THE NATIONAL FOOD CONSUMPTION SURVEY IN CHILDREN
AGED 1-9 YEARS: SOUTH AFRICA, 1999

A VIDEO TRAINING PRESENTATION FOR
CO-ORDINATORS AND FIELD WORKERS
ACKNOWLEDGEMENTS

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1. INTRODUCTION

This video presentation has been compiled on behalf of the Department of Health to assist in the training of the field workers who will participate in the National Food Consumption Survey in children 1 to 9 years of age.

The National Survey will be conducted in all the provinces of South Africa in order to collect important information about children aged 1-9 years, regarding their nutritional status, food consumption patterns and household food security.

In order for you, the field worker, to collect the data for the survey, the Heads of nine universities’ Departments of Human Nutrition, who are also the Directors of the survey, have compiled 5 questionnaires.

Let me introduce you to the group of Directors. They are:

- Prof D Labadarios (Chairman) (University of Stellenbosch)
- Prof A Dannhauser (University of the Free State)
- Ms G Gericke (University of Pretoria)
- Mrs H Huskisson (University of Cape Town)
- Prof E Maunder (University of Natal)
- Mr E Nesamvuni (MEDUNSA)
- Prof N Steyn (University of the North)
- Ms R Swart (University of the Western Cape)
- Prof H Vorster (University of Porchefstroom CHO)

Now, let me explain your role as a field worker in this survey:

You will work in small groups, which will be supervised by a group leader. All groups of field workers and group leaders will be supervised by a coordinator. Both the group leaders and the coordinator will be there to guide and support you throughout the survey. During the time of the fieldwork you will drive or be taken to the area and house which you are to visit.
At each house included in your list you will interview, in the first instance, the mother of the child who has been included in your sample. If the mother of the child is not available, please conduct the interview with the caregiver of the child. Your coordinator will show you how to randomly select the houses in your area as well as how to select a child in each selected house. At all times during the survey, we expect you to be friendly and respectful towards the people whom you are interviewing. We would like you to follow this procedure at each house you visit:

- Introduce yourself to the mother (or caregiver).
- Explain briefly that you are collecting important information on children on behalf of the Department of Health; that her house has been randomly selected; and that you need information about one of the children in her household.
- Assure her of the confidentiality of the information she gives you and the importance of answering truthfully.
- Do not lead her or put words in her mouth. Do not educate her about nutrition while you are conducting the interview, otherwise she may say what she thinks she should say and not what the actual situation is in the household.

In conducting the actual interviews, please bear the following essential and basic points in mind:

- Ask the questions as they are written in the questionnaires. Try to keep the tone of your voice the same for each interviewee, so as not to lead the interviewee or to give him/her an idea of how you want him/her to answer. You may have to explain a question or use different wording, if the participant cannot understand it. You may need to translate the question into the home language of the interviewee. It is essential that the interviewee understands the question you are asking.
- Ask the questions in the order that they appear in the questionnaires. If the interviewee refuses to answer a question, record the lack of response and go on to the next question.
Strictly follow the instructions in the questionnaires. Not all questions are relevant to all participants. For example, if the child does not eat a certain food, then do not ask how the food is prepared.

Do not in any manner influence the way the participant answers a question. Keep your facial expression friendly and interested, but neutral. Never show surprise or shock or approval towards the participant’s answers. Try to avoid unconscious reactions, such as nodding the head, frowning, raising the eyebrows. Never give your own opinion(s) or advise the participant.

Keep the tone of the interview conversational. Be friendly and courteous. Do not make the participant feel as if he/she is taking an examination or is on trial. Be familiar with the questionnaires, so that you can ask questions conversationally rather than reading them with a stiff tone. The questionnaires are designed to keep the amount of writing to a minimum. However, if a participant gives a long response to a question, say, “Excuse me while I write that down”. Don’t make the participant feel as though you have forgotten he/she is there.

Keep control of the interview at all times. Do not let the participant go off into irrelevant conversation. If he/she does so, bring her gently back to the interview.

Allow the participant time to think, do not hurry him/her to answer. However, if he/she is silent for too long, repeat the question, or ‘prompt’ him/her. For example, say “you have told me how you cook cabbage, now please tell me how you cook pumpkin”.

Follow the instructions in the questionnaires for recording the interviewee’s responses. Record all responses, including negative responses or refusals to answer.

Write very clearly. Someone has to be able to read your writing!!

MAKE SURE that you write the demographic information at the top of the first page of each questionnaire.

Before we come to the questionnaires, please do the following exercise:

Do a role-play with another fieldworker to practise introducing yourself to a woman of a house and to explain the purpose of the survey to her. Your
coordinator will watch and give you hints for doing it correctly. Continue reading this document, when you have finished with the role-play until you are sure you can introduce yourself properly.

During each interview you conduct, you will complete the following questionnaires in this prescribed order:

1. The Socio-demographic Questionnaire
2. The 24-hour-recall Questionnaire
3. The Quantitative Food Frequency Questionnaire
4. The Food Procurement and Household Inventory Questionnaire, and
5. The Hunger Scale

To make your task easier we will also supply you with the following:

   **A Manual:** This contains detailed information regarding each questionnaire. If you are unsure about a question or any aspects of the questionnaires, you can refer to your Manual.

   **A food models kit:** This contains examples of model foods and will assist you in collecting information on the types of foods eaten and portion sizes.

   **Equipment:** You will use these for the determination of the nutritional status of the child. A scale, a measuring rod (for height), a length measuring board (for length) and a tape measure are included. The procedures you must follow in taking these measurements will be explained to you later in this video presentation.

**Each questionnaire will now be explained to you in detail:**

Let us start with the first questionnaire:

**2. THE SOCIO-DEMOGRAPHIC QUESTIONNAIRE**

The first part of this questionnaire comprises questions, which you will ask the mother or caregiver. The second part of the questionnaire requires you to measure and weigh the child. I will explain the first part of the questionnaire
and then Dan Monyeki will demonstrate the weighing and measuring techniques.

Firstly, you need to complete the identification section on the top part of page 1. This section is found at the beginning of all the questionnaires and identifies the Enumerator Area (EA) in a province, the household and the child. The subject number and the name of the EA will be given to you by your team leader.

The “birth date” of the child should obtained from the birth certificate or the Road to Health Card, or, if none of these are available, from the mother/caregiver. The first two squares in the birth date section represent the day, the second two squares the month and the third two squares the year when the child was born. For example, if the child was born on 1 January 1990, then you will write in the respective squares 01 01 90.

The “interview date” is the date on which you will be conducting the survey, and it should be filled in as for the date of birth, i.e. first the day, then the month and then the year.

**Now do the following exercise: Pause the Video:**

- Child born: 3rd March 1990 = 03 03 90
- 4th October 1989 = 04 10 89
- 12 January 1993 = 12 01 93

Where it says “interviewer”, fill in your name followed by your code, which will be given to you by your coordinator. These details are for quality control purposes.

Now fill in the rest of the questionnaire. Always keep the following in mind, when you complete any of the questionnaires:

Use a **RED** pen to fill in the questionnaire
Make a tick or a cross or a circle in the required space. If you do use a circle make sure the circle actually circles ONLY one space/square
If you make a mistake, use a black pen to cross out the mistake and re-enter the correct answer in the correct place with the red pen.

Now, mark who the interviewee is i.e. the mother or the caregiver, enter the full name of the child and address of the house and tick the box for gender, i.e. male of female. Ask the mother/caregiver about the religion of the child. Fill in the ethnic group section without asking but judging by the home language of the mother e.g. Zulu, Xhosa, Indian. Include the home and work telephone numbers of the mother/caregiver, if they have such a facility.

You now need to check whether any one of the following 7 statements are true in this home. Ask these in the following manner and in the sequence given:

Statement 1: Was there a death in the family in the past three weeks
Statement 2: Was the child ill over the last two days
Statement 3: Whether the care giver is available if the mother of the child is not at home
Statement 6: Was the child away from home over the past 24 hours
Statement 7: Is the caregiver younger than 12 years of age.

You also need to check the following two questions, because you cannot ask these questions without offending the mother/caregiver:

Statement 4: Mother/caregiver is mentally incapacitated
Statement 5: Mother/caregiver is under the influence of alcohol.

