

**NATIONAL FOOD CONSUMPTION SURVEY**

**IN CHILDREN IN SOUTH AFRICA**

**1999**

**TRAINING MANUAL**

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## PREFACE

The Training Manual has been compiled to assist in :

- the training of the coordinators, team leaders and field workers
- guiding the coordinators, team leaders and field workers in making decisions during the fieldwork
- standardizing the data collection as well as in quality control
- our strive for delivering valid and reliable research results

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    - Food Procurement and Household and Food Inventory Questionnaire by Eleni Maunder
  - Guidelines and exercises on training the field workers:
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    - 24-H Recall Questionnaire by Nelia Steyn and Sumyah Howard
    - Food Frequency Questionnaire by Una MacIntyre
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## **1. BACKGROUND**

### **1.1 Aim of survey**

### **1.2 Objectives of survey**

#### **1.1 Aim of survey**

The aim of this National Food Consumption Survey (NFCS) is to collect baseline information for the formulation of appropriate policy guidelines for food fortification, as well as for the development of appropriate nutrition education material for children in South Africa.

#### **1.2 Objectives of survey**

##### **1.2.1 Primary objectives**

- 1.2.1.1 Determine usual food consumption of children aged 1-9 years (12 - 108 months) in South Africa
- 1.2.1.2 Assess usual intake of nutrients of 1-9 years (12 - 108 months) old children in South Africa
- 1.2.1.3 Identify factors impacting on food consumption of 1-9 years (12 - 108 months) old children in South Africa
- 1.2.1.4 Determine anthropometric status of 1-9 years (12 - 108 months) old children in South Africa

##### **1.2.2 Secondary objectives**

Use the baseline data obtained from the primary objectives, to make recommendations regarding :

- 1.2.2.1 Identification of appropriate food(s) for fortification
- 1.2.2.2 Development of appropriate nutrition education material

## **2. METHODOLOGY**

### **2.1 Study population**

### **2.1 Sample size**

### **2.3 Sampling strategy**

## 2.1 Study population

The survey population will consist of all the children aged 1-9 (12 -108 months) years in South Africa. For this purpose a nationally representative sample with provincial representation was selected using the Census 1996 information. This implies that each child in the country would have a known probability of being selected (self-weighting for the strata selected). This initial sample was adapted by means of 50% over sampling to accommodate for children that would not be at home at the time of the survey (25%), and for allowing an over-representation of the children living in high risk areas (25%) (low socio-economic status).

## 2.2 Sample size

The stipulated number of children to be studied was originally 2 200. However, in order to have a minimum of 50 observations per province and per urban/rural strata for the *24-H Recall Questionnaire*, the number of children to be studied was increased to 2 440 children. The sample was further increased to 3 050 children (i.e. an increase of 25%) to over-represent children from high-risk areas. In order to ensure that this number of children (i.e. 3 050) would be studied, the total number of children to be included in the sample was further increased to 3 120 children to allow for children that would not be at home at the time of the survey. A total of 156 Enumerator Areas (EAs) have been included in the survey, 82 of which are urban and 74 non-urban. All qualifying EAs for the survey were selected with a known probability. The EAs per province are shown in Table 1. A qualifying household for including in the survey was defined as any household with at least one child aged between 1-9 years in it.

**TABLE 1. NUMBER OF RANDOM EAs SELECTED PER PROVINCE:**

Province	Number of EAs for Urban Areas	Number of EAs for Non-Urban Areas
KwaZulu	13	16
Gauteng	25	4
East Cape	8	14
Northern Province	4	14
Western Cape	14	4
North West	4	8
Mpumalanga	4	6
Free State	6	4
Northern Cape	4	4
<b>Total</b>	<b>82</b>	<b>74</b>
<b>GRAND TOTAL:</b>		<b>156</b>

## 2.3 Sampling strategy

### 2.3.1 Selection of households

After the maps of the relevant EAs are obtained, it will be passed on to the respective field work teams. An estimate of the total number of households (HHs) in each EA needs to be obtained in order to determine the approximate number of qualifying HHs with children within the prescribed age interval in the EA. An adapted version of *Snowball Sampling* will be used to set up a partial sampling frame. For this survey the Snowball Sampling method entails the random selection of a number of HHs in each EA in which you will ask whether there are other HHs in the vicinity (within the boundaries of the same EA) with children in the prescribed age range of the survey. These HHs are then recorded on the EA map. Ultimately, you will have a list of qualifying HHs in the EA with children in the prescribed age range. Therefore, follow these steps: A child who eats **and**

sleeps in the HH more than four times per week is part of the HH. From this list you will then randomly select the required number of households for the survey. Therefore, follow these steps (Section 2.3.2, 2.3.3):

### **2.3.2 For urban and peri-urban EAs**

#### **Step one**

Let us assume, as an example, that the EA you are working in has 150 households. Now define a path that you are going to follow in moving through the EA in a systematic way so as to cover all 150 HHs. Select a HH at a random starting point within the EA. Then define the first fifteen HHs in the path you have chosen to follow and from these 15 HHs select one at random. This is your starting point. Mark this HH with a circle on the EA map. You need to have as complete coverage of the qualifying HHs in the EA as possible. In order to achieve this, start moving along the path you have decided upon identifying every 15<sup>th</sup> HH and marking it with a circle on the EA map. By the time you have covered all 150 HHs in the EA, you will have 10 HHs marked with a circle on the map. The aim is to select 10 households as a base to work from. If you estimate your EA has 200 households you will identify every 20<sup>th</sup> household from your random starting point in the first 20 households, or in general if you estimate your EA has  $x$  households you will identify every  $x/10$  th household from your random starting point in the first  $x/10$  households. You now need to go back to the first HH you marked with a circle on the EA map to start with the survey. You can of course, start with the last HH you marked with a circle on the EA map, but then you will have to move in exactly the opposite direction in your chosen path to the one you followed in marking the 10 HHs on the EA map. If the randomly selected HH you decided to visit has no

