## Appendixes

## Appendix 1:

## Visual support to measure attitudes

A visual scale can be used to help children or respondents with little education to rate their response to attitudinal questions. The surveyor should show the visual scale to the respondent during the interview, list the response options and point out the images relating to the response options. The visual scale can also be used in a self-administered questionnaire; response options can be placed under each image (see example on page 34).

Three-point scale


## Five-point scale



## Appendix 2:

## Readiness to change

"Readiness to change" refers to an individual's readiness to act or perform a nutrition-related behaviour or practice. It is measured using the Transtheoretical Model of Behaviour Change (15, 26, 27). According to this model, individuals move through five stages in the process of behaviour change, culminating in measurable behaviour change (28). The five stages of change are as follows:

1. Precontemplation: the respondent is not ready to change behaviour or adopt a new behaviour within the next six months.
2. Contemplation: the respondent is thinking about changing his/her behaviour or adopting a new behaviour within the next six months.
3. Preparation: the respondent is committed to change his/her behaviour of adopt a new behaviour within the next 30 days.
4. Action: the respondent has changed his/her behaviour or adopted a new behaviour in the past six months.
5. Maintenance: the respondent has changed his/her behaviour or adopted a new behaviour for at least six months. In this last stage, the behaviour has become a habit.

Stages of change provide information about what people think about their eating and feeding behaviours or practices and their interest in change (37).

Example: Measuring readiness to eat more mango
How ready do you feel to eat more mango (vitamin-A-rich fruit)? Are you (read the statements for the five stages of change)Not thinking about eating more mango (Precontemplation)Thinking about eating more mango (Contemplation)Planning to eat more mango in the next six months (Preparation)Definitely planning to eat more mango in the next month (Action)Eating more mango now (Maintenance)

## Appendix 3:

# Informed consent form and sociodemographic questionnaire for caregivers of infants and young children (0-6 months and 6-23 months) 

The MS Word format of Appendix 3 is available for adaptation at: www.fao.org/docrep/019/i3545e/i3545e00.htm

## Informed consent and confidentiality of interviews

Good morning/afternoon, Mr/Mrs $\qquad$ We are from [insert the name of your organization]. We are working on a project concerned with nutrition and education in which you could participate/participated. [Include the objectives and a short description of the project]. Now, the project is just starting/almost finished [select depending if the project is just starting or almost finished] and we are completing a survey among participants to know more about their knowledge, attitudes and practices to do with nutrition. The interview will take about [time estimated to conduct the interview]. All the information we obtain will remain strictly confidential and your answers and name will never be revealed. Also, you are not obliged to answer any question you do not want to, and you may stop the interview at any time.

The objective of this study is to [evaluate the effectiveness of an intervention (if outcome evaluation) or assess the nutrition situation (if situation analysis)]. This is not to evaluate or criticize you, so please do not feel pressured to give a specific response and do not feel shy if you do not know the answer to a question. I am not expecting you to give a specific answer; I would like you to answer the questions honestly, telling me about what you know, how you feel, the way you live and how you prepare food. Feel free to answer questions at your own pace.

Do you agree to participate in this interview?
Yes __ No __ If yes, continue to the next question; if no, stop the interview.
Do you have any question before we start? (Answer questions).

May I start now?

## Sociodemographic questionnaire for caregivers

| Caregiver |  |  |
| :---: | :---: | :---: |
| 1. Name and code | What is your name? |  |
|  | Insert respondent code |  |
| 2. Sex | Insert the sex of the caregiver | Male $\square$ Female $\square$ |
| 3. Relationship | What is your relationship with the child you take care of? | Mother $\square$ <br> Father $\square$ Grandmother/ Grandfather $\square$ $\square$ Other $\square$ $\square$ |
| 4. Caregiver's age | When is your birthday? <br> Probe if necessary: <br> On what day and in which month and year were you born? | $\begin{array}{r} -\quad / \_-I_{-}--- \\ \text {day/month/year } \end{array}$ |
|  | How old are you? <br> Probe if necessary: <br> What was your age at your last birthday? <br> If the information conflicts with the previous answer, determine which one is more accurate | Age in completed years |
| 5. Parity (only for women) | How many children do you have? <br> For pregnant women: ask if this is her first pregnancy | Number of children <br> First pregnancy |
| 6. Geographical characteristics | Where do you live? <br> Adapt to the local geographical characteristics: district, city, village, section, tribe, etc. | District |
|  |  | City |
|  |  | Village |
|  |  | Section |
|  |  | Other |


| 7. Educational level | Have you ever attended school? <br> If yes, continue asking: <br> What is the highest level of school you attended? | None <br> Primary school $\square$ Secondary school Higher |
| :---: | :---: | :---: |
|  | What is the highest grade/form/year you completed at that level? | Grade __ |
| Infant/young children |  |  |
| 1. Child's name | What is your child's name? |  |
| 2. Child's sex | Is (the name of the child) male or female? | Male $\square$ Female $\square$ |
| 3. Child's age | When is your child's birthday? <br> Probe if necessary: <br> On what day and in which month and year was (name of the child) born? <br> Does he/she have a health/vaccination card with the birth date recorded? <br> If yes, record the date of birth as documented in the card | $\begin{array}{r} -_{--} / I_{-} \\ \text {day/month/year } \end{array}$ |
|  | How old was (name of the child) at his/her last birthday? <br> Record age in completed years and/or months | Age in completed years <br> Age in completed months $\qquad$ |

## Appendix 4:

# Informed consent form and sociodemographic questionnaire for school-aged children 

The MS Word format of Appendix 4 is available for adaptation at: www.fao.org/docrep/019/i3545e/i3545e00.htm

## Informed consent and confidentiality of interviews <br> For parents/caregivers of children younger than 18 years of age

Good morning/afternoon, Mr/Mrs $\qquad$ . We are from [insert the name of your organization]. We are working on a project concerned with nutrition and education in which your child could participate/participated. [Include the objectives and a short description of the project]. Now, the project is just starting/almost finished [select depending if the project is just starting or almost finished] and we are completing a survey among participants to know more about their knowledge, attitudes and practices to do with nutrition. The interview will take about [time estimated to conduct the interview]. All the information we obtain will remain strictly confidential and your child's name and answers will never be revealed. If you agree that your child may participate in the survey, he/she will be asked to give his/her own consent. Do you agree that your child participates in the survey?

Yes __ No __ If yes, continue to the next question; if no, do not conduct the interview.

## Respondent school-aged children

Good morning/afternoon. We are working on a project concerned with nutrition and education in which you could participate/participated. [Include the objectives and a short description of the project]. The project is just starting/almost finished [select depending if the project is just starting or almost finished] and we are completing a survey among children like you who could participate/participated in the project because we want to know more about their knowledge, attitudes and practices in nutrition. The interview will take about [time estimated to conduct the interview]. All the information we obtain will remain strictly confidential and your answers and name will never be revealed. Also, you are not obliged to answer any question you do not want to, and you may stop the interview at any time.

The objective of this study is to [evaluate the effectiveness of an intervention (if outcome evaluation) or assess the nutrition situation (if situation analysis)]. This is not to evaluate or criticize you, so please do not feel pressured to give a specific response and do not feel shy if you do not know the answer to a question. I am not expecting you to give a specific answer; I would like you to answer questions honestly, telling me about what you know, how you feel, the way you live and how you eat and prepare food. Feel free to answer questions at your own pace.

Do you agree to participate in this interview?
Yes $\qquad$ No $\qquad$ If yes, continue to the next question; if no, stop the interview.

Do you have any question before we start? (Answer questions).
May I start now?

## Sociodemographic questionnaire for school-aged children

## School-aged children

| 1. Child's name and code | What is your name? |  |
| :---: | :---: | :---: |
|  | Insert respondent code |  |
| 2. Child's sex | Insert the child's sex | Male $\square \quad$ Female $\square$ |
| 3. Child's age | When is your birthday? <br> Probe if necessary: <br> On what day and in which month and year were you born? | $\begin{gathered} \text { _-_/_-_--- } \\ \text { day/month/year } \end{gathered}$ |
|  | How old are you? <br> Probe if necessary: <br> How old were you at your last birthday? <br> Record age in completed years and months <br> If the information conflicts with the previous answer, determine which one is more accurate | Age in completed years <br> Age in completed months $\qquad$ |
| 4. Geographical characteristics | Where do you live? <br> Adapt to the local geographical characteristics: district, city, village, section, tribe, etc. | District |
|  |  | City |
|  |  | Village |
|  |  | Section |
|  |  | Other |
| 5. Educational level | What level of school are you attending now? | Primary school $\square$ Secondary school $\square$ <br> Higher $\square$ |
|  | What grade/form/year? | Grade _ - |

## Appendix 5:

# Informed consent form and sociodemographic questionnaire for adults (> 18 years) 

The MS Word format of Appendix 5 is available for adaptation at: www.fao.org/docrep/019/i3545e/i3545e00.htm

## Informed consent and confidentiality of interviews

Good morning/afternoon, Mr/Mrs $\qquad$ . We are from [insert the name of your organization]. We are working on a project concerned with nutrition and education in which you could participate/participated. [Include the objectives and a short description of the project]. Now, the project is just starting/almost finished [select depending if the project is just starting or almost finished] and we are completing a survey among participants to know more about their knowledge, attitudes and practices to do with nutrition. The interview will take about [time estimated to conduct the interview]. All the information we obtain will remain strictly confidential and your answers and name will never be revealed. Also, you are not obliged to answer any question you do not want to, and you may stop the interview at any time.

The objective of this study is to [evaluate the effectiveness of an intervention (if outcome evaluation) or assess the nutrition situation (if situation analysis)]. This is not to evaluate or criticize you, so please do not feel pressured to give a specific response and do not feel shy if you do not know the answer to a question. I am not expecting you give a specific answer; I would like you to answer questions honestly, telling me about what you know, how you feel, the way you live and how you eat and prepare food. Feel free to answer questions at your own pace.

Do you agree to participate in this interview?
Yes $\qquad$ No $\qquad$ If yes, continue to the next question; if no, stop the interview.

Do you have any question before we start? (Answer questions).
May I start now?