You should use your judgement to determine the mental state of the mother/caregiver.

If any of these statements is true, make a tick in the appropriate box and discontinue the survey in this house. You should do this in a polite manner, without causing offence or explaining the real reason for discontinuing the survey.

Now proceed to question 1. We would like to know what is the relationship of the caregiver to the child. Remember that the caregiver is the person who looks after the child for most of the time. Make a tick in the correct box. The options include, “mother”, “father”, “grandparent”, “sibling”, “aunt/uncle” and any “other”. By “sibling” we mean brother or sister. By “other” we mean any other person who is not mentioned in the choices given. You may tick only ONE option.

Question 2 requires you to record information about ALL the people who live in the house with the child. In the first column, record the full name of each household member. In the next column, write the age of each person in years. If a child is less than 1 year of age, then record the age as <1 yr. Then tick the gender of each household member. The next column requires you to record the relationship of each household member to the child. Always chose one of the codes from the options given at the bottom of the Table, i.e. “father”, “mother”, “sibling” etc. Only chose “other”, if none of the options given is appropriate. The last column of this question requires you to tick a “Yes” or a “No” as to whether each of the household members listed eats or sleeps in the house for at least 4 days in a week.

Question 3 inquires about the marital status of the mother at present. You should select ONE option only. Please do note the difference between options 3, 4 and 6. “Divorced” for the purpose of this survey means that this a legal parting. “Separated” means that the husband and wife are still legally married,
but not living together by choice. “Living together” means living in the same house without having a marriage certificate.

Questions 4 - 8 require that you ask the interviewee every question and you mark ONE option only in reply to the question. We are interested in knowing:

- Who prepares the food in the house
- Who buys the food in the house
- Who decides on what food is bought
- Who is the head of the house
- Who decides on the amount of money that is spent on food

Remember a “sibling” is a brother or a sister of the child, a “cousin” is the child of an aunt or an uncle of the child in the house, and “aunt” and “uncle” refers to blood relatives of the mother or father of the child.

Questions 9 - 10 require you to fill in the given options without asking any questions. Use your judgement to decide on whether the child looks healthy or not. If you do not consider the child to be healthy, please give the reason(s) in the column “specify”, e.g. sores on mouth. If the child is disabled, you should specify the nature of the disability, e.g. legs paralysed.

Question 11 inquires about the type of house in which the child lives. If the dwelling consists of different sections which are made of different materials you may tick more than one option, e.g. for traditional and tin tick 2 and 3.

Question 12 enquires about the total number of people (adults and children) sleeping in the same house for at least 4 nights a week.

Question 13 requires you to determine the number of rooms in the house or dwelling. Do not include the bathroom and the toilet when counting the rooms. Do not include the kitchen, if it is used only for cooking and eating.

Questions 14 - 16 requires you to select ONE option only, whereas question 17 inquires about the fuel used for cooking, for which you may tick more than
one option.

Now do the following exercise: Pause the Video:

Make sure that you understand ALL the questions and reply options. Ask your coordinator if you are unsure about any aspects of this section of the questionnaire.

Question 18 has five sections and you are required to tick ONE option only in each section. Example: “Does the home have a refrigerator or a freezer?”. If both are found, then tick “both”, if only one of the two are found, tick the specific one, if neither are found, then tick “none”. Please DO note that the equipment MUST be in working order, otherwise you may not record them in the questionnaire.

Questions 19 - 22 enquire about the education level and employment status of the parents/caregiver. In each of these questions, you may record ONE option only. With regard to the educational level, please note the following:

| None          | = No schooling at all |
| Primary school| = Only primary school education |
| Standard 6 - 8 | = High school up to standard 8 |
| Standard 9 - 10| = High school up to matric |
| Tertiary      | = Qualifications after matric, e.g. diploma or degree |

With regard to employment status, please also note the following:

| Housewife by choice | = Means staying at home by choice rather than being unable to find a job |
| Unemployed         | = Cannot find work |
| Self- employed     | = Has own business |
| Wage earner        | = Works for somebody else |
| Other              | = any other options which are |
Retired = retired by choice and not due to inability to find employment.

Question 21 should be completed only if the caregiver is a different person to the mother. If the caregiver is the mother, fill in the same details as for the mother of the child.

Questions 23 and 24 need special care and sensitivity as, in general, people do not like to talk about their income. Try to determine the income by asking about ALL the adults in the house as you listed them in question 2. You could determine which adults are working or receive a grant. If it is a poor household having one pensioner and two labourers, you could ask the question in a general manner, e.g. “Is the total income less than or more than R 1000,00 per month.

Question 25 requires you to give the number of people contributing to the income. You should have already determined this in question 23. Remember to include people with a pension or grants.

Question 26 inquires about whether the income has been more or less the same over the last six months. If for example the husband has recently lost his job, you could answer “No” because the income would have decreased.

In question 27, try to find out how much money this family spends on food every week. You can start off in a general way to assist the interviewee, e.g. “do you spent more or less than R 100,00 per week on food”.

**Now do the following exercise: Pause the Video:**

Make sure you understand ALL the questions and options before you go on to the second part of the questionnaire, namely the anthropometric measurements.
Anthropometric measurements:
Mr Dan Monyeki will now demonstrate to you how to do the following anthropometric measurements:

- Weight (W)
- Height (H)
- Mid-upper arm circumference (MUAC)
- Head circumference (HC).

In order to do these measurements you will be provided with the following equipment:

- A scale
- A measuring board
- A stadiometer
- A measuring tape.

Weight Determination
The scale should be placed on an even, uncarpeted area and levelled with the aid of its in-built spirit level:

After the scale is switched on, the fieldworker should wait for the zero indication (0,0) as well as the stable indicator (0 on top left hand corner of the display panel) to appear.
The child should be weighed (preferably after emptying his/her bladder) and with the minimum of clothing:
  - dry nappies only, if applicable
  - underclothes for older children
The child is placed on the scale, standing still and upright in the middle of the platform, facing the fieldworker, looking straight ahead with his feet flat and slightly apart until the reading is taken.
After the reading is recorded in the space provided in the questionnaire, the child is removed from the scale. The weight is
recorded to the nearest 100g

After the child steps down from the scale, the fieldworker should wait for the zero reading to appear on the digital display before repeating the procedure. The two readings should not vary by more than 100g. If they do, the scale has to be checked for accuracy, and the procedure has to be repeated until the correct weight is obtained. When the child is not able to stand alone on the scale, the following method is employed:

The mother/caregiver is weighed first (without heavy clothing and shoes).
Then the zero/reset button is pressed and the fieldworker has to wait for the zero reading (0.0) to appear on the digital display.
The child is then placed in the mother’s arms and the reading taken and recorded.
The mother and child are then taken off the scale, and when the zero reading appears again on the display, the procedure is repeated.

**Height Determination**

**Children younger than 2 years:**
The supine height of these children is determined by means of a measuring board, which has been specially constructed for the survey. Two readings are taken and the measurement is repeated if the two readings vary by more than 0.5cm.

The measuring board is placed on an even, uncarpeted area.
Care should be taken to ensure that the measuring board is functional and the footboard has no undue loose movement.
The child is placed on the measuring board lying on his/her back with the crown of the head touching the fixed headboard and the shoulders touching the base of the board. The mother/caregiver is needed to hold the child in this position.
The fieldworker should ensure that the child’s heels touch the board.
and that the legs are straight (knees not bent), before the footboard is slid against the soles of the child’s feet. The measurement is taken on the inside of the footboard to the nearest 0.1 cm. The measurement is recorded in the space provided in the questionnaire and the procedure is repeated.

**Children 2 years of age and older**

The standing height of these children is taken by means of a stadiometer. Two readings are taken and the measurement is repeated if the two readings vary by more than 0.5cm:

- The stadiometer should be placed on an even, uncarpeted area
- The child’s shoes are removed
- The child is positioned as follows:
  - facing the fieldworker
  - shoulders relaxed, with shoulder blades, buttocks and heels touching the measuring board
  - arms relaxed at sides
  - legs straight and knees together; and
  - feet flat, heels touching together
- With the child looking straight ahead (Frankfurt plane), the headpiece is slid down until it touches the crown of the head
- The reading is taken to the nearest 0.1cm
- The measurement is recorded in the space provided in the questionnaire and repeated once.