children in the desired age range, ask the occupant of the HH whether he/she knows of any other HHs with children in the prescribed age range in the vicinity (within boundaries of the same EA) and mark these HHs on the EA map with an X. After you have confirmed that the HHs you marked with an X on the EA map have children in them in the prescribed age range, number them **sequentially** (i.e. from X1 to Xn) on the map. Then, following your chosen path, move on to the next nearest household in the path that has children in the prescribed age range. List all the occupants of HH. If there is more than one child in the age range of 1 - 9 years, use the *Random Number Table*, which will be in your tool kit, to select ONE child in this HH to include in the survey. Fill in all the required questionnaires and take all the required anthropometric measurements. This HH is now completed.

Once you have completed the survey in this HH, ask the occupants of the HH whether they know of other HHs with children in the prescribed age range in the vicinity (within the boundaries of the same EA). There are now two possible options:

### **Option I**

The occupants of the HH in which you have just finished the survey may not know any other qualifying HHs in the vicinity. In such a case you move in your own chosen direction, to the next HH you marked on the EA map (i.e. the next one of the 10 HHs you have already marked with a circle on the EA map) and decide whether it qualifies for the survey. Continue doing so until you find the next qualifying HH in the EA and include this HH in the survey (i.e. fill in questionnaires and complete other tasks).

## **Option II**

The occupants of the first randomly selected HH in which you have just completed the survey, do know of other qualifying HHs in the vicinity. Now, mark these qualifying HHs with an X on your EA map. Go to these new HHs that qualify for the survey and ensure that they do have children in the prescribed age range, **and number these sequentially on the map**, BUT do not fill in the questionnaire or complete the other tasks at this stage.

### **Step two**

Now move to the next randomly selected HH that is marked with a circle in the EA and repeat *Step 1*.

### **Step three**

The first two steps in this process will provide you with a given number of randomly selected HHs in which the survey has already been completed (i.e. the circled HHs on the EA map), and also a list of qualifying HHs in the EA (i.e. the ones marked with an X). Now make sure that the list of qualifying HHs you have created (marked with an X ) together with the completed HHs (marked with a circle) exceed a total of 30 HHs after you have selected enough HHs in the EA following the prescribed procedure; if not, you must select an adjacent EA (ask your coordinator) in order to fulfil the cluster size of a minimum total of 30 HHs by following the prescribed procedure.

**NB: The EA maps following the direction path you have followed, together with the circled and X marked HHs, will be checked by the coordinator in order to ensure that all HHs in the EA have been adequately covered.**

**Step four**

Now use the listed HHs marked with an X on the EA map (i.e. if you have completed the questionnaire, say in 10 HHs, then you have at least 20 more HHs listed), from which a simple random sample can be drawn. Complete the survey in these randomly selected HHs until you have a total of 20 completed HHs for which the questionnaires have been completed (in the example above, you will only have to study 10 extra HHs from the ones that were randomly drawn for the list of HHs marked with an X on the EA map). The reason you draw more than the required number of HHs in which the survey has to be completed (i.e. 20 per EA), is to allow for non-participation or for not finding anybody at home at the time of your visit and subsequent SINGLE revisit, or for a randomly selected child not being available at the time of your visit and subsequent SINGLE revisit, or for the HH selected not meeting the inclusion criteria for the survey. A *Random Number Table* will be provided for the random selection of the HHs, which will contain random numbers between 1 and 30. If you select a number larger than your listed maximum (i.e. in the example above, 20), then skip this larger number and accept the following one on the *Random Number Table*. (For more details, refer to Section 2.3.5). If you were unsuccessful in finding and completing 20 HHs per specific EA, you have to go to an adjacent EA and repeat the whole procedure.

**2.3.3 For commercial farms and deep rural EAs**

In the case of commercial farms (and sparsely populated rural or tribal areas), draw a small number of farms with equal probability using a *Random Number Table*. From these farms, list all qualifying HHs, and from these HHs draw a simple random sample of a total minimum of 30 HHs so as to ensure that 20 HHs

are included in the survey.

#### **2.3.4 Selection of children within households**

One child only in each randomly selected HH will be included in the survey. If there is more than one child present in the prescribed age interval in a HH, then number all children in the HH in age order, so that a single child can be selected at random.

Use this list to randomly select one child to be included in the survey using the *Random Number Table* in your tool kit. (For more details, refer to Section 2.3.6).

#### **2.3.5 Random selection of households**

A *Random Number Table* is provided below. Provision is made for 30 EAs (i.e. each column is labeled as EA1, EA2, to EA30). Each column enables you to draw a random sample from a maximum of 60 numbered households (i.e. the ones you have marked from X1 to Xn on your map; an over-provision is made in case the family is not present when you visit the household, or in case the randomly selected child is not available at the time of the interview). Now, let us say for example you are in EA1 (go to the appropriate column of the Table below) and you have marked with an X 35 households on your map and have numbered them from X1 to X 35. Let us also say that you have already completed the survey in 10 households (i.e. the ones that you have marked with a circle on your EA map). Therefore, you still need a minimum of another 10 households to complete the survey in this particular EA. But now you have already 35 households numbered and marked with an X on your EA map. Now proceed down the EA1 column (i.e. the column providing you with the random numbers) and select the first 10 numbers (i.e. the 10 households you still need) that are smaller or equal to

35 (i.e. the numbered Xs on your EA map. In this example you will therefore select the households marked on your EA map as X9, X33, X19, X25, X31, X7, X12, X30, X32 and X21. This will complete the 20 households necessary in this EA for the completion of the survey.