## Sociodemographic questionnaire for adults (> 18 years)

| Adults (>18 years) |  |  |
| :---: | :---: | :---: |
| 1. Name and code | What is your name? |  |
|  | Insert respondent code |  |
| 2. Sex | Insert the sex of the respondent | Male ${ }^{\text {] }}$ |
|  |  | Female ${ }^{\text {] }}$ |
| 3. Age | When is your birthday? <br> Probe if necessary: <br> On what day and in which month and year were you born? | $\begin{array}{r} -_{--} / l_{----} \\ \text {day/month/year } \end{array}$ |
|  | How old are you? <br> Probe if necessary: <br> What was your age at your last birthday? <br> If the information conflicts with the previous question, determine which one is more accurate | Age in completed years |
| 4. Geographical characteristics | Where do you live? <br> Adapt to the local geographical characteristics: district, city, village, section, tribe, etc. | District |
|  |  | City |
|  |  | Village |
|  |  | Section |
|  |  | Other |
| 5. Educational level | Have you ever attended school? <br> If yes, continue asking: <br> What is the highest level of school you attended? | None <br> Primary school Secondary school $\square$ Higher $\square$ |
|  | What is the highest grade/form/year you completed at that level? | Grade _ |

## Appendix 6:

## Nutrition-related KAP model questionnaires

The modules included in Appendix 6 are model questionnaires that need to be adapted to the local context and to the requirements of the specific project or intervention in which they are going to be used. They are available in MS Word format for easy adaptation and reproduction at: www.fao.org/docrep/019/i3545e/i3545e00.htm

## MODULE 1: Feeding infants (0-6 months)

Note: The surveyor should ideally be female in order to put mothers at ease.

## Explain to the participant:

I am going to ask you some questions about nutrition of infants from birth to six months old. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## 1 Question P.1: Breastfeeding ${ }^{3}$

Was (name of the baby) breastfed yesterday during the day or at night?
$\square$ Yes
$\square$ No
$\square$ Don't know/no answer

## 1 Question P.2: Feeding breastmilk ${ }^{3}$

Sometimes babies are fed breastmilk in different ways, for example by spoon, cup or bottle, or are breastfed by another woman.
Did (name of the baby) consume breastmilk in any of these ways yesterday during the day or night?
$\square$ No
$\square$ Don't know/no answer

[^0]
## Question P.3: Feeding breastmilk when the mother is absent

When you are not home or cannot feed the baby yourself, who does it?FatherGrandmotherOther childrenOther $\qquad$Don't know/no answer
If you are not there to feed the baby, what type of food is the baby fed?Breastmilk by spoon, cup or bottle
$\square$ Infant formula by spoon, cup or bottle
$\square$ Other liquids

## 1

Question P.4: Introducing liquids ${ }^{3}$
Next I would like to ask you about some liquids that (name of the baby) may have had yesterday during the day or at night.

Did (name of the baby) have any of the following liquids? (Read the list of liquids, starting with "plain water")
A. Plain waterYes
$\square$ Don't know
B. Infant formula such as (insert local examples)
$\square$ No
$\square$ Don't know
C. Milk, such as tinned, powdered or fresh animal milkYesNoDon't know
D. Juice or juice drinks
$\square$ YesNoDon't know
E. Clear broth
$\square$ Yes
$\square$ No
$\square$ Don't know
F. Yogurt
$\square$ Yes
$\square$ No
$\square$ Don't know
G. Thin porridgeYesNoDon't know
H. Any other liquids such as (list other water-based liquids available in the local setting)YesNoDon't know
I. Any other liquids
$\square$ YesNoDon't know

## Preliminary analysis

From questions P.1, P.2, P. 3 and P. 4 determine if the child is exclusively breastfed (i.e. fed exclusively with breastmilk)$\square$ Exclusively breastfedNot exclusively breastfed

## Knowledge

2 Question K.1: Breastmilk at birth
What is the first food a newborn baby should receive?


Have you heard about exclusive breastfeeding?Yes
$\square$ No $\rightarrow$ continue to question K. 3
What does exclusive breastfeeding mean?

Exclusive breastfeeding means that the infant gets only breastmilk and no other liquids or foods
$\square$ Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

## Question K.3: Recommended length of exclusive breastfeeding

How long should a baby receive nothing more than breastmilk?
Probe if necessary:
Until what age is it recommended that a mother feeds nothing more than breastmilk?
$\qquad$
$\square$ From birth to six months
$\square$ OtherDon't know

## Preliminary analysis

KnowsDoes not know2
Question K.4: Breastmilk is sufficient for babies from birth to six months old

Why do you think breastmilk is the only food recommended for infants up to six months old?

Probe if necessary:
Why is breastmilk alone sufficient to feed babies during the first six months?
$\qquad$
$\qquad$
$\square$ Because breastmilk provides all the nutrients and liquids a baby needs in its first six months
$\square$ Because babies cannot digest other foods before they are six months old
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

1 Question K.5: Frequency of feeding
How often should a baby younger than six months be breastfed or fed with breastmilk?
$\square$ On demand, whenever the baby wants
$\square$ Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

## 2 Question K.6: Benefits of exclusive breastfeeding for babies

What are the benefits for a baby if he or she receives only breastmilk during the first six months of life?
$\qquad$
$\square \mathrm{He} /$ she grows healthily
$\square$ Protection from diarrhoea and other infections
$\square$ Protection against obesity and chronic diseases in adulthoodProtection against other diseases. Specify
$\square$ Other
$\square$ Don't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

What are the physical or health benefits for a mother if she exclusively breastfeeds her baby?

Probe if necessary:Delays fertilityHelps her lose the weight she gained during pregnancyLowers risk of cancer (breast and ovarian)Lowers risk of losing blood after giving birth (less risk of post-partum haemorrhage)Improves the relationship between the mother and babyOtherDon't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

2 Question K.8: Maintaining breastmilk supply
Many times, mothers complain about not having enough breastmilk to feed their babies.

Please tell me different ways a mother can keep up her milk supply.
$\qquad$
$\qquad$
$\square$ Breastfeeding exclusively on demand
$\square$ Manually expressing breastmilk
$\square$ Having a good nutrition/eating well/having a healthy or diversified diet
$\square$ Drink enough liquids during the day
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

2 Question K.9: Overcoming barriers to breastfeeding
Many mothers need to work and are separated from their baby. In this situation, how could a mother continue feeding her baby exclusively with breastmilk?
$B y$ :
$\square$ Expressing breastmilk by hand, storing it and asking someone to give breastmilk to the baby
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Question K.10: Seeking health care if breastfeeding difficulties arise

If a mother has difficulties feeding breastmilk what should she do to overcome them?
Probe if necessary:
Who can help the mother to solve the problem?Seek professional help from health-care services: doctors, nurses, midwives or other health professionalsOtherDon't know

## Preliminary analysis

$\square$ KnowsDoes not know

## Attitudes

Attitudes towards an ideal or desired nutrition-related practice

## 1

Breastfeeding exclusively for six months

## Perceived benefits

How good do you think it is to breastfeed your baby exclusively for six months?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?
$\qquad$
$\qquad$

## Perceived barriers

How difficult is it for you to breastfeed your baby exclusively for six months?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?

## 1 Breastfeeding on demand

## Perceived benefits

How good do you think it is to breastfeed your baby on demand, that is when the baby wants to feed?
$\square$ 1. Not good
$\square$ 2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to breastfeed your child on demand?
$\square$ 1. Not difficult
$\square$ 2. So-so
$\square$ 3. Difficult
If Difficult:
Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

## Self-confidence

## Breastfeeding

How confident do you feel in breastfeeding your child?
$\square$ 1. Not confident
$\square$ 2. Ok/so-so
$\square$ 3. Confident

## If Not confident:

Can you tell me the reasons why you do not feel confident?
$\qquad$
$\qquad$

## Expressing and storing breastmilk

How confident do you feel in expressing and storing breastmilk so that someone else can feed your baby?
$\square$ 1. Not confident
$\square$ 2. Ok/so-so
$\square$ 3. Confident

## If Not confident:

Can you tell me the reasons why you do not feel confident?
$\qquad$
$\qquad$

## MODULE 2: Feeding young children (6-23 months)

## Explain to the participant:

I am going to ask you some questions about nutrition of infants aged from 6 to 23 months. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## Season:

$\square$ Low food season
$\square$ High food season

## 1 <br> Question P.1: Continued breastfeeding ${ }^{4}$

Was (name of the baby) breastfed or did he or she consume breastmilk yesterday during the day or at night?YesNoDon't know/no answer

## 3 Question P.2: Dietary diversity ${ }^{4}$

Now I would like to ask you about (other) liquids or foods that (name of the baby) ate yesterday during the day or at night. I am interested in whether your child had the item even if it was combined with other foods.

For example, if (name of the baby) ate a millet porridge made with a mixed vegetable sauce, you should reply yes to any food I ask about that was an ingredient in the porridge or sauce.

Please do not include any food used in a small amount for seasoning or condiments (like chillies, spices, herbs or fish powder); I will ask you about those foods separately.

Yesterday during the day or at night, did (name of the baby) eat:
(Read the food lists. Underline the corresponding foods consumed and tick the column Yes or No depending on whether any food item of the list was consumed. Record the number of times when relevant (Group 3)).

[^1]| Group | Food lists | No | Yes |
| :---: | :---: | :---: | :---: |
| Group 1: <br> Grains, roots and tubers | Porridge, bread, rice, noodles or other foods made from grains |  |  |
|  | White potatoes, white yams, manioc, cassava or any other foods made from roots |  |  |
| Group 2: <br> Legumes and nuts | Any foods made from beans, peas, lentils, nuts or seeds |  |  |
| Group 3: <br> Dairy products | Infant formula, such as [insert local examples] |  | How many times? |
|  | Milk, such as tinned, powdered or fresh animal milk |  | How many times? |
|  | Yogurt or drinking yogurt |  | How many times? |
|  | Cheese or other dairy products |  |  |
| Group 4: <br> Flesh foods | Liver, kidney, heart or other organ meats |  |  |
|  | Any meat, such as beef, pork, lamb, goat, chicken or duck |  |  |
|  | Fresh or dried fish, shellfish or seafood |  |  |
|  | Grubs, snails or insects |  |  |
| Group 5: Eggs | Eggs |  |  |
| Group 6: <br> Vitamin A fruits and vegetables | Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside |  |  |
|  | Any dark green vegetables [insert local examples] |  |  |
|  | Ripe mangoes (fresh or dried [not green]), ripe papayas (fresh or dried), musk melon [insert other local vitamin-A-rich fruits] |  |  |
|  | Foods made with red palm oil, red palm nut or red palm nut pulp sauce |  |  |
| Group 7: <br> Other <br> fruits and vegetables | Any other fruits or vegetables |  |  |
| Others (not counted in the dietary diversity score) | Any oil, fats, or butter or foods made with any of these |  |  |
|  | Any sugary foods, such as chocolates, sweets, candies, pastries, cakes or biscuits |  |  |
|  | Condiments for flavour, such as chillies, spices, herbs or fish powder |  |  |

$\square$ The baby does not consume any food other than breastmilk

## Preliminary analysis

Number of food groups consumed the previous day $\qquad$ /7

## 1 <br> Question P.3: Minimum meal frequency ${ }^{4}$

How many times did (name of the baby) eat foods, that is meals and snacks other than liquids yesterday during the day or at night?