**Mid-Upper Arm Circumference Determination**

The mid-upper arm landmark is taken as the point on the lateral side of the left upper arm midway between the lateral border of the acromion and the olecranon *when the ELBOW is flexed at 90 degrees*. This may be most easily determined by marking the lateral border of the acromion and applying the tip of a tape measure to this point. If the tape is allowed to fall over the surface of the arm, the mid-point between the acromion and the olecranon may easily be determined and marked.
Ensuring that the tape is at the same level as the mid upper-arm mark, the tape is tightened, so that it touches the skin all round the circumference but does not compress the tissue OR alter the contour of the arm. The circumference is then read to the nearest 0.1cm. Take two measurements and record them in the appropriate section of the questionnaire. If the two measurements differ by more than 1mm, take a third measurement and select the two measurements that are nearest to each other.

**Head Circumference Determination**

This is a standard measurement for the serial assessment of growth in children from birth to 36 months. The manual contains pictures, which demonstrate the procedure to be followed clearly. Essentially, the following procedure is employed:

- Hold the child’s head completely still with the aid of the mother/caregiver.
- All measurements should be taken around fixed landmarks
- Place tape over the most prominent part of the occiput (back) and around the forehead just above the supraorbital ridge (front above eyebrows)
- Tighten tape securely, and note measurement over the forehead
- Read the nearest 0.1 cm.

Take two measurements and record them in the appropriate section of the questionnaire. If the two measurements differ by more than 1mm, take a third measurement and select the two measurements that are nearest to each other.

**Now do the following exercise: Pause the Video:**

Select a partner
Weigh and measure each other
Repeat the exercise with the coordinator observing
Repeat the exercise on 5 children
Repeat each measurement twice

3. THE FOOD MODELS KIT
Before we go to the dietary questionnaires, the food models kit will be explained. This is necessary so that you know which food models are available, when we explain the different questionnaires. Please look after your food models kit and handle the food models with great care in order to prevent breakage.

Each fieldworker will be given a food models kit to use during the survey. The purpose of this kit is to help you to determine the portion sizes of foods eaten by the children.

The kit comprises the following items:

1 light cardboard container
3 wax maize models (1/2 cup, 1 cup and 2 cups)
3 foam meat models (30g, 60g, 100g)
1 vegetable wax model (1/2 cup)
1 fruit portion (tennis ball)
3 x 500 ml plastic containers : (samp, dry beans, maize meal)
3 wax bread slices (10mm, 20mm, 30mm)
1 wax scone (8cm)
1 enamel plate
1 plastic glass with measures
1 enamel mug (labelled 150ml and 250ml)
1 serving spoon, tablespoon, teaspoon
1 plastic measuring jug (500ml)
1 plastic baby bottle (250ml)
1 ruler.

Let me explain the purpose of each item in the kit:

The cardboard container is for you to carry the models and
The 3 wax maize models are for you to use to determine the portion size of porridge. This can be done by placing a wax model on the plate and showing it to the mother to tell you the portion size. You have a ½ cup, 1 cup and a 2 cup model to demonstrate with.

The 3 foam meat models can be used to demonstrate meat portion sizes. Included in the kit are a 30g, 60g and 100g portion.

The wax vegetable model is useful to show a ½ cup portion size.

The tennis ball can be used to demonstrate an average (medium) fruit, such as an apple or an orange.

You also have 3 plastic containers containing samp, dry beans and maize meal, respectively. These can also be used to demonstrate food portion sizes. For example pour 1 cup of beans in a plate, and show the mother/caregiver. She will indicate whether more or less was eaten, or whether this was the correct amount.

The wax bread slices should be used to determine the thickness of the slice of bread eaten. You still need to ask whether it was white or brown bread. The 10mm slice is the same as the one, which is sliced by a machine.

The wax scone can be used to determine a scone or vetkoek size. It measures 8cm and weighs 60g.

The glass and mug have been marked at a certain level so that you can determine the amount of liquid drunk.

The serving spoon is useful as many people dish up with such a spoon and most homes have one.

The tablespoon and teaspoon indicate smaller quantities.

The measuring jug can be used to determine volume sizes of maize meal or samp. For example, when the caregiver indicates the amount eaten, throw it into the jug. You can then read the volume.

**NB:**

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The baby bottle can be used to indicate amount of milk drunk by the baby e.g. 150ml
The ruler is useful to estimate the size of a food item such as a slice of cake.

Please look after your food models and repack them carefully after each interview. You may also add empty containers and packets of local food products to your kit.

Now do the following exercise: Pause the Video:

Check your kit and familiarise yourself with its contents
Ask your coordinator to explain anything you are unsure of

4. THE 24-HOUR-RECALL QUESTIONNAIRE
The objective of this questionnaire is to record all food items and drinks, which the child consumed during the previous 24 hours.

I will go through the questionnaire step by step, pointing out important points for you to note. When I have finished with the explanation, you will have an opportunity to practice using the questionnaire. Please note any questions you may have as we go along. These can be discussed later with your coordinator. Your coordinator may also stop the video in order to point out relevant and important points.

Firstly, let me give you an overview of the layout of the questionnaire. It consists of the following:

On page 1:

An identification (demographic) section at the top of the page
Questions 1 - 8
Specific instructions on how to complete the questionnaire, and
A list of abbreviations.
From page 2 onwards you will find the following:

A column with food items grouped together in specific food groups e.g. “tea and coffee” or “milk and milk drinks”. Food items in each section are generally in alphabetical order

A column containing food codes

A column containing the weight or volume of common portion sizes

A section with the 6 intervals of the day for you to indicate when the food was eaten. The following abbreviations are used:

- **BR** stands for Breakfast (the interval up to 09H00)
- **IS** stands for In-between Snack
- **L** stands for Lunch (the interval between 12H00 - 14H00)
- **IS** stands for In-between Snack
- **D** stands for Dinner (the interval between 17H00 - 19H00)
- **AD** stands for After Dinner.

**Now do the following exercise: Pause the Video:**

Please spend some time familiarising yourself with the layout of the questionnaire.

Now let us go to page 1 and I will explain each question:

The demographic section you should complete as explained earlier.

**Question 1:** Fill in the name and surname of the child

**Question 2:** Requires you to fill in the day of the week recalled. This means that you should make a cross or a tick in the block indicating the
previous day. For example, if you are conducting the interview on Wednesday, then the previous day you are recording the recall for is Tuesday, so mark the Tuesday box.

**Question 3:** Requires you to determine whether the previous day was a typical eating day for the child. You need to find out if the child’s eating pattern was different. If for example the child attended a wedding or a party and ate many different food items, the day would not have been a typical one, and you should tick “No” and describe the reason why the day was not a typical one, i.e. “went to a wedding”

**Question 4:** Inquires about the type of fat, which the child usually eats on his/her bread; by usually, we mean at least 4 days in a week. Please note the different types of fat, which are available. We show you a few examples:

- Butter
- Hard margarine (in paper)
- Medium fat (in paper and a tub)
- Polyunsaturated (in a tub)
- White fat (in paper)
- Ghee (made by boiling butter; used primarily by the Asian population)
- Peanut butter
- Butro (mixture of margarine and butter).

It may also be possible that the child does not eat fat on his/her bread. If so, then tick “none”.

**Question 5:** Inquires about the type of fat usually used in cooking. The same items appear as for the previous question, except that sunflower oil (SO) is added. Please do note that some people often refer to SO as fish oil. Ask the mother more questions about this and
make sure you mark the correct type of fat.

**Question 6:** Inquires about the type of bread the child usually eats, i.e. at least on 4 days per week. Tick either white, brown or whole wheat. If the family makes their own bread, find out what type of flour they bake with.

**Question 7:** Inquires about the type of milk the child usually drinks. We will show you one or two examples of each type:

Condensed milk is available in 3 types, i.e.:
- made from Skim Milk (SM) - Gold Medal
- made from Whole Milk (WM) - Gold Cross
- made from Non-Dairy products (ND) - Nestle Gold Cross

Evaporated milk is available in 2 types, i.e.:
- made from WM - Carnation
- Nestle Ideal and in a light (blue label) - Nestle Ideal Lite

Non-dairy creamers are very popular and are added to tea or coffee as a powder. Examples include Cremora, Ellis Brown and Tea Mate

Some people may use WM powder (e.g. Nespray), which they may add directly to tea or coffee.