When you come to complete the survey in these 10 households, you may find that for whatever reason 4 of the selected ones cannot be included in the survey. You will now have to replace these 4 households. In this example, you will then proceed further down the EA1 column (i.e. after the last number that you chose; in example 21) and select the next 4 numbers that are smaller or equal to 35 (i.e. 24, 1, 18 and 27). The replacement households, therefore, will be the households numbered X24, X1, X18 and X27 on your EA map.

**The Random Number Table is given below:**





### 2.3.6 Random selection of ONE child within a household

For this purpose another *Random Number Table* is provided below. In this Table provision is made for you to randomly select **ONE** child in a maximum possible of 30 households. The columns are numbered HH1, HH2 to HH30. In each column, provision is also made to select ONE child from a maximum of 11 children in the prescribed age range that may live in a given household. Proceed as follows:

Let us assume that the household you selected has 5 children in the prescribed age range. You will have already recorded these five children **in ascending age** in the appropriate section of the socio-demographic questionnaire (i.e. question 2 on page 1 of the questionnaire). Let us also assume that you are in household 2 (HH2 in the Table below). Now proceed down column HH2 until you arrive at the first number that is less or equal to five (i.e. the number of children in this household. This is number 2. You will therefore select the second child in your list of children according to ascending age. This is the child that will be included in the survey.

In case this second child on the ascending age list you have made is not available, you will have to return **once** to the household to complete the survey. If the child is still not available or present in your revisit, then this household will not be included in the survey, and you will have to randomly select a replacement household.

**NB:** If there is a possibility of finding out that the selected child will **not at all** be **available** during the field work, then the survey, in this specific HH, must be discontinued. A replacement must be selected and the rest of the sampling procedure (i.e. random selection of child per HH), be repeated.

**Random Number Table: Use this table to select ONE child per HH**

<b>HH1</b>	<b>HH2</b>	<b>HH3</b>	<b>HH4</b>	<b>HH5</b>	<b>HH6</b>	<b>HH7</b>	<b>HH8</b>	<b>HH9</b>	<b>HH10</b>
1	10	1	1	3	1	6	6	4	10
7	7	4	5	9	3	9	10	7	4
4	11	5	7	5	6	10	8	1	9
5	9	7	3	1	4	4	9	2	6
8	6	3	6	6	2	3	2	8	5
3	2	8	2	11	7	11	7	9	11
11	5	9	11	10	9	8	3	11	2
6	4	6	9	7	5	5	1	10	1
10	3	11	4	4	11	1	5	6	3
2	8	10	8	2	10	2	4	5	7
9	1	2	10	8	8	7	11	3	8
<b>HH11</b>	<b>HH12</b>	<b>HH13</b>	<b>HH14</b>	<b>HH15</b>	<b>HH16</b>	<b>HH17</b>	<b>HH18</b>	<b>HH19</b>	<b>HH20</b>
7	2	7	7	1	3	6	7	4	11
6	1	11	6	8	5	3	9	7	10
10	7	1	9	5	8	7	5	6	3
4	5	6	11	4	11	2	8	10	9
11	9	10	3	3	9	10	3	1	7
5	4	2	1	2	1	11	2	8	4
9	6	9	10	6	7	4	6	9	8
2	3	4	5	7	10	1	1	3	2
3	11	3	8	10	2	5	10	2	5
8	10	8	2	9	6	9	11	5	1
1	8	5	4	11	4	8	4	11	6
<b>HH21</b>	<b>HH22</b>	<b>HH23</b>	<b>HH24</b>	<b>HH25</b>	<b>HH26</b>	<b>HH27</b>	<b>HH28</b>	<b>HH29</b>	<b>HH30</b>
7	6	9	11	11	11	2	10	11	3
3	8	5	3	4	7	5	7	9	11
5	9	8	9	3	8	4	11	7	1
9	1	2	1	5	4	9	9	8	7
6	10	10	10	8	1	10	4	2	6
4	3	1	5	7	9	11	5	5	2
8	2	4	2	2	3	1	6	1	5
11	5	7	8	10	10	6	2	4	10
1	4	6	7	1	2	7	3	10	4
10	7	11	4	9	6	3	1	6	8
2	11	3	6	6	5	8	8	3	9

**2.3.7 Selection of HHs in poorly demarcated EAs**

Randomly select point of reference as your starting point. If the HHs are clustered together (as for instance in kraals or farm homesteads), then map the HHs within the boundary of the EA on an A4 size paper and number those households which have children in the prescribed age range in them. Use the RNT to

select the HHs that you will include in the survey. Proceed as previously described. In case that there are less than 20 HHs which you need to complete the survey in this EA, choose (ask your coordinator) an adjacent EA and continue sampling until you have completed 20 HHs. Use the same approach in selecting HHs in commercial farms. If the HHs are not clustered together in relation to the reference points, then map all the households within the boundary of the EA and proceed as previously explained.

### **2.3.8 What if?; why?; how?**

**2.3.8.1** The birth date of the child cannot be determined. The most important part of the date of birth is the year of birth. If the month and date is not known, then write 00 for the date in the day block and 00 in the month block. Complete the block for the year as previously explained. If the year of birth is also not known, then select a replacement HH from the HHs already numbered X1 to Xn on your EA map.

#### **2.3.8.2 Definition of ages**

For the purpose of this survey, the age is defined according to completed years of life. A 1 year old child is 12 - 23.9 months of age; so a child of 14 months of age is older than 1 year and will be included in the survey. At the other end of the spectrum only children younger than 108 completed months of age will be included in the survey.

### **2.3.8.3 Selection of EAs for the Food Inventory component of the Food Procurement and Food Inventory Questionnaire**

The details of this process will be given to you by your director.