Number of times $\qquad$
Don't know/no answer

## Preliminary analysis (to do after the interview)

WHO (2008) recommendations for minimum meal frequency:

## For breastfed children:

- 2-3 times for breastfed infants 6-8 months
- 3-4 times for breastfed infants 9-23 months


## For non-breastfed children:

- 4 times for non breast-fed-children 6-24 months (including milk feeds, identified in question P.2, Group 3)
From questions P.1, P. 2 and P.3, determine if the child receives food the minimum number of times according to WHO recommendations:
$\square$ Less than recommended
$\square$ The minimum number of times each day (follows the recommendation)
$\square$ More than recommended


## Knowledge

## 2 Question K.1: Continued breastfeeding

How long is it recommended that a woman breastfeeds her child?
Probe if necessary:
Until what age is it recommended that a mother continues breastfeeding?


## 1 Question K.2: Age of start of complementary foods

At what age should babies start eating foods in addition to breastmilk?
$\qquad$
$\square$ At six months
$\square$ Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Question K.3: Reason for giving complementary foods at six months
Why is it important to give foods in addition to breastmilk to babies from the age of six months?
$\qquad$
$\square$ Breastmilk alone is not sufficient (enough)/cannot supply all the nutrients needed for growth/from six months, baby needs more food in addition to breastmilkOtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

## 1 Question K.4: Consistency of meals

Please look at these two pictures of porridges. Which one do you think should be given to a young child?
(Show the images/pictures of thick and watery/thin porridges and tick one of the options here below depending on the respondent answer.)
$\square$ Shows the thick porridge
$\square$ Shows the wateryDoes not know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

## Support material: porridges


2.


Question K.5: Reason for consistency of meals
Why did you pick that picture?Because the first porridge is thicker than the other
$\square$ Because the thick porridge is more nutritious/because it is prepared with different types of foods or ingredients (food diversity)
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

## 1 Question K.6: Dietary diversity and ways of enriching porridge

To feed their children, many mothers give them rice porridge or borbor.
Please tell me some ways to make rice porridge more nutritious or better for your baby's health.

Probe if necessary:
Which foods or types of food can be added to rice porridge make it more nutritious?
(Response options are listed on the next page).

By adding:
$\square$ Animal-source foods (meat, poultry, fish, liver/organ meat, eggs, etc.)
$\square$ Pulses and nuts: flours of groundnut and other legumes (peas, beans, lentils, etc.), sunflower seed, peanuts, soybeans
$\square$ Vitamin-A-rich fruits and vegetables (carrot, orange-fleshed sweet potato, yellow pumpkin, mango, papaya, etc.)
$\square$ Green leafy vegetables (e.g. spinach)Energy-rich foods (e.g. oil, butter/ghee)Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Question K.7: Responsive feeding
Do you know any ways to encourage young children to eat?
$\square$ Giving them attention during meals, talk to them, make meal times happy times
$\square$ clap hands
$\square$ make funny faces/play/laugh
$\square$ demonstrate opening your own mouth very wide/modelling how to eat
$\square$ say encouraging words
$\square$ draw the child's attentionOtherDon't know

## Preliminary analysis

$\square$ KnowsDoes not know

## Attitudes <br> Attitudes towards an ideal or desired nutrition-related practice

## 1 Self-confidence

How confident do you feel in preparing food for your child?1. Not confident
$\square$ 2. Ok/so-so
$\square$ 3. Confident
If Not confident:
Can you tell me the reasons why you do not feel confident?

## 1 Giving a diversity of food (foods from many food groups)

## Perceived benefits

How good do you think it is to give different types of food to your child each day?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?
$\qquad$
$\qquad$

## Perceived barriers

How difficult is it for you to give different types of food to your child each day?1. Not difficult
$\square$ 2. So-so
$\square$ 3. Difficult

## If Difficult:

Can you tell me the reasons why it is difficult?

## 1 Feeding frequently

## Perceived benefits

How good do you think it is to feed your child several times each day?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to feed your child several times each day?1. Not difficult2. So-so3. Difficult

## If Difficult:

Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

## 1 Continuing breastfeeding beyond six months

## Perceived benefits

How good do you think it is to continue breastfeeding beyond six months?
$\square$ 1. Not good
$\square$ 2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to continue breastfeeding beyond six months?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?

## MODULE 3: Diet of school-aged children

Note: Depending on the study context, questions from this module can be administered to different players involved in changing knowledge, attitudes and practices, some of whom may be the project's participant populations, such as parents and teachers of school-age children or mothers, caregivers (e.g. fathers, grandmothers).

## Explain to the participant (child):

I am going to ask you some questions about your nutrition and nutrition in general. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Season:

$\square$ Low food seasonHigh food season

## Practices

## 1 Question P.1: Having breakfast: time and place

A. Did you have breakfast before going to school?Yes $\qquad$ Go to question P.1BNo $\qquad$ Go to question P. 2Don't know/no answer
If Yes:
B. At what time?Between 6 a.m. and 9 a.m.Between 9 a.m. and noonBetween noon and 3 p.m.
C. Where?HomeSchoolElsewhere (specify) $\qquad$

## Question P.2: Having lunch: time and place

A. If the interview is being conducted before lunchtime, ask: Did you have lunch yesterday?

If the interview is being conducted after lunchtime, ask: Did you have lunch today?Yes $\qquad$ Go to question P.2BNo $\qquad$ Go to question P. 3
$\square$ Don't know/no answer
If Yes:
B. At what time?Between 9 a.m. and noonBetween noon and 3 p.m.Between 3 p.m. and 6 p.m.
C. Who prepares your lunch?Parents at homeSchool cafeteriaLunch is bought with pocket moneyOther (specify) $\qquad$

Question P.3: Dinner/supper: time and place
A. Did you have dinner yesterday?Yes $\qquad$ Go to question P.3BNo $\qquad$ Go to question P. 4Don't know/no answer
If Yes:
B. At what time?Between 3 p.m. and 6 p.m.Between 6 p.m. and 9 p.m.Between 9 p.m. and midnight
C. Where?HomeSchoolElsewhere (specify)

## 1 Question P.4: Snacks

A. Yesterday during the day and night, did you eat anything between the meals?Yes $\qquad$ Go to question P.4BNo. $\qquad$ Go to question P. 5Don't know/no answer
If Yes:
B. What did you eat?
[Include a list of locally available snacks or the responses most cited during pre-testing.]Other (specify) $\qquad$

1 Question P.5: Bought food
A. Yesterday during the day and night, did you buy foods with your own money?Yes. $\qquad$ Go to question P.5.BNo. $\qquad$ Go to question K. 1Don't know/no answer
If Yes:
B. What did you buy?
[Include a list of locally available snacks/foods or the responses most cited during pre-testing.]Other
C. Where did you buy those foods?At school/cafeteriaOn the street (from street vendors)Other (specify) $\qquad$

## Knowledge

## 1 Question K.1: Consequences of short-term hunger at school

Some children do not have breakfast before going to school and are hungry in class. What is the consequence for children of not having breakfast and being hungry at school?

Probe if necessary:
What problems can children have if they don't eat before going to school?
$\square$ Children have short attention/have low concentration/cannot study well/ do not do as well at school as they should
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

2 Question K.2: Discouraging sweets and candies
Why should parents discourage sticky and sugar-rich foods, such as sweets and candies?

Probe if necessary:
Why is it so bad to eat too many sweets and candies?
$\square$ Because they can cause tooth decay
$\square$ Because they are not nutritious
$\square$ Because they interfere with appetiteOtherDon't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses
[Knowledge and practice questions included in other modules can be added to this module. Look at modules 6 to 13 and select the relevant questions based on the objectives of the survey.]

## Attitudes

## Attitudes towards an ideal or desired nutrition-related practice

## 1 <br> Having breakfast before going to school

## Perceived benefits

How good do you think it is to have breakfast before going to school?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to have breakfast before going to school?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?

## 1 Having three meals a day and snacks

## Perceived benefits

How good do you think it is to have three meals a day and snacks?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to have three meals a day and snacks?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?

## Perceived benefits

How good do you think it is to have different types of foods at meals?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to have different types of foods at meals?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?

## Attitudes towards food preference

[Refer to questions included in modules 6 and 7 and add the relevant ones based on objectives of the survey.]

## MODULE 4: Nutrition during pregnancy and lactation

## Explain to the participant:

I am going to ask you some questions about nutrition of pregnant and lactating women. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## Question P.1: Food-intake practices

Based on the objectives of the survey, food-intake practices can be assessed in terms of:

## 1

Intake of foods from a list of locally available nutrient-rich foods through a short food-intake checklist. To assess the intake of nutrient-rich foods, refer to the practice section of modules 6,7 and 8 for iron, vitamin A and iodine, respectively. Before measuring food-intake practices, lists of locally available nutrient-rich foods of interest should be created (see "Adapting the food lists," page 31); or

Frequency of intake of foods from a list of locally available nutrient-rich foods with a short food-frequency questionnaire; or

Dietary diversity through the dietary-diversity questionnaire to assess the quality of the diet. The guidelines for measuring dietary diversity are available online (FAO, 2011 (34)): www.fao.org/fileadmin/user_upload/wa_workshop/docs/ FAO-guidelines-dietary-diversity2011.pdf

## Knowledge

## 1

Question K.1: Women's nutrition during pregnancy and breastfeeding

For a pregnant woman:
How should a pregnant woman eat in comparison with a non-pregnant woman to provide good nutrition to her baby and help him grow?