Then, we also have various types of milk in a liquid form, i.e.:
- SM (fresh, or long-life)
- WM (fresh, or long-life)
- Blend (BL) is a mixture of cows milk and ND creamer
- 2% is a low fat milk
- Soy milk, such as Infasoy
- Breast milk
- Goat milk
Formula Milks: specify the product used. Note the different types at the footnote of page 2.

If the child does not drink milk, please indicate by marking the “none” box. If you are unsure about the type of milk used, ask the mother/caregiver to show you the container.

**Question 8:** Inquires whether the child ate at a feeding scheme or crèche on the previous day. If the answer is “Yes”, you should record the type of scheme, i.e.:

- **PEM** - Protein energy malnutrition scheme run at the clinic
- **PSNP** - Primary School Nutrition Programme
- **NGO** is a non-governmental feeding scheme e.g. Operation Hunger or World Vision
- Self-funded refers to a crèche or primary school scheme, which is private and paid for by the parents

If the child did eat at a feeding scheme or at a crèche on the previous day, please complete Section A on page 15 of the questionnaire:

- The name and address of the school or crèche
- The person to contact and the telephone number.

You should then contact the school to find out exactly what the child ate on the previous day. This is only necessary, if the mother/caregiver is unable to give you relevant information regarding the meals eaten or the supplements taken.

Question 8 is followed by specific “instructions”, which you will use with every mother/caregiver interviewed, i.e.: “Now I want you to tell me everything that this child ate and drank yesterday. Let’s start with when the child woke up. Did he/she have anything to eat or drink?. Proceed through the day following the child’s activities. When you have finished, summarise it for the
mother/caregiver. Any forgotten items can then be added:

Enter each item eaten in grams under the correct interval of the day eaten
Make sure that the code is always circled
Items not on the questionnaire should be looked up in the Food Composition Tables
Specify fully when new items are entered and look up the code later
Recipes should be added to “section B on page 15” of the questionnaire

Let us now proceed to page 2 and examine each food group:

The first group is “Tea and Coffee”. If tea or coffee was drunk, specify what type it was by circling the correct code with your RED pen. Now try to determine what additions were made. The following checklist can be used with all food items consumed:

What was consumed?
How much was consumed?
Which food models can be used to estimate the portion size?
When was the food consumed?
Was anything extra added?
How much of the extra food item was added?
Where would I find the addition?
Have I circled the correct food codes?.

Using this procedure you should determine how much tea or coffee was consumed. Was a sweetener such as sugar, or milk added? If so, what type and how much was added?

Please note that if milk formula was used you need to specify the type of formula as well as the number of scoops used per bottle. The different types of formula milks are found at the footnote of page 2.
To determine the amount of tea and coffee drunk by the child you should use the following food models: a mug and a teaspoon. Please note that the amount of milk added to tea and coffee differs depending on whether tea or coffee was drunk, and whether a mug or a cup was used. We have presented you with a medium amount of milk; if “little” or “a lot” of milk was added, you should refer to the Manual for the correct amount.

The next group includes “Milk and Milk Drinks”: This comprises:

- sour milk products such as buttermilk and maas
- custard (made from SM or WM)
- milk to drink: specify the type used
- yoghurt: can be plain, flavoured or contain fruit
- flavoured milk is a low fat milk which has been sweetened

Please note that additions might have been made to the milk drunk:

- Sweeteners such as sugar, syrup or honey
- Ice cream or sorbet
- Flavourants such as Milo or Drinking Chocolate.

In this section, you need to know the different container sizes. For this purpose, collect an empty container of each size for your food models kit. You can use the glass, mug and teaspoon provided in the kit to assist you in determining portion sizes.

The next group includes “Fruit Juice and Cold Drinks”. Fruit juice can be sweetened or be WITHOUT sugar. Examples of juice without sugar are Liquifruit and Ceres. Sweetened fruit juice is generally in a plastic bottle. Note the different container sizes of the fruit juices.

Carbonated (fizzy) cold drinks purchased from the shop are available either in a can or in a bottle. A squash, such as Oros, is made by adding water to a
sweetened concentrate. When the concentrate is artificially sweetened, it can be classified as Sweeto or Low-cal. Magou is a drink made from fermented maize, and is purchased in a carton. A dairy-fruit mix is a mixture of milk and fruit juice. Tropica is a typical example.

Now do the following exercise: Pause the Video:

Go through the questions from the beginning until the end of the “cold drinks and juices” section
Make sure that you understand what has been explained to you so far
Check with your coordinator if you do not understand what has been dealt with up to now

The next food group is “Breakfast Cereals”. This includes cooked porridge and instant cereals. Cooked porridge includes maltabella, mabella, maizemeal, oats and tastewheat. Please pay special attention to maize porridge. You need to determine the texture, namely whether it was soft, stiff or crumbly. You also need to determine whether the brand used was plain or enriched with vitamins and minerals. Some examples include:

Enriched: Impala, Iwisa, Ace
Plain: Super Sun and White Diamond.

Do also check for other brand names in the area where you are working.

If the porridge eaten was sour, you need to indicate whether it was soured with vinegar or by fermentation.

Instant cereals are given alphabetically from corn flakes to weetbix.

You should use the following food models to determine portion sizes:

wax maize models ½ cup, 1 cup and 2 cups
other measuring cups
raw maize meal
puffed wheat
the plate.

Do not forget any additions made to the porridge and cereals, such as milk, sugar or fat:

Fat may be added: check the type of fat
Sugar or other sweetener may be added
Milk may be added: check the type of milk and the quantity. In the questionnaire we have indicated medium portions of milk. If a small or a large amount of milk was added you need to indicate this according to the quantities found in the Manual. Notice that the amount of milk added differs for instant cereal, porridge and for Pronutro.

The next group deals with “Bread and Rolls”. The most important consideration here is the type of bread eaten and the thickness of the slices eaten. Use the 3 slices in your kit to determine the thickness of the bread. The thinnest slice is a machine sliced one measuring 10mm, the next is a 20 mm slice and the thickest one measures 30mm. Note that this group also includes snack breads such as cream crackers and provita. If rolls are eaten, it should be specified whether they are long ones “hot dog” rolls or round “bun” types. The long rolls are used for hot dogs and the round ones for hamburgers.

Roti is a savoury type of pancake used mainly by the Asian community.

If rusks are eaten, please distinguish whether they are commercial or homemade; white, whole wheat, buttermilk or bran.

If scones are eaten determine whether they were made from white or whole wheat flour. Also distinguish whether whole or skim milk was used. The same applies to vetkoek. Vetkoek is made with yeast, and dumplings are vetkoek made without yeast. Use your ruler and scone model in your kit to
determine the portion size of muffins, scones and vetkoek.

The next group includes “Spreads used on bread and rolls”. Please note that it is common to use fat such as margarine with an additional spread such as jam or meat spread. Note the addition of beef fat, mutton fat and lard (pork fat) to the list of fats eaten. Meat spreads include Oxo, Bovril and Fray Bentos. Also note the inclusion of chocolate spread (Nuttelo). You need to determine how the spread was applied to the bread i.e. thinly, medium or thickly spread, in order to record the portion size.

**Now do the following exercise: Pause the Video:**

Go through the questionnaire from “breakfast cereals” until the end of the “spreads on bread” section

Make sure that you understand everything

Check with your coordinator if there is anything you do not understand.

We now come to the “eggs group”. It is important to determine what type of cooking method was used to cook the egg, namely whether it is boiled, poached, curried, fried or scrambled. You also need to determine what type of fat and milk was used, where appropriate. For example, if the egg was fried, you need to determine whether it was fried in butter, HM, PM, SO or in bacon fat.

The “Cheese group” comes next. The most commonly used cheeses are cheddar and gouda:

Cheddar can be distinguished by its strong taste

Gouda is also known as sweetmilk. It has a milder sweetish taste and can be distinguished by its red skin. Tussers is also classified under Gouda

Cottage cheese comes in 3 types:

- fat free
- low fat, and
creamed cottage cheese.