### **2.3.8.4 Numbering of provinces and subjects and interviewers**

At the top of the first page of each questionnaire, these details should be filled in as follows:

Subject number: This refers to the HH, and the ONE child you will include in the survey from a given HH. Since in each EA only 20 HHs will be studied, enter the number of the HHs in the EA, i.e. from 01 to 20 using the first two blocks of the subject number field. For the subject number, you will also have to insert in the next two blocks of the subject number field the number of the child you randomly selected from the list of children you made in Question 2 of the Socio-demographic Questionnaire. Remember that this list you will have done in ascending age order. If, for example, you have chosen child no 5 from this list, then enter 05 in the next two blocks of the field after you entered the HH number. For example, if you included child no 2 in HH x 15, then enter 1502 in the first four blocks of the subject number: field. The last two blocks remain open.

Replacement HHs should be numbered in the same manner from 21 onwards in order to avoid confusion and also to identify the number of replacements. If you replace any of the 20 HHs you selected originally, then

make sure you have filled in the subject number field in the Socio-demographic Questionnaire for the HH you originally selected and you had to replace. For instance if you had to replace HH X15, then fill in, in the subject number field of the Socio-demographic Questionnaire X15 and leave the other questionnaires empty. Because you have replaced HH X15 with X21, you will of course now have filled in a complete set of questionnaires for HH X21.

**Province:** Simply write or abbreviate the name of your province. If you decide to abbreviate, use G for Gauteng, FS for Free State, EC for Eastern Province, WC for Western Province, NC for Northern Cape, KZN for KwaZulu/Natal, M for Mpumalanga, NW for North West Province, NP for Northern Province.

**EA:** Write the number of the EA as it appears on the copy of the Census EA you have been provided with.

**Interviewer:** Please write your surname in the space provided.

**Interviewer code:** This will be given to you by your coordinator.

#### **2.3.8.5 Missing values**

Remember that every effort will be made to avoid having missing values. Also remember that if you did not complete any aspects of the questionnaires on your first visit, you must return to this HH only **once** having

made an **appointment**. **If during this revisit you are still unable to obtain the missing information, then this missing information is a missing value for the survey.**

#### **2.3.8.6 Validation**

For the purpose of this survey, validation means the comparison of data obtained from the FFQ and the data from three separate 24-H Recalls. Each 24-H Recall will be done in the same chosen HH on a Monday, a Wednesday and a Friday in a random order. For this purpose a Random Day Table is included in the Training Manual for your use. Consult with your director as to how the validation will be implemented. **Please note that the same field worker who completed the questionnaires in the randomly selected HH in which the validation will be done, MUST return to that HH to complete the remainder two 24-H Recalls.** In terms of the random selection of the HHs to be included in the validation exercise, you can do the validation in every second HH in the chosen EA, after you have randomly selected all the 20 HHs to be included in the survey in the chosen EA. The validation will only be done during the pilot stage of the survey.

### Randomisation of the days on which to do the 24-hour recall

WEEK 1	WEEK 2	WEEK 3
Friday	Wednesday	Monday
Friday	Monday	Wednesday
Monday	Friday	Wednesday
Friday	Wednesday	Monday
Friday	Wednesday	Monday
Monday	Wednesday	Friday
Wednesday	Friday	Monday
Friday	Monday	Wednesday
Friday	Monday	Wednesday
Wednesday	Friday	Monday
Monday	Friday	Wednesday
Friday	Monday	Wednesday
Friday	Monday	Wednesday
Wednesday	Friday	Monday
Monday	Wednesday	Friday
Monday	Wednesday	Friday
Monday	Friday	Wednesday
Friday	Monday	Wednesday
Friday	Wednesday	Monday
Wednesday	Friday	Monday

#### Example:

If you start in an EA, say on a Wednesday select Wednesday in the Week 1 column and find the corresponding day for the repeat of the remaining two 24-H Recall will be done on a Wednesday, the second on a Friday and the third on a Monday.

### 2.3.8.7 Quality control

This integral part of the study will be implemented for the QFFQ and anthropometry in two HHs in each EA. Essentially, the coordinator will select these two HHs randomly after you have randomly selected all the 20 HHs to be included in the survey. During the pilot stage of the survey, the HHs that can be selected for the quality control exercise cannot be the same as those selected for the validation exercise; effectively, during this period, you will select the two HHs for the quality control exercise. **The quality control exercise will be implemented in every EA and in every province.** In these two randomly selected HHs the QFFQ and the anthropometric measurements will be completed again on the same day, **but this time by the coordinator or the team leader.**

### 2.3.8.8 Repeatability

For the purposes of the survey, repeatability means the ability of the field worker to obtain as accurate information as possible from the same interviewee one week apart. This entails that one HH will be randomly selected by your coordinator in a manner similar to that for quality control in which the same field worker will return to complete the QFFQ and the anthropometric measurements a second time. This exercise will be done in one HH in every EA in all provinces. **All field workers will be tested for repeatability during the course of the survey. This is part of a necessary process and not a reflection on the ability or**

**integrity of the field worker being tested.** Your coordinator will implement the exercise without your prior knowledge. During this exercise you will start afresh with a new QFFQ and you will not have access to the one you already completed, neither will the field worker have access to the measurements made previously.

#### **2.3.8.9 Consent**

Do remember that you will also have to complete a consent form for each HH you visit. The consent form assures us that the HH participated in the survey voluntarily. If the HH refuses to sign the consent form, then a replacement HH will have to be randomly selected.

#### **2.3.8.10 Piloting**

All provinces will in the first instance carry out a pilot in one urban and one non-urban EA. Consult your director on this matter. The pilot will also incorporate the validation exercise. Once the pilot has been completed, then the director, the coordinator, the team leader and the fieldworkers will jointly address any points that need to be attended to before the survey proper begins. If no problem areas are identified during the pilot then the survey proper can start immediately.