Please list four practices she should do.
For a lactating woman:
How should a lactating woman eat in comparison with a non-lactating woman to be healthy and produce more breastmilk?

Please list four practices she should do.1. Eat more food (more energy)
$\square$ Eat more at each meal (eat more food each day)
Or
$\square$ Eat more frequently (eat more times each day)
$\square$ 2. Eat more protein-rich foods3. Eat more iron-rich foods4. Use iodized salt when preparing meals
$\square$ OtherDon't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

2 Question K.2: Micronutrient supplements for pregnant women
Most women would benefit from two types of supplements, or tablets, during pregnancy. Which are they?
$\qquad$
$\qquad$
$\qquad$
$\square$ Iron supplements
$\square$ Folic acid supplements
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

2 Question K.3: Recommendation of folic acid supplements
Can you tell me why it is so important to take folic acid supplements during pregnancy?
Probe if necessary:
What is the health benefit for taking folic acid supplements/tablets?
$\qquad$
$\qquad$
$\square$ For normal development of the nervous system of the unborn baby (brain, spine and skull)
$\square$ To prevent birth defects/abnormalities the nervous system of the unborn baby (brain, spine and skull)
$\square$ Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

When a pregnant woman is undernourished, she is at risk of having a low-birth-weight baby, meaning that the baby is small or has a low birth weight. What are the health risks for these babies?
$\square$ Slower growth and development
$\square$ Risks of infections/being sick
$\square$ Risks of dying
$\square$ Risks of being undernourished/having micronutrient deficiencies
$\square$ Risks of being sick once adult/developing chronic diseases in adulthood (heart disease, high blood pressure, obesity, diabetes)
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know
Number of correct responses $\qquad$

Question K.5: Family planning/birth spacing

```
Note: This question can generate anxiety in participants. The theme (family planning)
should be handled with care.
```

It is recommended that a woman waits at least two or three years between pregnancies, that is before coming pregnant once again. Please can you tell me why this is recommended?

| $\square$ To rebuild/fill up their body stores of nutrients (fat, iron and others) |
| :--- |
| $\square$ For the mother to be healthier before having a new baby/to be prepared |
| for the arrival of a new baby |
| $\square$ Other |
| $\square$ Don't know |
| $\square$Preliminary analysis <br> $\square$ Knows <br> $\square$ Does not know |

## Attitudes

## Attitudes towards a health or nutrition-related problem

## 2 Giving birth/having a low-birth-weight baby

## Perceived susceptibility

How likely do you think you are to have a low-birth-weight baby?
$\square$ 1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think it is for your baby to have a low-birth-weight?1. Not serious2. You're not sure
$\square$ 3.Serious
If Not Serious:
Can you tell me the reason why it is not serious?

## Attitudes towards an ideal or desired nutrition-related practice

## 1 Eating more food during pregnancy: eating more at each meal or eating more frequently or having more snacks during the day

## Perceived benefits

How good do you think it is to eat more food during pregnancy?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to eat more food during pregnancy?1. Not difficult2. So-so3. Difficult

## If Difficult:

Can you tell me the reasons why it is difficult?

## MODULE 5: Undernutrition

Explain to the participant:
I am going to ask you some questions about undernutrition. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Knowledge

## 1 Question K.1: Signs of undernutrition

How can you recognize that someone is not having enough food?
Probe if necessary:
What are the signs of undernutrition?

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## Question K.2: Causes of undernutrition

What are the reasons why people are undernourished?Not getting enough foodFood is watery, does not contain enough nutrientsDisease/ill and not eating food
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

What are the reasons why people do not get enough food?
$\qquad$
$\square$ Not having enough money to buy food
$\square$ Food is not available
$\square$ Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

Question K.3: Seeking growth monitoring for infants and young children
How can you (caregiver) find out if the baby is growing well or not?
Probe if necessary:
Who can help the mother to find out if the baby is growing well? Where can she go?
$\qquad$
$\square$ Go to the health centre/ask a doctor or nurse (health professional)(seeking health-care services for growth monitoring)OtherDon't know


2
Question K.4: Meaning of lack of weight gain among infants and young children

Families and health workers can find out if children are well nourished or malnourished by weighing them regularly and plotting their weights on growth charts.
If the baby is not gaining weight, what does that mean?
If no answer, probe:
What could be the causes?
$\qquad$
$\qquad$
$\square$ The baby is not eating well/the baby does not want to eat
$\square$ The baby may be sick often
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses

What should we do to prevent undernutrition among [population of interest]?

Infants (0-6 months)Breastfeed exclusively/give only breastmilk
$\square$ Go to the health centre/hospital and check that the child is growing (growth monitoring services)

Young children (6-23 months)Give more foodFeed frequentlyGive attention during meals
$\square$ Go to the health centre/hospital and check that the child is growing (growth monitoring services)OtherDon't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses

## Attitudes <br> Attitudes towards a health or nutrition-related problem

## 1 <br> Undernutrition

## Perceived susceptibility

How likely do you think your child is to be undernourished, that is they stop growing or lose weight?1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think undernutrition is for a baby's health?1. Not serious2. You're not sure3. Serious

If Not Serious:
Can you tell me the reason why it is not serious?

## MODULE 6: Iron-deficiency anaemia

Explain to the participant:
I am going to ask you some questions about anaemia and iron-rich foods. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Knowledge

## 1 Question K.1: General signs of iron-deficiency anaemia

Have you heard about iron-deficiency anaemia?YesNoDon't know/no answer
If Yes:
Can you tell me how you can recognize someone who has anaemia?

|  |
| :--- |
| $\square$ Less energy/weakness |
| $\square$ Paleness/pallor |
| $\square$ Spoon nails/bent nails (koilonychia) |
| $\square$ More likely to become sick (less immunity to infections) |
| $\square$ Other |
| $\square$ Don't know |

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

2 Question K.2: Consequences of iron-deficiency anaemia for infants and young children

What are the health risks for infants and young children of a lack of iron in the diet?
$\qquad$
$\qquad$Delay of mental and physical developmentOtherDon't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

## 2 Question K.3: Consequences of iron-deficiency anaemia for pregnant women

What are the health risks for pregnant women of a lack of iron in the diet?Risk of dying during or after pregnancyDifficult deliveryOtherDon't know

What causes anaemia?Lack of iron in the diet/eat too little, not muchSickness/infection (malaria, hookworm infection, other infection such as HIV/AIDS)Heavy bleeding during menstruationOtherDon't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

1 Question K.5: Prevention of anaemia
How can anaemia be prevented?Eat/feed iron-rich foods/having a diet rich in ironEat/give vitamin-C-rich foods during or right after mealsTake/give iron supplements if prescribedTreat other causes of anaemia (diseases and infections) - seek health-care assistance
$\square$ Continue breastfeeding (for infants 6-23 months old)OtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## 1 Question K.6: Iron-rich foods - easily absorbed ${ }^{5}$

Can you list examples of foods rich in iron?

Organ meatLiverKidneyHeart
[Add other locally available organ meat.]
Flesh meatBeefPorkLambGoatRabbitDogChickenDuck
[Add other locally available flesh meat.]
InsectsInsect larvaeRed antsGrasshoppers
$\square$ Crickets
[Add other locally available insects.]