Other cheese dishes have been included in this group, e.g. macaroni cheese, pizza, and savoury tart. You need to use your tablespoon, serving spoon and ruler in your kit to determine portions sizes.

The next group is a large one and deals with “Meats”. It includes:

- Beef/veal
- Chicken
- Goat
- Mutton/lamb
- Pork
- Processed meats, such as polony.

The meat group has been listed alphabetically and you should go through all the items to make sure that you understand what they mean. If the child has eaten a meat dish not listed in the questionnaire, please write the recipe down in detail in section B of page 15 in the questionnaire.

When you are asking about “meats” always check the following:

- The type of meat and the cut of meat eaten
- The cooking method used
- Whether the fat was trimmed off the meat (FT) or retained (F)
- Whether skin was removed from the chicken
- Whether traditional meat products were eaten e.g. mopani worms or locusts.

You also need to specify the cooking method used to prepare the meat:

- Whether it was boiled
- Roasted in the oven or in a pot
- Fried in deep or shallow fat
Fried with a batter
Grilled or braaied on coals
Stewed, in which case what was added?
If a burger or hot dog was made, what was added?

Please use the following food models to determine meat portion sizes:

- 30g, 60g, 100g foam meat models
- The tablespoon and serving spoon
- The 1/2cup and 1cup measure
- The ruler.

The next group is “Fish”. This includes:

- Fatty fish, such as kipper and snoek
- Tinned fish, such as pilchards, and
- White fish, such as hake and kingklip.

As for the “Meat group”, the cooking method needs to be determined. Use the same food models as for the meat group.

**Now do the following exercise: Pause the Video:**

Please go through the questionnaire from the “egg” section until the end of the “fish” section
Go through every item under the “Meat” and the “Fish” sections to make sure you understand all the dishes and details
Ask your coordinator if you are unsure.

We now come to the “Starch group”. This includes the following items:

- Maize porridge
- Mabella
- Mealie rice and samp
Brown rice and white rice
Pasta, such as spaghetti and macaroni, and
Wheat rice.

Please note that the quantities are given in a tablespoon, serving spoon and ½ cup format. You should use the maize food models in your kit to determine portion sizes. Make sure that you specify which type of maize was used and what the texture of it was, i.e. soft, stiff or crumbly. You also need to inquire whether fat or sugar was added to the starch and to specify what type of fat it was.

The next food group deals with “Soup and Legumes”. This group includes:

- Dry beans (cooked)
- Lentils
- Samp and beans
- Samp and peanuts
- Soups
- Dry bean stew.

The following food models can be used to estimate portion sizes:

- Tablespoon, serving spoon and ½ cup measure
- Plate
- Dry beans.

The next group, which is found on pages 7-9 of the questionnaire deals with “Cooked Vegetables”. These are easily identified and are presented in alphabetical order. You will notice 5 specific columns, which present you with details regarding cooking methods:

The first column indicates “Boil - NF”. This means that the vegetable was simply boiled and no fat was added
The next 4 columns indicate that the vegetable was cooked and fat
was added, or the vegetable was fried in fat. You need to determine whether B, HM, PM or SO was used. Always circle the relevant code and enter the correct portion size.

“Salads and Raw Vegetables” are dealt with next.

You should use your tablespoon or serving spoon in your kit to estimate the portion size. Any unusual salads eaten should be included on the “other” row.

The salad section is followed by “Dressings” which include:

- French dressing (vinegar and oil)
- Mayonnaise (homemade or commercial)
- Mayonnaise low in fat e.g. Trim
- Oil
- Salad dressing.

**Now do the following exercise: Pause the Video:**

Go through the questionnaire from the “starch” to the end of “dressings” section
Make sure that you understand every item.

Pages 10 and 11 include the “Fruit group”, listed in alphabetical order. Fruits have been divided into 4 columns:

- A column with sweetened, canned fruit
- A column with the raw fruit
- A column with the dry fruit
- A column with cooked, stewed fruit.

Once again, you should circle the correct code and enter the portion size. Fruit portions given are always for a medium fruit. If the fruit is very large or very small, the weight should be looked up in the Food Composition Tables.
Use the tennis ball in your kit to indicate a medium fruit portion size.

The next 2 food groups are “Pudding” and “Sauces”. Puddings include:

- Baked puddings
- Ice cream and sorbet
- Instant pudding
- Jelly
- Pancakes/crumpets.

You need to select whether baked puddings were made with SM or with WM. Use the tablespoon, serving spoon and ½ cup measures in your kit to determine portion sizes. If a different pudding was eaten that is not listed in the questionnaire, please write in the recipe in detail in section B of page 15 in the questionnaire.

“Sauces” include:

- Cream
- Chocolate sauce, and
- Custard.

If cream was eaten, please specify the type e.g. plant: Orley whip, canned or fresh. If custard was eaten, please specify the type of milk used and whether sugar was added. Different sauces can be entered in the “other” row.

The next 3 food groups are found on pages 11 and 12 of the questionnaire and include:

- Cake
- Cookies and special breads, and
- Tarts.

All three sections require you to determine whether these products were
made with:

SM or WM
HM or PM
Whether icing was added
Whether a filling was added.

Portion sizes can be estimated using:

The ruler
The bread slices
The vetkoek/scone food model.

“Sweets” are found on page 13. The weights of individual sweets and savoury snacks can be found in your Manual. The “Sweets” group include:

Chewing gum
Chocolates
Hard sweets
Peanuts
Crisps
Snacks, and
Soft sweets.

After the 24-hour recall has been completed you should specifically ask the mother if the child ate any sweets on the previous day. Mothers do not always associate sweets with foods eaten.

The last group on page 13 is an “Other” group, which includes:

Sauces, such as cheese sauce
Condiments, such as achar and chutney, and
Gravy.
The last group on the questionnaire comprises “Infant Foods”. This includes:

- Infant cereals
- Milk
- First foods (small jar)
- Fruit juices
- Infant dinners (dry)
- Junior foods (big jar)
- Strained foods (small jar).

All that now remains still for you to do is to complete the interview by asking questions 9 to 11 on page 14, and to record a “Yes” or “No” answer to each of these questions. Please do not forget to check that the required details are filled in on page 15 of the questionnaire.

**Now do the following exercise: Pause the Video:**

Go through the questionnaire from the fruit group until the end of page 15.
Make sure that you understand every section of the questionnaire
Ask your coordinator if you do not understand anything.

**Now do the following exercise: Pause the Video:**

Each fieldworker should select a partner and conduct a 24-hour recall with him/her using the food models
When this part of the exercise has been done, swoop around and repeat it, with your partner conducting the interview
Ask your coordinator if you are unsure about anything
You are now ready to do a test to ensure that you understand the 24-hour recall questionnaire. Your coordinator will hand these out to you and he/she will score you on each of the exercises. If your score is not satisfactory, please watch the video again and redo the exercises.
GOOD LUCK!!!!!!

5. THE QUANTITATIVE FOOD FREQUENCY QUESTIONNAIRE (FFQ)
The aim of the FFQ is to find out the types of foods eaten, the amount of these foods usually eaten and how often the food is eaten by the child. The questionnaire, therefore, consists of a list of foods and drinks that are most commonly consumed in South Africa. The purpose of the questionnaire is to find out from the mother/caretaker:

- Whether the child eats these foods
- How the foods are prepared and cooked
- How much of the food is eaten by the child at a time
- How many times a day the child eats the particular food. Does he/she eat it every day, and if not, how many times in a week or in a month is the food eaten
- Whether there are any foods which the child eats more than once a month and which are not included in the questionnaire.

Now do the following exercise: Pause the Video:

Take a few minutes to read the introduction of the questionnaire. When you have done so, look through the questionnaire to get an idea of what it contains and how the questions are set out.

Make sure at all times that the participant understands what the interview involves and answer any questions he/she may have. If you have any problems, or the participant wants to know something you are unable to answer, call the coordinator:

Fill in the Subject number, Birth date, Interview date, Province, EA number, and Interviewer name and code as already explained.
The first set of questions (pages 1 and 2) ask for some general information about the mother/caregiver and the child. Take a minute or two to read through the questions.
Try to ask the questions as they are written in the questionnaire. Sometimes, however, the participant may not understand the question or may give you an answer you do not expect. In this case, you may have to ask additional questions. We will show you examples of how to do this as we go through the video.