#### **2.3.8.11 Claims for expenditure**

A claim form has been designed for this purpose and is included in the Training Manual as an appendix. No claims will be paid without the submission of this form

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duly signed by the coordinator and the director.

### 3. RESPONSIBILITIES OF COORDINATORS

The provincial coordinator will be overall responsible for the coordination and implementation of the fieldwork of the survey. This includes **ALL** tasks required for the successful completion of the fieldwork of the survey. Relevant training will be provided. Within this framework of responsibilities, the following are some examples of the expected responsibilities/duties:

- 3.1 Finalizing all arrangements for fieldwork (allocation of field workers in groups according to the requirements of a given EA, transport, accommodation, meals, remuneration, sampling of the EAs and control thereof, communication, safety and any other aspects related to the field work).
- 3.2 Coordinating field workers at the time of doing the survey in a given EA.
  - 3.1.1 Continuous monitoring of data collection in terms of checking procedures, and cross-checking for completeness of data collection; coding of data. Additionally, the coordinator will be responsible for the quality control of the data collected. This will be achieved by physically checking the data collected in 10% of the HHs included in the survey in a given EA.
  - 3.1.2 For Food Frequency questionnaire: Check quantities and do coding.
  - 3.1.3 Coordinator must sign questionnaires after having checked them.
- 3.4 Team building.

- 3.5 Problem solving.
- 3.6 Training of all field workers for a given province under his/her jurisdiction.
- 3.7 Continuous communication as necessary with the national coordinator on points and aspects of the survey in need of clarification.
- 3.8 Making contact with leaders of the community(ies) to be surveyed, and recruiting and training community members familiar with local circumstances and community needs/expectations, who would help with the implementation of the survey.
- 3.9 Safe keeping of all records arising from all HHs.
- 3.10 Safe and prompt dispatch after checking of all records to the central survey office according to previously agreed upon arrangements.
- 3.11 Any other tasks/responsibilities which are essential for the successful completion of the fieldwork part of the survey, e.g. providing the field workers with an interviewer's code. This can be done by simply using the province name or abbreviation followed by a number from 01 (to cover total number of field workers.)

## 4. RESPONSIBILITIES OF FIELD WORKERS AND TEAM LEADERS

### 4.1 Field workers

### 4.2 Team leaders

#### 4.1 Field workers

##### 4.1.1 Field work

##### 4.1.1.1 Sampling

##### 4.1.1.2 Data collection (complete five questionnaires per selected household by means of interviewing and do anthropometry).

Field workers will be overall responsible for the collection of the data for the survey under the direct or indirect, (as appropriate), supervision of the coordinator and/or group team leader. This includes **ALL** related tasks required for the successful completion of the fieldwork of the survey. Relevant training will be provided by the coordinator of the specific province. At all times the field worker will respect and be sensitive to the needs/ constraints of the person he/she interviews.

#### 4.1.2 Conducting the field work

4.1.2.1 You will work in small groups and you will be immediately supervised by a team leader. All groups of field workers and team leaders will be supervised by a coordinator. Both the team leaders and the coordinator will be there to guide and support you throughout the survey.

4.1.2.2 During the time that you are working in the field on the survey you will drive or be taken to the area and

house, which you are to visit.

4.1.2.3 At each house included on your list you will interview, in the first instance, the mother of the child (1 - 9 years old/12 -108 months), 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.

4.1.2.4 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.

4.1.2.5 At all times during the survey, we expect you to be friendly and respectful towards the people whom you are interviewing. (Please refer to Section 5.3: Interview skills.)

### **4.1.3 Main duties**

4.1.3.1 Complete the questionnaires of the survey.

4.1.3.2 Complete the anthropometric measurements.

4.1.3.3 Handing out the *thank you* token of appreciation to the mother/caregiver according to the protocol of the survey.

4.1.3.4 Close collaboration with the team leader/coordinator.

4.1.3.5 Clarification of any points of the survey that are not

clear with the team leader/coordinator.

4.1.3.6 Delivery of all records of the survey to the team leader/coordinator.

4.1.3.7 Any other relevant tasks essential to the successful completion of the data collection as part of the survey.

## 4.2 Team leaders

Team leaders will be overall responsible for the direct supervision of field workers and the collection of the data for the survey under the direct or indirect (as appropriate) supervision of the coordinator. This includes ALL related tasks required for the successful completion of the field work of the survey. Relevant training will be provided by the coordinator of the specific province. At all times the team leader will respect and be sensitive to the needs/constraints of the person of the person he/she supervises, and depending on the prevailing needs and circumstances of the person he/she interviews. Within this framework of responsibilities and in close consultation with the coordinator, the following are some examples of the **responsibilities**:

4.2.1 Coordinate and allocate HHs to be surveyed to the field workers.

4.2.2 Be immediately available for consultation and resolution of points of clarification of any aspects concerning the data collection.

4.2.3 Completion of the questionnaires of the survey (if and when necessary), in order to maximize the efficiency of data collection.

4.2.4 Completion of the anthropometric measurements under

circumstances as in 4.2.3.

- 4.2.5 If necessary, handing out of the *thank you* token of appreciation to the mother/caregiver according to the protocol of the survey.
- 4.2.6 Close collaboration with the coordinator in terms of maximizing the use of available resources.
- 4.2.7 Quality control and monitoring of the data collected, as well as checking the completion of all questionnaires. (The team leader has to do on site (in situ) checking and monitoring).
- 4.2.8 Delivery of all records of the survey to the coordinator.
- 4.2.9 Any other relevant tasks essential to the successful completion of the data collection as part of the survey.

