of the context, programme appropriateness, and delivery should be conducted.

### INTERPRETATION

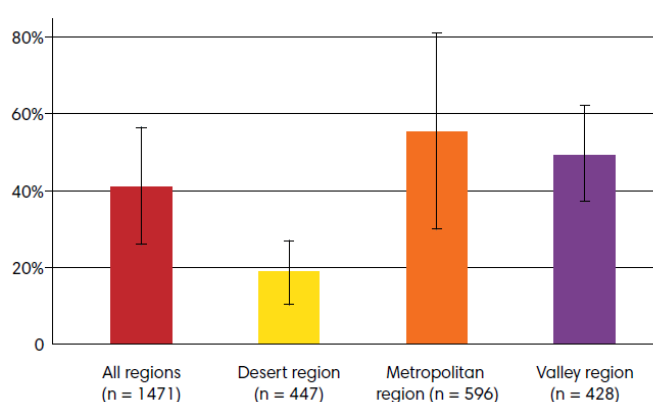
Presentation of the MDD-W can be as simple as stating the percent of WRA who have achieved MDD-W. The indicator was developed exactly for this purpose – as a single, simple, population-based dichotomous indicator. The basic interpretation of the indicator is: “X% of women achieved minimum dietary diversity, and they are more likely to have higher (more adequate) micronutrient intakes than the X% of women who did not.”

### REPORTING EXAMPLE(S)

The proportion of women and girls who achieved the minimum diet diversity was 40%. A higher prevalence of women and girls who reached the minimum diet diversity was found in the Metropolitan region, while the lowest percentage was obtained in the desert region indicating nutritional deficiencies among the interviewed women.

### VISUALIZATION

**Figure 1:** Percent of WRA achieving MDD-W during the previous day or night, by region



### LIMITATIONS

While data are collected from individual women, the indicator cannot be used to infer diet quality for an individual, as it is based on a single recall period over one day and night (24-hours) and does not reflect day-to-day variability for individual intakes. The correct use and interpretation of MDD-W are at the population level, i.e., for groups of WRA. Therefore, it should not be used for screening or targeting women.

### FURTHER INFORMATION

[Nutrition Monitoring & Evaluation Guidelines 2023 | WFPgo](#)

[Nutrition CRF Indicator Compendium 2023 | WFPgo](#)

[WFP Guidance Minimum Dietary Diversity – Women 2022](#)

[Survey Designer](#)

List based questionnaire – [xlsform](#) / [enketo](#)

Open recall questionnaire – [xlsform](#) / [enketo](#)

[Scripts](#) in R, STATA and SPSS and sample [data](#) are available on [github](#) for calculating this indicator.