

A guide to using Computer Assisted Telephone Interviewing (CATI) to collect data on Minimum Dietary Diversity for Women (MDD-W) and Minimum Acceptable Diet (MAD)

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Minimum Dietary Diversity for Women (MDD-W)

Definition

MDD-W is a proxy indicator which assesses population-level micronutrient adequacy, an important dimension of diet quality, for women's diets. The indicator measures the proportion of women 15 - 49 years who have achieved minimum dietary diversity (i.e. met the threshold of five or more groups out of the ten defined food groups¹) in the past 24 hours.

Who participates?

Women of reproductive age (15 - 49 years of age).

Why is it important?

- MDD-W is a WFP corporate indicator, required for stunting prevention and nutrition-sensitive programmes and highly recommended for micronutrient and Moderate Acute Malnutrition (MAM) prevention programmes.
- Women tend to be more nutritionally vulnerable, require more nutrient-dense foods than men, and are often disadvantaged in intra-household food distribution.
- Women who achieve the minimum dietary diversity are more likely to have more adequate micronutrient intakes than groups of women who do not.

Note: The questionnaire used for the CATI validation study in Kenya included 10 core food groups that make up the MDD-W score and one additional question on fortified food. The study used an open recall method. For further information on the findings from the validation study in Kenya, please refer to: http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp291938.pdf

For further information on the MDD-W indicator, please refer to the guidelines produced by the Food and Agriculture Organization of the United Nations (FAO), with funding from the European Union and the USAID-funded Food and Nutrition Technical Assistance Project (FANTA): <http://www.fao.org/3/a-i5486e.pdf>

¹ The ten food groups include:

1. Grains, white roots and tubers, and plantains,
2. Pulses (beans, peas and lentils),
3. Nuts and seeds,
4. Dairy,
5. Meat, poultry and fish,
6. Eggs,
7. Dark green leafy vegetables,
8. Other Vitamin A-rich fruits and vegetables,
9. Other vegetables and
10. Other fruits

² The seven food groups include:

1. Grains, roots, tubers,
2. Legumes and nuts,
3. Dairy products,
4. Flesh foods (meat, fish, poultry, liver/organ meat),
5. Eggs,
6. Vitamin A-rich fruits and vegetables,
7. Other fruits and vegetables

Minimum Acceptable Diet (MAD)

Definition

Minimum Acceptable Diet (MAD) is a proxy indicator used to assess the nutrient density of young children's diet. An internationally validated Infant and Young Child Feeding (IYCF) indicator, MAD measures the proportion of children 6-23 months who consumed a minimum acceptable diet (outside breast milk consumption) in the past 24 hours.

The minimum acceptable diet is calculated using a combination of the following two indicators:

Minimum Dietary Diversity (MDD): Proportion of children 6 - 23 months of age who consumed at least 4 out of 7 defined food groups.²

Minimum Meal Frequency (MMF): Proportion of children who received more than the minimal meal requirement:

- Breastfed children, 6-8 months: at least 2 feedings
- Breastfed children, 9-23 months: at least 3 feedings
- Non-breastfed children, 6-23 months: at least 4 feedings

Who participates?

Primary caretakers of children 6 - 23 months of age.

Why is it important?

- MAD is a WFP corporate indicator, required for stunting prevention and nutrition-sensitive programmes and highly recommended for micronutrient and Moderate Acute Malnutrition (MAM) prevention programmes.
- Young children are the priority group for nutrition assessments, as nutrition during the 1000-day period from conception to an infant turning 24 months has a profound impact on a child's health, including brain development, growth and a strong immune system. Infant and young child feeding practices directly affect the nutritional status of children under two years of age.

Note: Based on the findings from a recent MAD CATI validation study in Kenya, CATI can be used to collect data for trends analysis. However, point estimates on MAD collected via CATI cannot be compared with estimates from face-to-face data. For further information on the findings from the validation study, please refer to: http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp291938.pdf

The MAD indicator was developed by WHO and finalized at the WHO Global Consensus Meeting on Indicators of Infant and Young Feeding in 2017. For further information on the indicator, please refer to: http://apps.who.int/iris/bitstream/10665/44306/1/9789241599290_eng.pdf

Collecting MDD-W and MAD using CATI: Key steps

We highly recommend undertaking a formative research study to assess the feasibility of contacting women via CATI and to identify potential barriers for collecting MAD and MDD-W data. Please follow step 1 to determine if your operating environment is suitable for collecting MDD-W and MAD via CATI.

Once you have determined the feasibility, please follow the remaining steps as guidelines for collecting the two indicators using CATI. The recommended best practices for using CATI to collect the two indicators are outlined below.