## 5. CONDUCTING THE INTERVIEW

### 5.1 Questionnaires and tools

### 5.2 Food models kit

### 5.3 Interview skills

#### 5.1 Questionnaires and tools

During each interview that you conduct you have to complete the following **questionnaires** in a very specific (prescribed) order:

5.1.1 Socio-demographic Questionnaire

5.1.2 24-Hour Recall Questionnaire

5.1.3 Food Frequency Questionnaire

5.1.4 Food Procurement (all EAs) and Household Food Inventory Questionnaire (only selected EAs)

5.1.5 Hunger Scale Questionnaire

To make your task easier, we will supply the following **tools**:

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

A **video** has also been made to assist in the training on the completion of the questionnaires.

**Food models kit:** This contains examples of food models 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 in the video presentation, as well as in the Training Manual.

## 5.2 Food models kit

Each field worker will be given a food models kit to use during the survey. Please look after your food models kit and handle the food models with great care in order to prevent breakage. 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:

- wax maize models (1/2, 1 and 2 cups)
- 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 (labeled 150mL and 250mL)
- 1 serving spoon, tablespoon, teaspoon
- 1 plastic measuring jug (500mL)
- 1 plastic baby bottle (250mL)
- 1 ruler
- pens, pencils, eraser, clipboard, extra paper

### Purpose of each item in the kit

- The cardboard container is for you to carry the models and containers in.
  
- The 3 wax maize models are for you 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 one cup and a 2 cup-model to demonstrate with.

- The 3 foam meat models can be used to demonstrate meat portion sizes. Included is a 30g, 60g and 100g portion.
- The wax vegetable model is useful to show a 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 or whole wheat bread. The 10mm slice is the same as the one that is sliced by a machine. The slices can also be put together to create a specific thickness.
- The wax scone can be used to determine a scone or a 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:** 250mL = 1 cup  
500mL = 2 cups

- 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.

### 5.3 Interview skills

Please apply the following guidelines when conducting the interview (i.e. for all the questionnaires):

#### 5.3.1 Introducing yourself:

- Introduce yourself to the mother/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.

- Request the mother/caregiver to sign the letter of consent. You first have to explain to him/her what it is all about.
- Assure her of the confidentiality of the information he/she gives you and the importance of answering truthfully.

- 5.3.2 Ask the questions as they are written on the questionnaire. Try even to keep your tone of 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 to answer. You may have to explain a question or use different wording if the interviewee cannot understand it.
- 5.3.3 Ask the questions in the order that they appear on the questionnaire. If the interviewee refuses to answer the question, record the lack of response and go on to the next question.
- 5.3.4 Follow the instructions on the questionnaire. Not all questions are relevant to all interviewees. For example, if the child does not eat a certain food, then do not ask how the food is prepared.
- 5.3.5 Do not try to influence the way the interviewee answers. Keep your facial expression friendly and interested, but neutral. Never show surprise or shock or approval to the interviewee answers. Try to avoid unconscious reactions such as nodding the head, frowning, raising the eyebrows. Never give your own opinions or advise the interviewee.
- 5.3.6 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.

- 5.3.7 Keep the tone of the interview conversational. Be friendly and courteous. Do not make the interviewee feel as if he or she is taking an examination or is on trial. Be familiar with the questionnaire so that you can ask questions conversationally rather than reading them stiffly. The questionnaire is designed to keep the amount of writing to a minimum. However, if a interviewee gives a long response to an other question, say: excuse me while I write that down . Don't make the interviewee feel as though you have forgotten she is there.
- 5.3.8 Keep control of the interview. Do not let the interviewee go off into irrelevant conversation. If she does, bring her gently back to the interview.
- 5.3.9 Allow the interviewee time to think, do not hurry her to answer. However, if she is silent for too long, repeat the question or prompt her. For example, say: you have told me how to cook cabbage, now please tell me how you cook pumpkin. (Prompting will be discussed in more detail later).
- 5.3.10 Follow the instructions on the questionnaire for recording the responses. Record all responses, including negative responses or refusals to answer.
- 5.3.11 Write clearly. Always keep the following in mind when you complete 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

**5.3.12 MAKE SURE THAT YOU HAVE COMPLETED THE FIRST PART OF ALL THE QUESTIONNAIRES IN THE SAME MANNER.**

## 6. SOCIO-DEMOGRAPHIC QUESTIONNAIRE

### 6.1 Introduction

### 6.2 Refer to questionnaire per se

### 6.3 Anthropometric measurements (Second part of questionnaire)

#### 6.1 Introduction

The questionnaire consists of two parts:

The first part comprises questions which you will ask the mother or the caregiver (i.e. the person who mostly looks after the child if the mother is unavailable).

The second part requires of you to measure and weigh the child.

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 EA in a province, the household and the child. The name of the EA will be given to you by your team leader.

The subject number should be worked out as follows (also refer to Section 2.3.8.4):

The **first** two squares are for the number of the HH.

The **next** two squares are for the ascending number of the child in the HH.

The **last** two squares are left open.

The birth date of the child should be obtained from the birth certificate or the Road to Health Card; if none of these are available then 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 1990. 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.

At interviewer, fill in your name followed by your code, which will be given to you by your coordinator. **The details are for quality control purposes.**

**Now** fill in the rest of the questionnaire. 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 or female. Ask the mother/caregiver about the religion of the child/household. Fill in the ethnic group section without asking, e.g. Zulu, Xhosa, Indian. Rather ask about the home language/mother tongue. Include the home and work telephone numbers of the mother/caregiver, if they have such a facility.

You now need to check whether any of the following 9 statements are true in this home. Ask these in the following manner and in the sequence given:

- 6.1.1 Was there a death in the family in the past three weeks?
- 6.1.2 Was the child ill over the last two days?
- 6.1.3 Whether the caregiver is not available if the mother of the child is not at home?
- 6.1.4 Was the child away from home over the past 24 hours?
- 6.1.5 Is the caregiver younger than 12 years of age?
- 6.1.8 Whether the child eats more than four days per week elsewhere?
- 6.1.9 Has the child not spend most of the past six months with his/her

mother /present caregiver (only applicable for children older than 2 year (24 months))?