[^2]```
Fish and seafood
```

```Fresh fish
```

```Dried fish
```

```Canned fish
```

```Prawns
```

```Shrimps
```

```Seafood
```


## [Add other locally available fish and seafood.]

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## 2 <br> Question K.7: Foods that increase iron absorption

When taken during meals, certain foods help the body absorb and use iron. What are those foods?
$\square$ Vitamin-C-rich foods, such as fresh citrus fruits (orange, lemons, etc.)

## [List locally available vitamin-C-rich foods.]

OtherDon't knowPreliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## 2 <br> Question K.8: Foods that decrease iron absorption

Some beverages decrease iron absorption when taken with meals. Which ones?


## Practices

## 1 Question P.1: Food-intake practices ${ }^{5}$

I would like to ask you about particular foods you may eat on their own or as part of a dish.

Yesterday, during the day and night, did you eat any of the following?
(Read the list of iron-rich foods and tick either yes or no for each food item)

Organ meat
LiverYesNo

KidneyNo
HeartYes
No
[Add other locally available organ meat.]
Flesh meat
BeefNo
PorkYes
LambYes
GoatYes

| Rabbit | $\square$ Yes | $\square$ No |
| :--- | :--- | :--- |
| Dog | $\square$ Yes | $\square$ No |
| Chicken | $\square$ Yes | $\square$ No |
| Duck | $\square$ Yes | $\square$ No |

## [Add other locally available flesh meat.]

Insects
Insect larvae $\quad \square$ Yes $\square$ No

Redants $\quad \square$ Yes $\square$ No
Grasshoppers $\square$ Yes $\square$ No
Crickets $\square$ Yes $\square$ No

## [Add other locally available insects.]

Fish and seafood

| Fresh fish | $\square$ Yes | $\square$ No |
| :--- | :--- | :--- |
| Dried fish | $\square$ Yes | $\square$ No |
| Canned fish | $\square$ Yes | $\square$ No |
| Prawns | $\square$ Yes | $\square$ No |
| Shrimps | $\square$ Yes | $\square$ No |
| Seafood | $\square$ Yes | $\square$ No |

[Add other locally available fish and seafood.]

Note: This can be asked for all the locally available iron-rich foods from the list but it is recommended to prioritize some of them; for example, those most often mentioned during the educational intervention.

## 2 <br> Question P.2: Consumption of vitamin-C-rich fruits

Do you usually eat fresh citrus fruits, such as [provide examples of locally available fresh citrus fruits], or drink juice made from them?YesNoDon't know/no answer
If Yes:
Every day?YesNoDon't know/no answer

When do you usually eat fresh citrus fruits? (Read the following options to the respondent)Before a mealDuring the mealAfter a meal
$\square$ Other (specify) $\qquad$
$\square$ Don't know/no answer

## 2

Question P.3: Consumption of coffee/tea
Do you usually drink coffee or tea?
$\square$ YesNoDon't know
If Yes:
Every day?NoDon't know

When do you usually drink coffee or tea? (Read the following options to the respondent)Two hours or more before a mealRight before a mealDuring the mealRight after a mealTwo hours or more after a mealOther (specify) $\qquad$Don't know/no answer

## Attitudes

Attitudes towards a health or nutrition-related problem

## 1 <br> Iron-deficiency anaemia

## Perceived susceptibility

How likely do you think your child is to be iron-deficient/anaemic?

## OR

How likely do you think you are to be iron-deficient/anaemic?
$\square$ 1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think iron-deficiency/anaemia is?1. Not serious2. You're not sure3. Serious

If Not Serious:
Can you tell me the reason why it is not serious?
$\qquad$
$\qquad$

## Attitudes towards an ideal or desired nutrition-related practice

## 1 Preparing meals with iron-rich foods

## Perceived benefits

How good do you think it is to prepare meals with iron-rich foods such as beef, chicken or liver?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to prepare meals with iron-rich foods?1. Not difficult2. So-so
$\square$ 3. Difficult
If Difficult:
Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

## Self-confidence

How confident do you feel in preparing meals with iron-rich foods?1. Not confident
$\square$ 2. Ok/so-so
$\square$ 3. Confident
If Not confident:
Can you tell me the reasons why you do not feel confident?

## Attitudes towards food preference

## 3 Food preferences

How much do you like the taste of [iron-rich food item or meal]?1. Dislike2. You're not sure3. Like

## MODULE 7: Vitamin A deficiency

Explain to the participant:
I am going to ask you some questions about vitamin A and food rich in vitamin A. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Knowledge

## 1 Question K.1: Signs of vitamin A deficiency

Have you heard about vitamin A deficiency or lack of vitamin A?
$\square$ Yes
$\square \mathrm{No}$
$\square$ Don't know/no answer

If Yes:
Can you tell me how you can recognize someone who lacks vitamin $A$ in his or her body?
$\square$ Weakness/feels less energetic
$\square$ Be more likely to become sick (less immunity to infections)
$\square$ Eye problems: night blindness (inability to see at dusk and in dim light), dry eyes, corneal damage, blindnessOtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

2 Question K.2: Causes of vitamin A deficiency
What causes a lack of vitamin $A$ in the body?Poor variety of foodsEat too little food/not eat much (poor intake)Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

1 Question K.3: Prevention of vitamin A deficiency
How can one prevent a lack of vitamin A in the body?
$\qquad$
$\qquad$Eat/feed vitamin-A-rich foods - having/giving a diet rich in vitamin A
$\square$ Eat/feed foods fortified with vitamin A
$\square$ Give vitamin A supplements/sprinkles
$\square$ Other
$\square$ Don't know

## Preliminary analysis

KnowsDoes not knowNumber of correct responses $\qquad$

## 1 Question K.4: Food sources of vitamin $A^{5}$

Can you list examples of foods rich in vitamin A?
Probe if necessary:
Do you know of any animal-source foods, vegetables or fruits that are rich in vitamin A?

Animal-source foodsLiverKidneyHeart
$\square$ Egg yolks/egg from chicken, duck, guinea fowl or other bird
$\square$ Milk, cheese, yogurt or other dairy product
Orange-coloured vegetablesOrange sweet potatoCarrotPumpkinSquash
[Add other locally available vitamin-A-rich vegetables (e.g. red sweet pepper).]

Green vegetablesAmaranths, spinach, cassava leaves, kale and other green leafy vegetables
[Add locally available vitamin-A-rich leaves.]
Fruits (orange- or yellow-coloured non-citrus fruits)Ripe mangoRipe papayaCantaloupeApricotDried peach
[Add other locally available vitamin-A-rich fruits.]Red palm oil
[Add other locally available vitamin-A-rich foods.]

Foods fortified with vitamin A
[Add locally available foods fortified with vitamin A (for example, oils, fats and sugar).]

Other foods
$\square$ Breastmilk (for infants 0-6 months)
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## Practices

## 1 Question P.1: Food-intake practices ${ }^{2}$

I would like to ask you about particular foods you may eat on their own or as part of a dish.

Yesterday, during the day and night, did you eat any of the following foods?
Read the list of vitamin-A-rich foods and tick yes or no for each food item
Animal-source foods
LiverYesNo

KidneyYesNo

HeartYesNo

Egg yolks/egg from chicken, duck, guinea fowl or other birdYes No

Milk, cheese, yogurt or other dairy productsNo

Orange-coloured vegetables
Orange sweet potatoYesNo

CarrotYesNo

PumpkinYesNo

SquashYesNo

## [Add other locally available vitamin-A-rich vegetables (e.g. red sweet pepper).]

Green-leafy vegetables
Amaranths, spinach and other green leafy vegetables:YesNo
[Add locally available vitamin-A-rich leaves.]
Fruits (orange- or yellow-coloured non-citrus fruits)
Ripe mangoYesNo

Ripe papayaYesNo

CantaloupeYesNo

ApricotYesNo
Dried peachYesNo

## [Add other locally available vitamin-A-rich fruits.]

Red palm oilYesNo

Foods fortified with vitamin A
[List locally available foods fortified with vitamin A (e.g. oils, fats and sugar).]

Note: This can be asked for all locally available vitamin-A-rich foods from the list but it is recommended to prioritize some of them; for example, those most often referred to during the educational intervention.

## Attitudes

Attitudes towards a health or nutrition-related problem

## 1 Vitamin A deficiency

## Perceived susceptibility

How likely do you think your child is to lack vitamin A in his/her body?

## OR

How likely do you think you are to lack of vitamin A in your body?1. Not likely2. You're not sure3. Likely

If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think a lack of vitamin $A$ is?
$\square$ 1. Not serious
$\square$ 2. You're not sure
$\square$ 3. Serious
If Not serious:
Can you tell me the reason why it is not serious?

## Attitudes towards an ideal or desired nutrition-related practice

## 1 Preparing meals with vitamin-A-rich foods

## Perceived benefits

How good do you think it is to prepare meals with vitamin-A-rich foods such as carrots, green leafy vegetables, sweet potatoes or liver?
$\square$ 1. Not good
$\square$ 2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to prepare meals with vitamin-A-rich foods?
$\square$ 1. Not difficult
$\square$ 2. So-so
$\square$ 3. Difficult
If Difficult:
Can you tell me the reasons why it is difficult?

## Self-confidence

How confident do you feel in preparing meals with vitamin-A-rich foods?1. Not confident
$\square$ 2.Ok/so-so
$\square$ 3. Confident
If Not confident:
Can you tell me the reasons why you do not feel confident?
$\qquad$
$\qquad$

## Attitudes towards food preference

## 3 Food preferences

How much do you like the taste of [insert a vitamin-A-rich food item or meal]?
Do you dislike it, you neither like it nor dislike it (neutral) or do you like it?1. Dislike2. Neutral3. Like

## MODULE 8: Iodine deficiency

Note: It is important, mainly for pregnant women, that meals are prepared with iodized salt to prevent the development of goitre and to prevent mental and physical impairment of the unborn child. However, it will be necessary to reinforce the message of using salt moderately, because a high consumption of salt is related to hypertension.

## Explain to the participant:

I am going to ask you some questions about iodine deficiency. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## 1 <br> Question P.1: Use of iodized salt ${ }^{6}$

Did you use salt to cook the main meal eaten by members of your family last night?
$\square$ No
$\square$ Don't know/no answer
If Yes:
What kind of salt did you use? (If possible, ask the respondent to show you the salt.)
$\square$ lodized
$\square$ Not iodized
$\square$ No salt at homeDon't know/no answer

[^3]
## Knowledge

## 1 Question K.1: Signs of iodine deficiency

Do you know what iodine deficiency is?
Probe if necessary:
Have you heard about iodine deficiency?YesNoDon't know/no answer
If Yes:
Can you tell me what it is?
Probe if necessary:
Can you describe the signs of a lack of iodine in the body?Apathy (lack of motivation and excitement)Having difficulty working or studyingGoitreOtherDon't know

Preliminary analysis
$\square$ KnowsDoes not know

Number of correct responses

## 1 Question K.2: Consequences for the unborn baby

What could be the consequences or health risks for the unborn baby of a lack of iodine in the diet of a pregnant woman?
$\qquad$Risk of being mentally impairedRisk of being physically damagedOtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## 2 Question K.3: Cause of iodine deficiency

What causes iodine deficiency?
$\qquad$
$\qquad$Poor or no intake of iodized saltOther
$\square$ Don't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

## Question K.4: Prevention of iodine deficiency

How can iodine deficiency be prevented?Eat/prepare foods with iodized saltOtherDon't know
Preliminary analysis
$\square$ KnowsDoes not know

## Attitudes

## Attitudes towards a health or nutrition-related problem

## 1 lodine deficiency

## Perceived susceptibility

Note: The question is most relevant for pregnant women.

How likely do you think your child is to lack iodine?
OR
How likely do you think you are to lack iodine?1. Not likely2. You're not sure3. Likely

If Not likely:
Can you tell me the reason why it is not likely?
$\qquad$
$\qquad$

## Perceived severity

How serious do you think a lack of iodine in the body is?1. Not serious2. You're not sure3. Serious

If Not Serious:
Can you tell me the reason why it is not serious?
$\qquad$
$工$

## Attitudes towards an ideal or desired nutrition-related practice

## 1 Preparing meals with iodized salt

## Perceived benefits

How good do you think it is to prepare meals with iodized salt?1. Not good2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to buy and use iodized salt?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