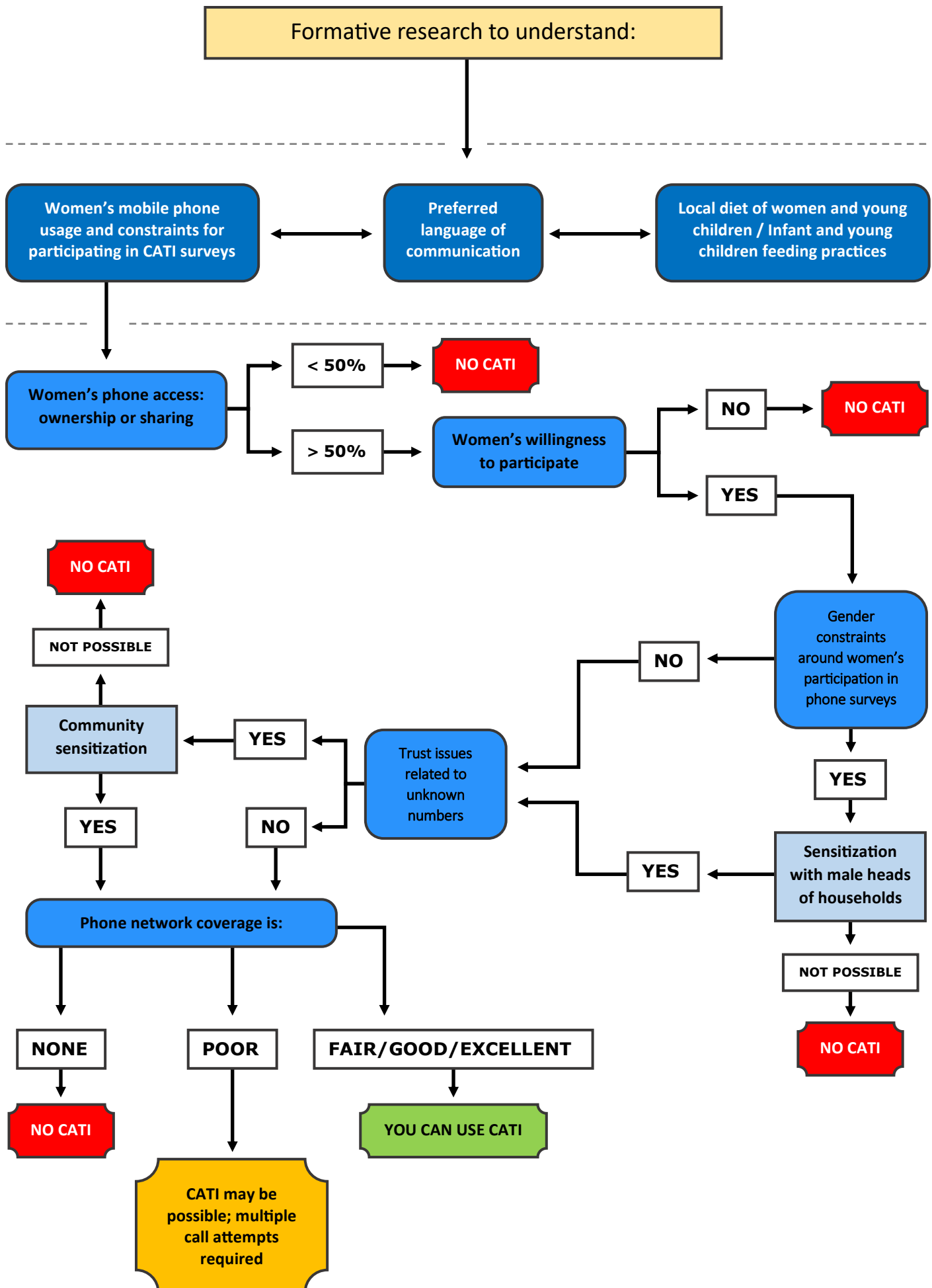
- Step 1** Formative research
- Step 2** Questionnaire design
- Step 3** Data entry tool and operator protocol design
- Step 4** Hiring operators
- Step 5** Operator training
- Step 6** Survey pre-test
- Step 7** Data collection methodology and tool revision
- Step 8** Administration of calls

Best Practices

The following best practices should be taken into account when conducting CATI surveys for MDD-W and MAD:

- Prior to carrying out a survey using CATI, conduct a formative study using qualitative methods to assess the feasibility of contacting women via CATI and to identify potential barriers for phone surveys.
- Organize sensitization activities and consultations with the community that will take part in the survey. Sensitization with men is also important in areas where gender norms could be a barrier for conducting CATI surveys with women.
- Identify optimal times for phone surveys with women to minimize non-response. Scheduling times for phone calls in advance can also minimize non-response and allow women to be ready to receive a call.
- Recruiting motivated and qualified call centre operators is key. Operators should receive intensive training, followed by daily supervision and regular feedback sessions.
- Budget and human resource planning at the operator set-up stage should account for the need to make multiple phone call attempts at different times of the day and on different days of the week.
- If this method is used to monitor progress towards WFP programmes through an in-house call center, it is also encouraged to set up a hotline for two-way communication, so that beneficiaries can contact WFP if they have any concerns.