You also need to **check** the following because you cannot ask these questions without offending the mother/ care giver:

6.1.6 Whether the mother/caregiver is mentally incapacitated.

6.1.7 Whether the mother/caregiver is under the influence of alcohol.

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

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

### **In Summary:**

The child is **included** if:

- there was no death in the family the past three weeks
- the child was not ill over the past two days
- the mother / caregiver is present and willing to participate
- the child eats at least four days per week at his own home
- the child has spent most of the past 6 months with his / her mother or the present caregiver (only applicable for children older than 2 years (12 - 24 months))
- the child was not away from home over the past 24 hours
- the caregiver is not younger than 12 years
- the mother / caregiver is mentally capacitated
- the mother / caregiver is sober (not under the influence of alcohol)

## 6.2 Refer to questionnaire per se

### 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 other, 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 choice given. You may only tick **ONE** option.

### Question 2

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 in years of each person. 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 and code the relationship of each household member to the child. Always choose one of the codes from the options given at the bottom of the Table, i.e. father, mother, sibling. Only choose other, if none of the options given are appropriate. The last column of this question requires you to tick a Yes or 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

Enquires about the marital status of the mother at present. You should select **ONE** option only. Please note the difference between option 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. Traditional

marriage is considered as legal.

### **Questions 4-8**

Ask every question and mark **ONE** option only. We are interested in knowing:

#### **Question 4**

Who prepares the food in the house?

#### **Question 5**

Who buys the food in the house?

#### **Question 6**

Who decides on what food is bought?

#### **Question 7**

Who is the head of the house? (The head of the household may not be staying in the household.)

#### **Question 8**

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 an aunt or uncle refers to blood relatives of the mother or father of the child.

### **Questions 9-10**

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**

Enquires about the type of house in which the child sleeps. If the dwelling consists of different sections which are made of different materials you may tick more than one block, 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.

**Question 17**

Enquires about fuel used for cooking, for which you may tick **more** than option.

**Question 18 (5 sections)**

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 do not record 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 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 that are mentioned, but you must specify (e.g. retired) as given to you, during the interview

**Question 21**

Should be completed only if the caregiver is a different person to the mother. Otherwise fill in the same details as for the mother of the child.

**Question 23**

Gives the number of people contributing to the income. You should already have determined this in question 23. Remember to include people with pension or grants.

**Questions 24 and 25**

Need to be dealt with 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 general manner, e.g. Is the total income less than or more than R1 000,00 per month?

**Question 26**

Enquires 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.

**Question 27**

Try to find out how much money this family spends on food every week. You can start off in general way to assist the interviewee, e.g. Do you spend more or less than R100,00 per week on food?

Remark: If the caregiver does not know the answers to Questions 19 - 27, record 'Do not know'.

**6.3 Anthropometric measurements (Second part of questionnaire)****General remarks**

If the child is not at home during the interview with the mother/caregiver:

- i. Make an arrangement to return to the home once the child will be available.
- ii. Make an arrangement to measure the child at school. Remember to first obtain permission.

- iii If the child will be transported by the field worker, written permission must first be obtained from the mother / caregiver.

**NB: Whatever arrangement you decide on, it must be logistically practical and cost effective.**

The following anthropometric measurements should be done:

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 leveled with the aid of its in-built spirit level.

- After the scale is switched on, the field worker 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 field worker, 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 field worker 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). The weighing should be done according to the discussed procedures.
  - Then the zero/reset button is pressed and the field worker 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 that has been specially constructed for the survey. (Refer to figure 6.2). 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 foot board 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 field worker should ensure that the child's heels touch the board and that the legs are straight (knees not bent), before the foot board is slid against the soles of the child's heels. The measurement is taken on the inside of the foot board 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. (Refer to figure 6.3). 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 field worker
  - shoulders relaxed, with shoulder blades, buttocks and heels touching the measuring board
  - arms relaxed at sides
  - legs straight and knees together
  - feet flat, heels touching together
  - with the child looking straight ahead (Frankfurt plan; refer to figure 6.1), the headpiece is slid down until it touches the crown of the head
  - the reading is taken at the bottom of the head piece to the nearest 0.1cm
  - the measurement is recorded in the space provided in the questionnaire and repeated once

### **Mid-upper Arm Determination**

The mid-upper arm landmark is taken as the point on the lateral side of the non dominant 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 a tape measure to this point. (Refer to figure 1.22). If the tape is allowed to lie over the surface of the arm, the mid-point 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. (Clean the tape with a wet wipe after a child has been measured).

### **Head Circumference Determination**

This is a standard measurement for the serial assessment of growth in children from birth to 36 months. This measurement should **only be done on children 12 - 36 months (1 - 3 years) old**. The Training Manual contains pictures, which demonstrate this clearly (refer to figure 1-17A and 1-17B). 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 (refer to figure 1.17A and 1.17B).
- Place tape over the most prominent part of the occiput (back) and around the forehead just above the supra-orbital ridge (front above eyebrows).
- Tighten tape securely, and note measurement over the forehead.
- Read the nearest 0.1cm.
- Clean the tape with a wet wipe after a child has been measured.

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.

**References**

Lee RD & Nieman DC. Nutritional assessment. 2<sup>nd</sup> Mosby. St Louis.

Rombeau GL, Caldwell MD et al. Atlas of nutritional support techniques. Little Brown Co. Boston/Toronto. 1989.