## MODULE 9: Food safety

Explain to the participant:
I am going to ask you some questions about food safety. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## 1 Question P.1: Cleaning of dirty surfaces, plates and utensils

After you have prepared dinner, kitchen surfaces, pots, pans, plates and utensils are dirty. Can you describe how you clean them usually?
$\square$ Scrape excess food into rubbish binWash with hot waterWash with detergentDon't know/no answer

## Preliminary analysis

$\square$ Knows
$\square$ Does not know
Number of correct responses $\qquad$

## 1 Question P.2: Storage of perishable foods

How do you store perishable fresh foods such as raw meat, poultry and seafood?
$\qquad$
$\qquad$
$\square$ In the refrigerator (below $5^{\circ} \mathrm{C}$ )/cool box
$\square$ Covered (protected from insects, rodents, pests and dust)
$\square$ Separated from cooked or ready-to-eat foods
$\square$ Other
$\square$ Don't know/no answer
Preliminary analysis
$\square$

Number of correct responses $\qquad$

## Knowledge

## 1 Question K.1: Separation of raw and cooked foods

Why should you prevent raw meat, offal, poultry and seafood from touching other foods such as those that are cooked or ready to eat?
$\qquad$Raw animal foods often contain germs (which may be transferred to cooked and ready-to-eat foods)
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

## 1 Question K.2: Cooking thoroughly

When cooking soups and stews, what sign shows that these are ready and safe to be served?
$\square$ They are boiling/well cooked
$\square$ OtherDon't know

Preliminary analysis
$\square$ Knows
$\square$ Does not know

## 2 Question K.3: Storage of perishable foods

What kinds of food should be placed in the refrigerator or in a cool place, such as an icebox or cool box?

Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses

## Question K.4: Storage of leftovers in a cool/cold place

Why should someone avoid eating leftovers that were not kept in a cool place?


Question K.5: Washing raw fruits and vegetables
What should you do before eating raw fruits and vegetables?Wash them with clean waterOther

| Preliminary analysis |
| :--- |
| $\square$ Knows |
| $\square$ Does not know |

## Attitudes <br> Attitudes towards a health or nutrition-related problem

## 1 <br> Food poisoning/sickness from eating spoiled food

## Perceived susceptibility

How likely do you think you are to get sick from eating spoiled food?
$\square$ 1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think it is to be sick from eating spoiled food?1. Not serious2. You're not sure3. Serious

If Not Serious:
Can you tell me the reason why it is not serious?
$\qquad$
$\qquad$

## Attitudes towards an ideal or desired nutrition-related practice ${ }^{7}$

## 1 Keeping perishable food in a cool place, for example in a cool box or in the refrigerator

## Perceived benefits

How good do you think it is to keep meat, poultry, fish, seafood or cooked food in a cool place, for example in a cool box or in the refrigerator?1. Not good2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to keep these foods in a cool box or in the refrigerator?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

[^4]
## 1 <br> Reheating leftovers before eating them

## Perceived benefits

How good do you think it is to reheat leftovers before eating or serving them?
$\square$ 1. Not good
$\square$ 2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to reheat leftovers before eating or serving them?1. Not difficult
$\square$ 2. So-so
$\square$ 3. Difficult
If Difficult:
Can you tell me the reasons why it is difficult?

## 2 Washing fruits and vegetables with clean water

## Perceived benefits

How good do you think it is to wash fruits and vegetables with clean water?1. Not good2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?
$\qquad$
$\qquad$

## Perceived barriers

How difficult is it for you to wash fruits and vegetables with clean water?
$\square$ 1. Not difficult
$\square$ 2. So-so
$\square$ 3. Difficult

## If Difficult:

Can you tell me the reasons why it is difficult?

## MODULE 10: Personal hygiene

Explain to the participant:
I am going to ask you some questions about personal hygiene. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## 1

Question P.1: Method of hand washing
Could you please describe step by step how you wash your hands?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\square$ a. Washes hands in a bowl of water (sharing with other people) - poor practice
$\square$ b. With someone pouring a little clean water from a jug onto one's hands - appropriate practicec. Under running water - appropriate practiced. Washes hands with soap or ashes
$\square$ Other
$\square$ Don't know/no answer

## Preliminary analysis

$\square$ If both b and d are ticked: the respondent knows to wash his/her hands (with clean water and soap)
$\square$ If both c and d are ticked: the respondent knows to wash his/her hands (with clean water and soap)
$\square$ If other responses are ticked (a or other): the respondent does not know to wash his/her hands (with clean water and soap)

## Knowledge

## 1 <br> Question K.1: Prevention of food poisoning from germs from faeces

Food poisoning often results from contact with germs from faeces.
What can you do to avoid sickness from germs from human or animal faeces?
$\square$ Wash hands (after going to the toilet and cleaning the baby's bottom)Remove faeces from the home and surroundings (use a latrine, teach small children to use a potty and put children's faeces in the latrine, and clean up faeces from animals)OtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## 1 Question K.2: Key moments for hand washing

There are key moments when you need to wash your hands to prevent germs from reaching food.

What are these key moments?
$\square$ After going to the toilet/latrine
$\square$ After cleaning the baby's bottom/changing a baby's nappy
$\square$ Before preparing/handling food
$\square$ Before feeding a child/eating
$\square$ After handling raw food
$\square$ After handling garbage
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses

## Attitudes

Attitudes towards a health or nutrition-related problem

## 2 Sickness from not washing hands

## Perceived susceptibility

How likely do you think you are to become sick, such as having stomach ache or diarrhoea, from not washing your hands?

OR
How likely do you think it is that your child will become sick, such as having stomach ache or diarrhoea, from you not washing your hands?
$\square$ 1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think it is if you or your child gets sick from you not washing your hands?

OR
How serious do you think diarrhoea is for your health?
OR
How serious do you think is diarrhoea for a baby's health?
$\square$ 1.Not really serious2. Neutral/unsure3. Serious

## If Not Serious:

Can you tell me the reason why it is not serious?
$\qquad$
$\qquad$

## Attitudes towards an ideal or desired nutrition-related practice

## 1 Washing one's hands

## Perceived benefits

How good do you think it is to wash your hands before preparing food?
OR
How good do you think it is to wash your hands before feeding a child/eating?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to wash your hands before preparing food?

## OR

How difficult is it for you to wash your hands before feeding a child/eating?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

## 1 Self-confidence

How confident do you feel in washing your hands properly?
$\square$ 1. Not confident2. Ok/so-so3. Confident

If Not confident:
Can you tell me the reasons why you do not feel confident?

## MODULE 11: Water and sanitation

Explain to the participant:
I am going to ask you some questions about water and sanitation. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## 1 Question P.1: Main source of water for drinking, cooking and hand washing ${ }^{8}$

What is the main source of water used by your household for drinking, cooking and hand washing?

|  |  |
| :--- | :--- |
| $\square$ | Piped water |
|  | $\square$ Piped into dwelling |
|  | $\square$ Piped into yard or plot |
|  | $\square$ Public tap/standpipe |
| $\square$ | Tube well/borehole |
| $\square$ | Dug well |
|  | $\square$ Protected well |
|  | $\square$ Unprotected well |
| $\square$ | Water from spring |
|  | $\square$ Protected spring |
|  | $\square$ Unprotected spring |
| $\square$ | Rainwater collection |
| $\square$ | Tanker-truck |
| $\square$ | Cart with small tank/drum |
| $\square$ | Surface water (river, stream, dam, lake, pond, canal, irrigation channel) |
| $\square$ | Bottled water |
| $\square$ | Other (specify) |
| $\square$ | Don't know |

[^5]A. Do you collect water for domestic use?Yes $\qquad$ Go to question P.2B.No. $\qquad$ Go to question P.3.
B. What item do you use to collect water?
C. To know if the item is clean probe: Did you treat this item in any way to make it clean?
$\square$ Yes
$\square$ No
$\square$ Don't know
If Yes:
How?
$\qquad$
$\qquad$
Use of water and soap (clean container)OtherDon't know/no answer

## 2 Question P.3: Storage of water

Could you describe how you store water?
$\qquad$
$\qquad$
$\qquad$
$\qquad$Clean container or jarCovered container or jarClean and covered container or jarOther
$\square$ Don't know/no answer

## 1 Question P.4: Treatment of water to make it safe to drink ${ }^{8}$

Do you treat your water in any way to make it safe to drink?YesNoDon't know/no answer
If Yes:
What do you usually do to the water to make it safer to drink?Boil itAdd bleach/chlorineStrain it through a clothUse a water filter (ceramic, sand, composite, etc.)Use solar disinfectionLet it stand and settleOtherDon't know/no answer
Anything else? (Record all items mentioned)

## Knowledge

## 1 Question K.1: Treating unsafe water

If you know that the water you are going to use for cooking or drinking is not safe or does not come from a safe source, what should you do?Boil it
ORAdd bleach/chlorine
ORStrain it through a cloth
OR
$\square$ Use a water filter (ceramic, sand, composite, etc.)
ORUse solar disinfection
ORLet it stand and settle
ORDiscard it and get water from a safe sourceOtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

## Attitudes <br> Attitudes towards a health or nutrition-related problem

## 2 Diarrhoea from using unsafe water

## Perceived susceptibility

How likely do you think you are to get diarrhoea from using unsafe water?
OR
How likely do you think your child is to get diarrhoea from using unsafe water?
$\square$ 1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think it is to get sick from using unsafe water?1. Not really serious2. Neutral/serious3. Serious

If Not serious:
Can you tell me the reason why it is not serious?

## Attitudes towards an ideal or desired nutrition-related practice

## 1 Boiling water before drinking or using it

## Perceived benefits

How good do you think it is to boil water before drinking or using it?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to boil water before drinking or using it?1. Not difficult2. So-so3. Difficult

If Difficult:
Can you tell me the reasons why it is difficult?

## Self-confidence

How confident do you feel in boiling water before drinking or using it?1. Not confident2. Ok/so-so3. Confident

If Not confident:
Can you tell me the reasons why you do not feel confident?
$\qquad$
$\qquad$

## MODULE 12: Food-based dietary guidelines

Explain to the participant:
I am going to ask you some questions about the national food-based dietary guidelines
[provide name of the local FBDG]. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Knowledge

## 1 <br> Question K.1: Knowledge of the local food-based dietary guidelines

K.1A: Have you ever seen this image? (Show the image of the local FBDG.)Yes $\qquad$ Go to question K.1B.No. Go to question K.2.Don't know
K.1B: Could you tell me what it is?

## [insert the name of the local FBDG]

OtherDon't knowPreliminary analysisKnows
$\square$ Does not know

## Question K.2: Objective of food-based dietary guidelines

What is the [name of the local FBDG] good for?
If the respondent experiences difficulty to answer, probe:
Why do you think the [name of the local FBDG] exist?
$\square$ To help people to eat more healthily/have a healthy diet
OR
$\square$ To encourage people to eat foods from different food groups/have a diversified dietOtherDon't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

## 1 Question K.3: Different food groups

A. How many food groups are included in the [name of the local FBDG]?
$\qquad$