Step 1 Formative research



Step 2 Questionnaire design

Design the MDD-W and MAD questionnaire based on one or more of the following:

- Information on local diet collected from formative research
- Consultations with local nutrition experts
- Existing survey modules used in the region

Socio-demographic module

MAD
module

and/or

MDD-W
module

Please refer to VAM Resource Center for sample script on MDD-W and MAD:

<http://documents.wfp.org/stellent/groups/public/documents/ena/wfp292164.pdf>

Step 3 Data entry tool and operator protocol design

- Create Standard Operating Procedures (SOPs) for operators. The SOP should include a section on conducting mobile surveys responsibly including taking into account respondent privacy and data protection.
- Create Job Aid for operators
- Create phonebook for reporting on call status
- Create a template to report on production statistics
- Use computer-based survey data entry platforms such as ODK, ONA, Visual Basic, KoBo

RESOURCES

Sample SOP:

<https://resources.vam.wfp.org/sites/default/files/mVAM%20Operator%20SOPs.pdf>

Field Guide: Conducting Mobile Surveys Responsibly

http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp292067.pdf

Sample job aid for operators
([English](#)) ([French](#))

Production Statistics

operator supervisor should compile and provide the following statistics on a regular basis

Statistic	Definition	Formula	Suggested Threshold
Accept	% of respondents who responded to the call and agreed to participate in the survey. Also includes participants who responded and accepted after multiple call attempts	$\frac{\text{Total \# of accept}}{\text{Total \# of response}}$	≥ 95%
Eligible	% of the respondents who responded to the call and met the selection criteria. Also includes respondents who met the selection criteria after the first responder passed on the call to the eligible respondent	$\frac{\text{Total \# of eligible}}{\text{Total \# of response}}$	≥ 95%
Complete	% of respondents who accepted the call, were eligible and completed the entire survey. Include interviews that were completed in multiple call attempts	$\frac{\text{Total \# of complete}}{\text{Total \# of response}}$	≥ 80%
Response	% of calls where the operator talked to participant	$\frac{\text{Total \# of response}}{\text{Total \# of call attempt}}$	70 - 90%; In areas with ubiquitous network coverage, the target should be ≥ 90%
Total calls attempted	All calls attempted including non-response. Include all attempted calls even if the survey was refused or incomplete or the participant was ineligible. If the same phone number is attempted more than once, only count it as 1 attempt	$\text{Total \# of call attempted at least once}$	≥ 100% of the target

Step 4 Hiring operators

Operators should possess the following key qualifications:

- Computer literate in MS Excel, Word and database software
- Prior experience working as an enumerator and/or operator
- Fluency in English and all local languages
- Good oral and written communications skills

Female operators are preferred, as female survey respondents tend to be more receptive to calls from women. In addition, it is recommended to hire an operator supervisor, who will be responsible for providing daily supervision to the operators, conducting quality checks and compiling/reporting production statistics on a regular basis.

RESOURCES

Sample Terms of Reference (ToR) for Operators:

<https://resources.vam.wfp.org/sites/default/files/Sample%20TOR%20for%20phone%20operators.pdf>

Step 5 Operator training

Operator training should familiarize the operators with the reasons for the survey and walk them through the key steps of data collection and reporting. It is important to cover the following steps:

1. Explanation of background and objectives of the survey
2. Indicator training: MDD-W, MAD
3. Data collection and entry protocol
4. Local translation of questionnaires (if needed)
5. Role-play, feedback and Q & A sessions
6. Daily call schedule and reporting requirements



Step 6 Survey pre-test

- Practice phone survey
- Practice reporting call status in phone book
- Practice reporting on production statistics
- Conduct Q & A sessions with operators and operator supervisor
- Identify data entry errors
- Identify potential respondent comprehension issues

Step 7 Data collection methodology and tool revision

Following the survey pre-test, any necessary modifications to the methodology and tools should be made prior to carrying out the survey. Issues of respondent comprehension should be addressed, as well as any operational issues related to survey implementation. The data entry tool should also be reviewed.

Step 8 Administration of calls

- Daily supervision of operators
- Regular feedback sessions with operators
- Regular reporting on production statistics



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This guidance has been developed to assist VAM, Nutrition and M&E Officers interested in collecting MDD-W and MAD using CATI. For further information please contact:

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