Do **NOT** read out aloud to the interviewee the instructions that are given in the questionnaire and are addressed to the interviewer. For example in question 1, under “remarks” the instruction to the interviewer reads: “If no, specify your relationship to the child”. In other words, if the participant answers “NO” to the question “Are you the mother of the child?” the interviewer will say only, “What is your relationship to the child?”

Tick ( ) or circle or mark with a cross (x) the appropriate option in the questionnaire to match the respondent’s answer to the question you asked him/her.

Go on in this fashion until you complete question 15 in the questionnaire.

**Now do the following exercise: Pause the Video:**

Find a partner

Then, one of you can be the interviewer and your partner the interviewee. The interviewee must answer the questions as if he/she is being interviewed about his/her child

When you have finished, switch around, so that each person has a chance to complete the interview of this part of the questionnaire.

If you are unsure about something ask the coordinator for clarification.

**We now come to the main part of the questionnaire.** It is very important that this information is filled in as accurately as possible. All that the participant tells us will be put onto a computer and analysed to tell us how much energy, protein, fat, vitamins and minerals the child is eating, and whether the food eaten is too little or too much for the child to be healthy, or whether it is the correct amount.
If the child is older than 2 years of age, the participant must answer what foods the child has eaten or what drinks the child has drunk over the preceding six-month period from the time of the interview. For 1-year olds, this period is the past month. Anything which the child has not eaten in the specified time periods must be marked with an “X” under the “Seldom/Never” column in the questionnaire.

You may have to remind the participant during the interview that we are only interested in the last six months.

We will be using the same food models and samples that were used for the 24-hour recall interview to help the participants describe and estimate the types and amounts of food the child eats. We will also be using the same measurements.

To make the interview easier, the questionnaire is divided into columns and rows which the interviewer fills in as the participant answers the questions. We shall now look at each column in more detail starting with page 3 as an example:

The first column gives the type of “food”, in this example, maize-meal porridge, sour porridge, mabella porridge. The foods are listed in groups according to the types. The following main groups of foods are used:

- Porridges
- Breakfast cereals
- Starches
- Bread and spreads
- Chicken
- Red meat
- Meat, in general
- Fish
- Eggs
Vegetables
Fruit
Drinks
Snacks and sweets
Cakes, biscuits and cookies
Puddings
Sauces, gravies and condiments.

It would be impossible to list all foods eaten in any questionnaire. Therefore, at the end of each section a row is provided with the heading ‘Other’. Any food(s) not listed in this questionnaire but is eaten more than once a month, must be written in this row. The format of the questionnaire is as follows:

The “food” column lists a variety of foods grouped together in the usual food groups
The “description” column describes the types of foods and the different ways in which the food can be cooked or prepared. One food may have several descriptions. For example, maize-meal porridge may be cooked as soft porridge (eaten with a spoon), stiff porridge (eaten with the hands), or as crumbly porridge. Some maize meal products are enriched (that is, some vitamins and or minerals are added to the meal by the manufacturer) while others are not. As another example, some foods can be cooked in several different ways or a participant may have his/her own way of cooking the food which is not listed in the questionnaire. For these cases, write the method of preparation as well in the “description” column. Since these details will influence the nutrient intake of the child, it is, very important that the correct descriptions and methods of food preparation of all the foods are recorded
The “code” column gives the computer code of the particular food and is only used by the staff who analyse the questionnaire. The interviewers must ignore this column
The “quantity” column gives a guide as to the amounts of the foods commonly eaten. The interviewer uses this information to help the
The "amount usually eaten" is the amount of the food that the child usually eats. The interviewer will write in the amounts of food usually eaten as 1T (1 Tablespoon), 1t (1 teaspoon), ½ cup, 1 medium-sized cup/portion etc. The interviewer MUST NOT write in the weights (g) or volumes (ml) of foods or drinks. These calculations will be done by the data analyst.

If the participant describes the amount as spoons or teaspoons, ask her which size of spoon. For example, if a child takes one teaspoon of sugar in a cup of tea, write “1t” under “amount”, or if he takes 2 teaspoons of sugar per cup of tea write “2t” under “amount”. Familiarise yourself with the correct abbreviations that you must use on page 20 of the questionnaire:

The “P/D, P/W, P/M, SEL/NEV” column is used to give the number of times per day (P/D), per week (P/W) and per month (P/M) that a food is eaten. If a particular food is eaten less than once per month or is never eaten, then write an ‘X’ in the last column indicating “Seldom/Never”.

For example, if a child eats half a cup of stiff porridge (Iwisa) in the morning and evening every day, seven days a week, then tick “Maize-meal porridge” in the “Food” column, “stiff-enriched” in the “description” column and ½ cup in the “amount usually eaten” column. Then, because the child eats this amount in the morning and in the evening, thus twice a day, fill in “2” in the “P/D” column, and because the child eats this amount every day of the week, fill in “7” in the P/W”.

At the end of each section there is a “checking” or “control” question, which asks the number of times a week food items in the food group in the preceding section of the questionnaire is/are eaten. See for example the sentence in the middle of page 4 “how many times a week does the child eat porridge for breakfast at any time of the day (not only breakfast)”. This is part of the quality control built into the questionnaires. Ask the
question and fill in the answer. The answer should correspond with the total number of times per week foods belonging to this particular food group are eaten.

Now do the following exercise: Pause the Video:

Take a few minutes now to familiarise yourself with the layout and various sections of the questionnaire.

Filling in the amounts and frequencies may not always be as straightforward as in the example above. So practise with different foods options and make sure you understand all aspects of recording the information you must obtain from the interviewee.

Please do note the following with regard to specific foods:

**Brand names:** In some sections, such as breakfast cereals, infant cereals and Soya products, the participant is asked the brand name of the food she uses. This is in order to be sure that we use the correct food item for the nutrient analysis. For example, as previously explained, some maize-meal brands have vitamins added, others do not. The participant may not know whether the brand of maize-meal she uses has added vitamins or not, but she should know the brand name. We can then check if that brand has added vitamins or not. The same applies to margarines, milk powders, fruit juices and breakfast cereals.

**See Manual:** For some foods you will see the comment ‘see Manual’ in the “quantity” column. See, for example, breakfast cereals on page 4 of the questionnaire. This is a note to the person doing the data analysis to check the correct code and amount in the Manual. The interviewer must fill in only the description, the amount usually eaten and the frequency of eating the specific food.

**Milk:** Note that milk appears several times in the questionnaire, namely after porridge on page 3, after breakfast cereals on page 4 and with drinks on page 14. Each time, it refers specifically to that particular
section. For example, on page 3, the question refers only to milk used on porridge. You must, therefore, record the milk under each section of the questionnaire, where it appears. The same applies to sugar and fat

**Dumpling and vetkoek (page 5):** Dumpling and vetkoek are prepared in different ways in different areas in the country. For example, for some people “dumpling” is a bread dough mixture, which is steamed in a large pot. Pieces of it are broken or cut off like a round loaf of bread; for coding this type of dumpling, use the white bread code. Other people cook balls of dough, usually made with baking powder, together with stew or soup and call these “dumplings”. Vetkoek may be made with baking powder or yeast. The size of vetkoek varies a lot, and it may be deep fried in oil or shallow fat. It is, therefore, very important to obtain the correct description from the interviewee

**Vegetables and fruit:** Ask the interviewee which vegetables and fruits the child eats and mark them in the questionnaire. Then go back to each one of them reported to you and ask about the method of preparation, the amount eaten and frequency of eating them. Do not read the list of fruit and vegetables to the interviewee

**Preparation methods/descriptions:** Do not read out the list of all the possible preparation methods to the interviewee. Ask “How do you prepare your beef?”. Then circle the option closest to the participant’s answer. If the answer does not fit one of the options, circle ‘other’ and write in the description. Also do check, if the participant cooks the food in more than one way. For example, the participant may sometimes cook cabbage with potato and onions and at other times he/she may fry it (page 10 of the questionnaire). Make sure you collect and record these details in all the questionnaires as appropriate

**Drinks, snacks, cakes and puddings:** Ask the participant what the child eats or drinks of these food items and mark them on the questionnaire. Then go back to each answer and ask about the method of preparation or the type, the amount and the frequency. Do not read the list to the interviewee

**Additional protein-rich foods:** On page 9 of the questionnaire, there
is space for describing protein-rich foods which have not been covered in the main section of the questionnaire. Please fill in only foods here that have not already been mentioned in the questionnaire, and which are eaten at least once a month or more. Give a full description of the type and method of preparation of the food. Do not write anything in the “code” column. This will be done by the data analyst Wild foods (page 18): Obtain as much information about “wild foods” as possible. For example, the type of animal or insect, at what time of year are they hunted or collected, the indigenous name of the food as well as how it is prepared and eaten.