[insert the number of food groups]OtherDon't know
Preliminary analysisKnowsDoes not know
B. Can you name them?

## [list the different food groups into response options]

$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## 1 Question K.4: Examples of foods from each food group

Can you list three examples of foods in each food group?
Probe if necessary:
List three foods included in each food group.
[List the food groups of the local FBDG into pre-categorized response options.]
[food group]

$\square$ Other $\qquad$
$\square$ Don't know

## Question K.5: Dietary guidelines

In order to stay healthy, the [name of the local FBDG] provide general recommendations. Please name at least three of them.
[List specific dietary guidelines appearing in text form in the local FBDG into pre-categorized options.]
$\qquad$
$\qquad$
$\qquad$
$\qquad$OtherDon't know
Preliminary analysisKnows
$\square$ Does not know
Number of correct responses $\qquad$

## Attitudes

## 1 Perceived importance of following the FBDG

How important is it to follow the [name of local FBDG]?
OR
How important is it to [insert a recommendation from the FBDG]?1. Not important2. You're not sure3. Important

If Not important:
Can you tell me the reasons why it is not important?

2 Self-confidence
How confident do you feel in following the [name of local FBDG]?
OR
How confident do you feel in [insert a recommendation from the FBDG]?
$\square$ 1. Not confident
$\square$ 2. Ok/so-so
$\square$ 3. Confident
If Not confident:
Can you tell me the reasons why you do not feel confident?

## Practices

## 1 Question P.1: Intake and frequency of consuming foods from a specific food

 groupYesterday, during the day and night, did you consume any of the following foods (read the list of different food groups of the FBDG) such as (provide example)?
[List the food groups of the local FBDG into pre-categorized response options.]
[food group]Yes

If Yes:
Which ones?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
[food group] $\square$ Yes $\square$ No
If Yes:
Which ones?
etc.

## MODULE 13: Overweight and obesity

Note: Overweight and obesity are sensitive topics that should be handled with care.

Explain to the participant:
I am going to ask you some questions about overweight and obesity. We are asking these questions to various people in the community who were selected independently of their physical status or weight. Please let me know if you need me to clarify any of my questions. Feel free to ask any question you may have.

## Practices

## 1 <br> Question P.1: Assessment of dietary practices leading to overweight and obesity

Dietary practices leading to overweight and obesity are culture- and person-specific. For that reason, model questions may not be suitable to assess these practices in any context. Questions measuring dietary practices leading to overweight and obesity need to be developed based on the practices that are expected to be changed as a result of the nutrition intervention, such as the frequency of intake of specific foods or observable behaviours.

## Measurement of frequency of intake of a specific food item

For instance, if the aim of the intervention is to reduce the intake of soft drinks, then the frequency of intake of soft drinks among the survey population should be measured. Depending on the project and the context, the frequency of consumption of sugary foods (soft drinks and other locally available sugary foods) and fatty foods (fast foods and other locally available fatty foods) should be assessed.

Yesterday, during the day and night, did you consume [food item]?
[List the food items of interest into pre-categorized options.]
[food group] $\quad \square$ Yes $\square$ No
If Yes:
How many times each:
day? $\qquad$
week? $\qquad$
month?

## Measurement of specific observable behaviours

Dietary practices leading to overweight and obesity can also be assessed in terms of specific observable behaviours, such as buying or cooking practices, removing ingredients from a recipe, etc. Questions specific to the educational intervention should be created (see "Step 5: Prepare additional questions (optional step)," page 37 for precautions to take while preparing additional questions).

For example, if the aim of the intervention is to promote oil-free cooking methods, such as boiling and cooking in the oven, the following question could be added:

How do you usually cook chicken for your family?Fry itCook it in an ovenBoil it
$\square$ OtherDon't know/no answer

## 1 Question P.2: Assessment of physical-activity practices

Do you do any physical activity, that is any activity where your body moves over long time periods? For example, walking, running, harvesting, etc.? (Give other examples if necessary.)YesNoDon't know/no answer
If Yes:
Which one?
[Add any other type of physical activity that is performed in the region. For example, in rural areas physical activities could include collecting and transporting water or firewood, pasture/shepherd livestock, etc.]
$\square$ Walking
If Yes: How many minutes each:
day? $\qquad$
week? $\qquad$
month? $\qquad$
$\square$ Running
If Yes: How many minutes each:
day? $\qquad$
week? $\qquad$
month? $\qquad$
$\square$ Harvesting
If Yes: How many minutes each:
day? $\qquad$
week? $\qquad$
month? $\qquad$
$\square$ Any sport (specify) $\qquad$
If Yes: How many minutes each:
day? $\qquad$ week? $\qquad$
month? $\qquad$
$\square$ Other (specify) $\qquad$
If Yes: How many minutes each:
day? $\qquad$
week? $\qquad$
month? $\qquad$
$\square$ Don't know/no answer

## Knowledge ${ }^{9}$

1 Question K.1: Risks of overweight and obesity
What are the health problems that can occur when a person is overweight or obese?Increased risk of chronic conditions (such as heart/cardiovascular disease, high blood pressure and diabetes, stroke, certain types of cancer, respiratory difficulties, chronic musculoskeletal problems, skin problems and infertility)Reduced quality of lifePremature death
$\square$ Other
$\square$ Don't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

[^6]
## Question K.2: Causes of overweight and obesity

Can you tell me the reasons why people are overweight or obese?
$\qquad$Increased/excessive intake of energy-dense foods that are high in fat and/ or sugarLack of or decreased physical activity
$\square$ Other
$\square$ Don't know
Preliminary analysis
$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

Question K.3: Prevention of overweight and obesity
How can people prevent overweight and obesity?
$\square$ Reduce energy intake (less high-energy foods and drinks)/reduce the intake of fatty and sugary foodsEat vegetables and fruits more oftenEat legumes/whole-grain products more oftenIncrease physical activity level/engage in regular physical activityOtherDon't know

## Preliminary analysis

$\square$ Knows
$\square$ Does not know

Number of correct responses $\qquad$

## Attitudes

## Attitudes towards a health or nutrition-related problem

## 1 Overweight and obesity

## Perceived susceptibility

How likely do you think you are to become overweight or obese?
$\square$ 1. Not likely
$\square$ 2. You're not sure
$\square$ 3. Likely
If Not likely:
Can you tell me the reason why it is not likely?

## Perceived severity

How serious do you think it is to be overweight or obese?1. Not really serious2. Neutral/serious3. Serious

If Not reallly serious:
Can you tell me the reason why it is not really serious?

## Attitudes towards an ideal or desired nutrition-related practice

1 Eating less (e.g. have smaller portions, eat slowly and follow appetite/ satiety signals, eat less fatty and sugary foods, etc.)

## Perceived benefits

How good do you think it is to eat less, for example by eating smaller portions of food?1. Not good2. You're not sure
$\square$ 3. Good
If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to eat less?
$\square$ 1. Not difficult
$\square$ 2. So-so
$\square$ 3. Difficult
If Difficult:
Can you tell me the reasons why it is difficult?

## 1 Doing some (more) physical activity (e.g. walk for 30 minutes every day, play a sport, dance for 60 minutes each week, etc.)

## Perceived benefits

How good do you think it is to do some physical activity, such as walking for 30 minutes a day, running or doing a sport?1. Not good2. You're not sure3. Good

If Not good:
Can you tell me the reasons why it is not good?

## Perceived barriers

How difficult is it for you to do some physical activity/exercise?1. Not difficult2. So-so
$\square$ 3. Difficult

## If Difficult:

Can you tell me the reasons why it is difficult?
$\qquad$
$\qquad$

## Self-confidence

How confident do you feel in doing some physical activity/exercise?1. Not confident
$\square$ 2. Ok/so-so
$\square$ 3. Confident
If Not confident:
Can you tell me the reasons why you do not feel confident?
$\qquad$
$\qquad$

## Appendix 7:

## Examples of possible nutrition strategies for low KAP indicators ${ }^{10}$

| Low indicators for ... | Possible nutrition education strategies | Examples |
| :---: | :---: | :---: |
| Knowledge | - Build on the current knowledge and increase comprehension of participants through discussions, lectures, slides, presentations | Educational objective: <br> Increase knowledge about irondeficiency anaemia <br> Content and activities of educational sessions: <br> - Present signs of iron-deficiency anaemia, causes, health consequences, local statistics of prevalence and ways to prevent and treat it <br> - Conduct a group activity to identify iron-rich food sources |
| Attitudes |  |  |
| Perceived susceptibility | - Provide facilitated discussions of risk factors or threats leading to the problem | Educational objective: <br> Increase mothers' perception of young children's vulnerability to undernutrition <br> Content and activities of educational sessions: <br> - Present and discuss with the group factors leading to undernutrition: poor caring and feeding practices causing inadequate dietary intake and disease (plane and watery porridges, infrequent meals, poor hygiene practices, etc.) |
| Perceived severity | - Present health consequences of the problem through films, images, statistics and personal stories | Educational objective: <br> Increase awareness of the health risks of obesity <br> Content and activities of educational sessions: <br> - Present health, social and economic consequences of obesity and related chronic diseases |

[^7]| Attitudes |  |  |
| :---: | :---: | :---: |
| Perceived benefits | - Present scientific arguments in favour of the practice <br> - Generate group discussion to evaluate pros and cons <br> - Provide information about personal health benefits and benefits for the family or community | Educational objective: <br> Increase the perception of benefits of eating a diversity of foods <br> Content and activities of educational sessions: <br> - Present and discuss reasons for eating a diversity of foods and highlight key nutrients and health benefits |
| Perceived barriers | - Hold sessions for brainstorming and group discussion of barriers and ways to overcome them | Educational objective: <br> Decrease the perceived barriers to preparing a thick porridge <br> Content and activities of educational sessions: <br> - Guide a group discussion on the barriers to preparing a thick porridge <br> - Encourage participants to identify ways to overcome the barriers <br> - Hold a participatory cooking demonstration, guiding preparations of a thick porridge |
| Self-confidence | - Guide hands-on foodrelated activities: participatory cooking demonstrations, recipe preparation <br> - Hold sessions for brainstorming and group discussion of the perception of barriers and ways to overcome them | Educational objective: <br> Increase people's skill in cooking vitamin-A-rich vegetables in order to increase confidence in preparing and consuming them <br> Content and activities of educational sessions: <br> - Hold a participatory cooking demonstration: guided practice of cutting and boiling vegetables and incorporating them in a recipe |
| Perceived importance of following nutrition recommendations | - Hold sessions for brainstorming and group discussion of the importance of following a specific nutrition recommendation <br> - Presentation and discussion of scientific arguments in favour of he recommended practice | Educational objective: <br> Increase the perceived importance of the local food-based dietary guidelines (FBDG) <br> Content and activities of educational sessions: <br> - Encourage participants to present the FBDG and make specific recommendations <br> - Have a brainstorming session and generate a group discussion: "Which recommendations seem important to you? Which ones do not? Why?" <br> - Present arguments in favour of following specific recommendations |