Finally on pages 18, 19 and 20 of the questionnaire you are requested to fill in any other foods that may have not been covered during the interview, foods that the child does or does not eat as well as the eating patterns of the child and whether the child’s food is served separately. Record or tick the appropriate information the interviewee gives you in the options provided. Questions 20 - 34 are of a general nature and should be completed in the same fashion as the questions on the first two pages of the questionnaire. That is, tick the option corresponding to the interviewee’s answer.

Now do the following exercise: Pause the Video:

Pair up with a fellow fieldworker and finish interviewing him/her

Make sure that all fieldworkers have a chance to be interviewed and to interview

Also do make sure you have mastered all aspects of the questionnaire.

HAVE FUN!!!!!!!

6. THE FOOD PROCUREMENT AND HOUSEHOLD FOOD INVENTORY QUESTIONNAIRE

We are now going to look at the Food Procurement and Household Food Inventory questionnaire. This questionnaire has two parts to it:
The first part is for food procurement, i.e. where people get their food from. You will ask ALL households in ALL EAs about food procurement. Food procurement refers to all sources of food, for example food grown, food donated and food purchased. The aim of this section of the questionnaire is to find out where people procure, i.e. get, their household food from. This is to help the government decide which foods to fortify with micronutrients.

The second part is for the household food inventory, i.e. a list of all the foods and drinks kept in the house at the time of the interview. We will ask this part of the questionnaire in ALL households but ONLY IN SELECTED EAs. Your coordinator and/or team leader will tell you which EAs have been selected for the completion of the household food inventory. The aim of this section of the questionnaire is to see how much food people have in their homes at the moment you visit them in order to help determine the level of food security in the household and in the country. The data you collect will be used to calculate how many days of energy supply is available in the house for household members.

You should start completing the questionnaire by filling in the demographic information at the top part of the first page as previously explained. Then you must ask the mother/caregiver “who is responsible for getting the food for the household” and, in the case of a caregiver being interviewed, “what is his/her relationship to the child”. Establish who procures food for the child. You should interview the person responsible for procuring the food for the household in order to complete the whole questionnaire. If that person is not present at the time of the interview, ask if there is anyone in the house who could show you all the food in the house. If that is possible, then you can complete the household inventory part of the questionnaire straight away otherwise, you will need to return to the household to interview the food Procurer. Make an appointment to see him/her and note down the date, day and time of the appointment in the appropriate section of the questionnaire.

NB: You will only return ONCE to a given household for completing any
missing parts of the questionnaire.

Study the section with the title “Explanation to be given to the interviewee” on page 1 of the questionnaire. Explain the purpose of the questionnaire and the information you need.

There are four parts to the explanation:

A general introduction for all households
The food procurement part of the questionnaire is explained to **ALL** households
The household food inventory part of the questionnaire is explained to **ALL** households but in **SELECTED** EAs only
Some final points to ensure that the person you are interviewing is happy to proceed with this questionnaire.

You then come to the section entitled “instructions to fieldworkers”. In this section, you are requested to circle the “chosen answer” or fill in information in the appropriate columns of the questionnaire, i.e. food and drinks used, frequency of obtaining food and drinks as well as the amounts of food and drinks obtained.

For the household food inventory part of the questionnaire, fill in the amount and location of food in the house in the appropriate columns. Please also note that for the household inventory:

Only **include** foods that are for **household use**
Do **not include** foods that are **being cooked**
Include **cooked food** that may be stored, in the fridge, cupboard or elsewhere. **List** these foods in section D labelled “COOKED FOOD STORED” on page 30 of the questionnaire
Do not include live animals or crops that are still growing in the garden.

Then, please explain to the person you are interviewing that you will be asking
him/her questions about the food and drinks in the house, while turning to page 2 of the questionnaire.

A. FOOD PROCUREMENT SECTION

In Section A of the questionnaire, please complete the “food procurement” section first. This section is on the left half side of the page, and deals with “foods” used by the household, the “description of the food”, the “source of the food”, and, “if the food is purchased”, the “frequency of purchase”, the “place of purchase” and “the amount purchased”.

Various codes from 1 - 13 are given at the top of the page for you to use when you fill in the questionnaire. These codes are given for use in the columns labelled:

Source of Food
Frequency of Food Purchase
Place of Food Purchase
Place of Food Storage.

In order to complete the questionnaire you need now to start with the first food item listed in the column “Food”. To help you learn how to complete this questionnaire we will take one food item as an example and also make some general points. For the first food listed ask: “Does your household use tea?”. If the answer is “No”, leave that line of the questionnaire blank and move on to the next food item. If the answer is “Yes”, then ask “Which type of tea?”. Circle the appropriate description of the food or drink in the “description” column, i.e. either Ceylon or Rooibos. Food codes need not be filled in by the field worker, as it will be done later by the data analyst.

For some items you are asked to give specific information in the column labelled “description”, e.g. for samp and beans, you are asked to specify the ratio of samp and beans. If the exact description for a food item or a drink is not listed in the questionnaire, include it in the “other” option, e.g. for mint tea, write “mint tea” under “other”. If it is difficult to get an exact description of the
food or drink from the person you are interviewing, then ask to see the food or the packet or the container in which the food was bought to see if it is labelled. The label can give you the necessary information. If any food items or drinks are not labelled, then the description is “unknown” and it must be listed as “unknown” under the “Other” option.

Then ask, for example, “Where do procure (get) the Roiboss tea from?”. Use the codes for “source of food” shown at the top of the questionnaire to record the response. Note that you may record more than one source of food. For example, if tea was obtained by purchase and was also given to the household as a present, you should record the codes 1 and 11 (1,11).

**NB:** You must fill in the codes along the dotted line corresponding with the description of food or drink you circled or recorded in the “food” column.

If the food is purchased, you should then ask “How often do you buy Rooibos tea”. Record the answer using the appropriate code for “frequency of food purchase” shown at the top of the page. Chose ONE code. For example, if Rooibos tea is bought every month, you should record 3.

**NB:** You must fill in this code also along the dotted line corresponding with the description of food or drink you circled or recorded in the “food” column.

**NOTE:** Frequency of food purchase refers to how often the household buys the food.

You can go on and ask “where do you buy the Rooibos tea?”. Use the codes for “place of food purchase” shown at the top of the page to record the response. Note that you may record more than one code for place of food purchase. For example, if Rooibos tea is purchased at the supermarket and in a small shop, you should record 1 and 2 (1, 2).

**NB:** You must fill in the code along the dotted line corresponding with the description of the food or drink you circled or recorded in the “food” column.
In terms of quantity, you can ask “how much Rooibos tea do you purchase?”, i.e. when this food item is bought, what is the total amount that is purchased. For example, if the household purchases two 200g boxes of Rooibos tea every week, the amount purchased is 400g. So in the column labelled “amount purchased” you will write down “400g”.

**NB:** You must fill in the code along the dotted line corresponding with the description of the food or drink you circled or recorded.

**NOTE:** The “amount purchased” refers to the total amount purchased each time of purchasing, i.e. how much of this item does the person shopping for the household brings home.

Record the “amount purchased” of food or drinks, either in weight (grams) or volume (mls). **Please do not forget to record** the unit of measurement, e.g. 400 g (not 400, which can be either weight or volume).

In some cases, if it is impossible to determine the weight or volume of a food item bought, it is then necessary to write down the number of the items counted and a description e.g. 100 teabags. For some other foods you may also need to use a description of the number of food items to evaluate the weight or volume, e.g. 10 medium potatoes = 10 x 90g = 900g.

You can also use the “quantity” column in the 24-hour recall or Food Frequency Questionnaire to evaluate the weight or volume of a food item.