| Attitudes |  |  |
| :---: | :---: | :---: |
| Food preferences | - Provide information about personal health benefits and benefits to the family or community of eating/ feeding a food or including it in meal preparation <br> - Facilitate participatory cooking demonstrations and food-tasting activities in order to increase acceptability of a specific food | Educational objective: <br> Increase acceptability of insects as a food to include in the preparation of children's porridge <br> Content and activities of educational sessions: <br> - Present the health benefits for children of consuming insects (i.e. development and growth). <br> - Guide cooking demonstrations of a porridge including insects and facilitate food tasting |
| Food taboos | - Provide facilitated discussions on specific food taboos <br> - Present evidence for optimal dietary practices through films, images, statistics and personal stories | Educational objective: <br> Modify the food taboo that states that consuming meat and eggs makes children steal <br> Content and activities of educational sessions: <br> - Facilitate a group discussion about a food taboo: "Who agrees? Who disagrees? Why?" <br> - Present arguments in favour of feeding children meat and eggs, including health benefits |
| Practices | - Address knowledge and attitudes to increase participants' ability to modify dietary or feeding practices and/or adopt new ones <br> - Guide hands-on foodrelated activities: participatory cooking demonstrations, recipe preparation | Educational objective: <br> Increase participants' skills in washing hands <br> Content and activities of educational sessions: <br> - Present the optimal way of washing hands <br> - Hold a participatory session of handwashing: Encourage participants to practice the good way of washing hands: clean water, soap, rub hands ... |

## Important

$\checkmark$ Messages intended to persuade people to adopt health and nutrition behaviours (i.e. passive provision of information) are not enough.
$\checkmark$ To make the content of the educational strategy memorable it is recommended to use visual and audio supports as much as possible: images, slides, films, personal histories, dialogues, etc.
$\checkmark$ Employ participatory methods such as group discussions, role plays, games or other group activities as much as possible. Also use other culturally appropriate methods, such as story-telling, songs and humour.

## Appendix 8:

## Qualitative methods - basic information on data collection and analysis

Qualitative methods are research methods used to understand and give meaning to a phenomenon, explore a problem or answer a question through people's narratives. As such, qualitative methods go beyond numerical data generated by quantitative methods (such as surveys) and provide a deeper understanding.

## Examples:

- Quantitative data: Forty percent of mothers do not feel confident in preparing an enriched porridge.
- Qualitative data: Mother said: "I feel that I am not able to prepare an enriched porridge because I have never done it before."
The most common qualitative methods are individual interviews and focus-group discussions.


## Interviews

## What is an interview?

An interview consists of asking an individual questions about a particular topic, listening attentively to their responses and exploring their views and experiences on specific matters to provide deep understanding (55).

## Preparation and planning

- Prepare for the interview by selecting questions from among those included in the KAP modules (if these address the priority issues you wish to inquire about) or develop new questions based on what you need to explore.
- Invite respondents individually to participate in an interview.
- Determine and schedule a meeting time and place convenient for the respondent. Reconfirm before the interview


## Key instructions for interviewers

- Obtain the respondent's informed consent; continue only if the respondent agrees to participate. Complete the sociodemographic questionnaire (see Appendixes 3, 4 and 5).
- Ask interview questions in a friendly manner to build trust between you and the respondent; this will encourage the respondent to give useful and truthful answers.
- Allow the respondent to express him- or herself. Wait a moment after having asked a question to give him/her time to respond to the question.
- Record all information obtained in the interview using a voice recorder or by taking detailed notes.
- Make notes about relevant issues that were raised during the interview, such as non-verbal or emotional reactions of the respondent or the environment in which the interview took place. Note any influence you may have had on the interview.
- Thank the participant at the end of the interview.
- Review all your notes at the end of the interview while the information is fresh in your mind. Fill in any gaps in the information recorded.


## Focus-group discussions

## What is a focus-group discussion?

A focus group is a group interview where participants are encouraged to talk to one another, ask questions, comment on others' experiences and points of view and exchanging anecdotes (55). The focus group is guided by an interviewer who asks questions previously developed.

## Preparation and planning

- Prepare for the focus-group discussion by selecting questions from among those included in the KAP modules (if these address the priority issues you wish to inquire about) or develop new questions based on what you need to explore.
- Invite respondents to participate in a focus-group discussion. The idea is to bring together a small, homogeneous group of people of similar age, socio-economic background and experiences. There should be six to eight participants in each focus group.
- Determine and schedule a meeting time convenient for all participants.
- Find a place to hold the focus-group discussion.
- Reconfirm attendance of participants before the sessions.
- In addition to the interviewer, you will need two note takers for each focus group. You may need an additional person to take care of children during the focus-group discussion.


## Key instructions for interviewers

- Greet the respondents and thank them for attending the meeting. It is important to greet and welcome the participants to make them feel comfortable; this will encourage them to participate with enthusiasm and trust.
- Obtain the participants' informed consent; continue only if the respondents agree to participate. Complete a sociodemographic questionnaire for each respondent. The interviewer and both note takers can complete the forms (see Appendixes 3, 4 and 5).
- As an ice-breaking activity, encourage participants to introduce themselves one at a time.
- Encourage respondents to share their views and experiences and to comment on each other's responses.
- Ask questions in a friendly manner to build trust between you and the participants; this will encourage them to give useful and truthful answers.
- Give respondents time to express themselves. Wait a moment after asking a question to give them time to respond.
- After one respondent finishes speaking, encourage other respondents to participate, for example by asking "What do the others have to say? Are your experiences similar or different?"
- Record all information obtained in the interview, using a voice recorder or by taking detailed notes.
- Make notes about relevant issues that were raised during the focus group discussion, such as non-verbal or emotional reactions of the respondent or the environment in which the interview took place. Note any influence you may have had on the group discussion. Also note how group interactions may have influenced the participation of individual participants.
- Thank the participants at the end of the interview.
- Review all your notes at the end of the focus group discussion while information is fresh in your mind. Fill in any gaps in the information recorded.


## Analysis of qualitative data

## Summarize responses by question

Each question assesses a specific aspect of the respondents' KAP or external factors affecting practices. The first step of analysis consists in summarizing the responses of all participants for each question.

## Count the frequency of the same types of responses

Responses to a given question will differ from one respondent to another. You will therefore have to classify or categorize the answers received and then count how many respondents gave each type of response. This will give some perspective on how common particular kinds of views and experiences were.

## Provide evidence from data collected

One (maximum two) quotes of respondents' narratives should accompany each summary so as to illustrate the findings. For example: Mother: "At home, my mother helps me feed my child because I have to work and I don't have time to prepare food and feed my baby."

Having physical and economic access to food on their own are not sufficient to ensure that people are food secure and well nourished. It is essential that people understand what constitutes a healthy diet; in particular, what nutrition-related health issues affect their communities and how to address these through food-based approaches, and know how to make the best use of their resources. They should also have positive attitudes towards nutrition, diet, foods and closely related hygiene and health issues to be able to perform optimal dietary and feeding practices that ensure their nutritional wellbeing and that of their families.

The Guidelines for assessing nutrition-related knowledge, attitudes and practices is a reference guide and practical tool for conducting high-quality surveys of nutrition- and health-related knowledge, attitudes and practices (KAP) at the community level.

The manual is written for people in charge of planning, implementing and evaluating food security and nutrition projects; these include project managers, nutritionists, health workers, planning and evaluation specialists and many others.

The manual includes definitions and key indicators for nutrition- and health-related knowledge, attitudes and practices. It provides useful guidance for planning and conducting a KAP survey, and for analysing and reporting the survey results.

The manual also provides model questionnaires (modules). These can be used to facilitate the design of KAP survey questionnaires. Using them contributes to the standardization of KAP studies and the comparability of their results. The modules comprise predefined questions that capture information on critical knowledge, attitudes and practices related to the 13 most common nutrition topics:

- Module 1: Feeding infants younger than 6 months
- Module 2: Feeding young children (6-23 months)
- Module 3: Diet of school-aged children
- Module 4: Nutrition during pregnancy and lactation
- Module 5: Undernutrition
- Module 6: Iron-deficiency anaemia
- Module 7: Vitamin A deficiency
- Module 8: Iodine deficiency
- Module 9: Food safety
- Module 10: Personal hygiene
- Module 11: Water and sanitation
- Module 12: Food-based dietary guidelines
- Module 13: Overweight and obesity


[^0]:    ${ }^{3}$ Questions adapted with permission from WHO's infant and young-child feeding module taken from: WHO. 2010. Indicators for assessing infant and young child feeding practices - Part 2: Measurement. Geneva, Switzerland: World Health Organization.

[^1]:    4 Questions adapted with permission from WHO's infant and young child feeding module taken from: WHO. 2010. Indicators for assessing infant and young child feeding practices - Part 2: Measurement. Geneva, Switzerland: World Health Organization.

[^2]:    5 The list of iron-rich foods and vitamin-A-rich foods were adapted from the FAO. 2011. Guidelines for measuring household and individual dietary diversity, by G. Kennedy, T. Ballard \& M.C. Dop. Rome.

[^3]:    6 Question adapted from MICS3- Household questionnaire (UNICEF, 2005), available at: www.childinfo.org/mics3_background.html

[^4]:    7 For additional practices to inquire on, refer to WHO. 2006 Five Keys to Safer Food Manual, Geneva, Switzerland: World Health Organization (available at: www.who.int/foodsafety/ consumer/5keysmanual/en/).

[^5]:    8 Question adapted from MICS3-Household questionnaire (UNICEF, 2005), available at: www.childinfo.org/mics3_background.html

[^6]:    9 Answers to the knowledge questions were taken from the WHO Fact Sheet N ${ }^{\circ} 311$, Obesity and Overweight, which appeared in May 2012 and is available at:
    www.who.int/mediacentre/factsheets/fs311/en/

[^7]:    10 Adapted from 15.