**NB:** The team leader or coordinator should check that each answer in the questionnaire includes a unit of measurement and a description.

Finally, you should ask “Does your household use any other types of tea?”. If the answer is “No”, leave that line of the questionnaire blank and move on to the next food. If the answer is “Yes”, record the information in the “other” row and repeat the procedure outlined above.
Follow this procedure to obtain information for all the foods and drinks listed in the following pages of section A of the questionnaire, including the “dietary supplements” and “wild birds....” section on page 26 of the questionnaire. Any other major food items or drinks not listed in the questionnaire must be recorded in the appropriate section on page 27 of the questionnaire.

Then complete all the details required in Section B on page 28 and 29 of the questionnaire, which asks questions about the commonly used foods in the household. After all the food items have been listed in this section, ask for the prices of some commonly used food items. Start with an explanation to the person you are interviewing. “Now I would like to ask you about how much some foods and drinks cost you”. For example, for the first food item listed under “food” on page 28, ask: “Does your household use maize meal?”. If the answer is “No” leave that line of the questionnaire blank and move on to the next food item. If the answer is “Yes” ask: “What type of maize meal do you use?”. Fill in the type in the column labelled “description”. Then ask if the food is purchased. If the food is purchased record 1, if the food is not purchased record 2. Then ask what the unit purchased is. The aim of asking what the unit purchased is, is to help determine the cost of foods per unit. Note that the “unit purchased” is different from the “amount purchased”, which refers to the total amount purchased at each time of purchasing, i.e. how much of this item does the person shopping for the household bring home. To give an example of the difference: if the household purchases two 200g boxes of Ceylon tea every week, the “unit purchased” is 200g, and the “amount purchased” is 400g. So, here in the column labelled “unit purchased” you must write down “200g”. Record the amount purchased in weight (grams) or volume (mls). Remember to write down both the amount and the unit of measurement, e.g. 200 g (not 200 which can be either weight or volume).

Then ask how much the unit purchased costs and insert the price in Rands in the same row of the appropriate column.

You can also use the “quantity” column in the 24-hour recall or Food
Frequency Questionnaire to evaluate the weight or volume of a food item.

**NB:** The team leader or coordinator should check that each answer in the questionnaire includes a unit of measurement and a description.

In **section C** on page 29 and 30 of the questionnaire, you are requested to obtain some additional information. Ask the questions listed and tick the appropriate box for the answer the interviewee gives you for each question. You should record the answers to the questions as follows:

**Question 1:** Circle or tick the correct answer. Since more than one answer may be appropriate you may tick **more than one** option.

**Question 2:** Establish whether any member of the household has his/her own crop production and tick the “Yes” or “No” option. If you ticked the “Yes” option, ask which crops are grown. List and record one crop for each line. For each crop listed, ask what proportion of it is consumed in the household each year?. Circle the appropriate answer in the corresponding line, i.e. “None”, “1/4”, “1/2”, “3/4”. Then ask what other crops are grown by the members of the household and repeat the process.

**Question 3:** Establish whether any member of the household has his/her own livestock and tick the “Yes” or “No” option. If you ticked the “Yes” option, list the animals in the “kind of animal” column, one animal per line. For each animal listed, ask for the number of animals as well as the purpose of keeping them, and record these details in the appropriate columns.

**Question 4:** Establish whether any other preservation methods are used in the household, such as smoking or drying, to keep food edible for longer. If you tick the “Yes” option, record in the table provided the foods and the preservation methods used. Record one food per line.
**Question 5:** Tick the “Yes or “No” option to indicate whether enough food is grown to last in the household until the next harvest.

This completes the collection of the information required for the “food procurement” section of the questionnaire.

**Now do the following exercise: Pause the Video:**

Make sure you practise completing the questionnaire using your co-worker as a subject

If you are unsure of any aspects of the questionnaire, please do ask the coordinator.

**B. HOUSEHOLD FOOD INVENTORY SECTION**

Now return to section A on page 2 of the questionnaire in order to complete the “Household Food Inventory” section. **Please do remember** that this section is to be filled in, in **ALL** households but in **SELECTED EAs only**. Start by completing all the information required in the columns of this section, which is on the right hand side of the page in the questionnaire, namely, “description of food”, “place of food purchase”, “amount in storage” and “if >50Kg stored,”. Do **also remember** to record the information on “cooked foods stored” in section D on page 30 of the questionnaire.

Now, ask the person you are interviewing to show you where the food in the house is stored and to allow you to write down how much food there is. In order to complete the inventory, you need to start with one place of food storage and note down each item stored in that place. You then need to move to the next place of storage and repeat the process, until all the items in all places of food storage are completed and recorded. When you have finished, you need to check that you have been shown all the places of food storage. Do bear in mind that there may be some unusual places of storage, e.g. on a table in an entrance room, on a table by a bed.
For the household food inventory, please fill in the amount and location of food in the house in the appropriate columns. Do remember:

- **Only include** food that is for **household use**
- **Do not include** food that is **being cooked**
- **Include** cooked food that may be **stored**, in the fridge, cupboard or elsewhere
- **Do not include** live animals or crops that are still growing in the garden.

List only food, which is in the house or in a household food storage site(s), i.e. food items which have been bought, gathered, harvested or brought in from the garden. Vegetables still growing and animals in the yard, for example, are not included.

**Important notes:**

For each food or drink shown to you remember to ask the person being interviewed “Is this food or drink for the members of the household?” If the answer is “Yes” then:

- You need to note the food in the list of foods by recording it in the “description” column. As for the food procurement section of the questionnaire, if there is no appropriate description listed, then you need to write the description in the line “other”
- Next, you need to note the place where the food is stored. The codes for the place of food storage are shown at the top of the page. For example, if potatoes are stored in a vegetable rack you will record 4 in the appropriate line for potatoes, in the “Place of Food Storage” column
- Then, you need to note the amount of the food, and record this together with the appropriate unit, i.e. “g” for grams, “mls” for millilitres, “kg” for kilograms and “l” for litres.

**Important notes on quantifying the amount of food stored:**
If food items are in full packets, bottles, cans or containers: Note the weights or volumes on the label
If there are several containers: Remember to count the number of containers
If stored in plastic bottles, plastic or paper packages: Weigh the container using the scales you have used for weighing the child
If stored in glass bottles or other heavy containers: Estimate the volume, unless there is an empty container you can measure
If a food in a container is partially used: Estimate the proportion left and note the volume
For fruits, vegetables and packets of meat: Weigh using the scales
If the amount of food stored is so large that you cannot manage to weigh/measure the amount, or you estimate that the amount is more than 50kg or 50l, then you leave the column “amount in storage” blank. **BUT**, you ask the interviewee “for how long does he/she expect this stored food to last?”. Then, fill in the answer in the next “If >50Kg stored....” column, noting either the number of days, the number of weeks or the number of months. **Remember also** to record the unit of time, e.g. 5 weeks.

**Now do the following exercise: Pause the Video:**

Make sure you practice completing the questionnaire using your co-worker as a subject
If you are unsure of any aspects of the questionnaire, please do ask the coordinator.

**ENJOY!!!!**

**7. THE HUNGER SCALE QUESTIONNAIRE**

The last questionnaire is the Hunger Scale:

This questionnaire will be available in all the South African official languages
Please make sure that the mother/caregiver is given a questionnaire
translated in her own language as she should complete it by herself
Please fill in the details regarding the demographic data at the top of the page as previously explained
Before you allow the mother/caregiver to fill in the questionnaire, please reassure her of its confidentiality. Ask her to answer the questions as truthfully as possible
Explain to the mother/caregiver that she should make a cross in either the “Yes” or the “No” column next to each question
Leave the mother/caregiver to complete the questionnaire in her own time. Please ensure that she has completed all 16 questions.

**NB:** If the mother/caregiver is illiterate, you may read the questions and record the answers for her. However, this should only be done as a last resort.
You have now come to the end of your interviews.

Thank the mother/caregiver for her time and willingness to assist with the survey, and present her with a token of appreciation, which your team leader or coordinator will give you.

**CONGRATULATIONS ON COMPLETING ALL THE QUESTIONNAIRES. WELL DONE!**

**WE RELY ON:**
YOUR DILIGENCE TO COLLECT TOP QUALITY DATA