**ANTROPOMETRIC TESTS**

**Instruction: Please repeat each measurement twice on every child**

**Fieldworker:** \_\_\_\_\_

**Date:** DD \_\_\_\_\_ MM \_\_\_\_\_ YY \_\_\_\_\_

<b>CHILDREN</b>	<b>AGE (YEARS)</b>	<b>WEIGHT (kg)</b>	<b>HEIGHT (m)</b>	<b>MUAC (cm)</b>	<b>HC (cm)</b>
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

**SCORE = \_\_\_\_\_ / 80**

**NB: 1 Point is given for every correct measurement which does not deviate more than allowed from the measurement taken by the coordinator.**

## **7. 24 HOUR RECALL QUESTIONNAIRE (24-H Recall questionnaire)\*\***

### **7.1 Introduction**

### **7.2 Refer to Questionnaire per se**

### **7.3 24-H Recall of Items per Specific Food Group**

### **7.4 Completion of Interview**

### **7.5 Quantification Exercises (minimum – 1 day)**

### **7.6 24-Hour Recall Test**

#### **7.1 Introduction**

The objective of this questionnaire is to record all food items and drinks, which the child consumed during the previous 24 hours.

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

\*\* The field worker must do the coding as well as writing in the quantities.

- 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 09:00)
  - \* IS stands for In-between Snack
  - \* L stands for Lunch: (the interval between 12:00-14:00)
  - \* IS stands for In-between Snack
  - \* D stands for Dinner: (the interval between 17:00 - 20:00)
  - \* AD stands for After Dinner

## **7.2 Refer to Questionnaire per se**

### **Questions 1 - 8**

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 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. Refer to the Training Manual: *Description of food items* for the different types of fat,

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

### **Question 5**

Enquires 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 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**

Enquires about the type of milk the child usually drinks. Refer to Training Manual: *Description of Food Items* for the different types of milk that are available. 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**

Enquires 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, that 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:
- 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 what exactly the child ate on the previous day. This is only necessary if the mother/caregiver is unable to give you relevant information regarding the meal eaten or the supplements taken.

Question 8 is followed by the 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. Lets 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, summarize it for the mother/caregiver. Any forgotten items can then be added.*

### **Remember**

- 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 recorded
- Specify fully when new items are entered, and look up the code later. (Refer to Addendum A.)
- Recipes should be added to Section B of page 15.

### **7.3 24-H Recall of Items per Specific Food Group**

The following check list 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?

### 7.3.1 Tea and coffee

Using this procedure you should determine how much tea or coffee was consumed. Was 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. 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 volume 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 Training Manual: *Description of Food Items* (Section 11.1) for the correct amount.

### 7.3.2 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 drink:

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 the kit. You can use the glass, mug and teaspoon provided in the kit, to assist you in determining portion sizes.

### 7.3.3 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*.

A dairy-fruit mix is a mixture between milk and fruit juice (*Tropica* is a typical example).

*Mageu* is a drink made from fermented maize, which is purchased in a carton. Refer to Training Manual: *Description of Food Items* (Section 11.3) for more details.

#### 7.3.4 Breakfast cereals

This includes cooked porridge and instant cereals. Cooked porridge includes Maltabella, Mabella, Maize-meal, Oats and Tasty wheat. Please pay special attention to maize porridge. You need to determine the texture and consistency, i.e. 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*

Check 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 Weet-Bix.

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

- wax maize models  $\frac{1}{2}$  1cup and 2cups
- measuring cups
- raw maize-meal
- puffed wheat
- the plate

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

- Fat may be added: check the type of fat
- Sugar or other sweetener (e.g. honey/syrup) may be added
- Raisins, bananas, etc., may be added

- Milk may be added: check the type of milk and the quantity. On 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 Training Manual. Notice that the amount of milk added differs for instant cereal, porridge and for *Pronutro*. Refer to Training Manual: *Description of food items* (Section 11.4) for more details.

### 7.3.5 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 20mm slice and the thickest one measures 30mm. The slices can also be put together to create a specific thickness.

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, 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 or baking powder. Use the ruler and scone model in your kit to determine the portion size of muffins, scones and vetkoek.

### 7.3.6 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 (e.g. *Bovril*, *Oxo*). 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.

### 7.3.7 Egg group

It is important to determine what type of cooking method was used to cook the egg, namely, whether it was boiled, poached, curried, fried or scrambled. You also need to determine whether the type of fat and milk, that 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. Refer to Training Manual: *Description of Food Items* (Section 11.7) for more details.

### 7.3.8 Cheese group

The most commonly used cheeses are Cheddar/Colchester 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 (also for grated cheese), ruler and match box in your kit to determine portion sizes. Refer to Training Manual: *Description of Food Items* (Section 11.18) for more details.

### 7.3.9 Meats

This group 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. When you are asking about meat always check the following:

- The type of meat and the cut of meat eaten
- The cooking method used
- Whether fat was added in cooking
- Whether the fat was trimmed off the meat (FT) or retained (F).  
(If the mother/caregiver is unsure, use the code *with fat*)
- Whether the 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
- What type of fat was used
- 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 ½ cup and 1cup measure
- The ruler

Refer to the Training Manual: *Description of Food Items* (Section 11.9) for more details

### **7.3.10 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.

### **7.3.11 Starch group**

This group includes the following items:

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

Please note that the quantities are given in a tablespoon, serving spoon and cup format. You should use your maize food models in the 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 enquire whether fat was added to the starch and to specify what type of fat it was. Refer to Training Manual: *Description of Food Items* (Section 11.4 and 11.11) for more details.

### **7.3.12 Soup and legumes**

This group includes:

- Dry beans (cooked) (e.g. sugar beans)
- Lentils
- Samp and beans (Commercial 1:10; homemade 2:1 check by asking)
- Samp and peanuts
- Soups (If homemade, record recipe)
- Dry bean stew

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

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

### 7.3.13 Cooked Vegetables

These are easily identified and are presented in alphabetical order. You will notice 5 specific columns that present you with instructions on 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.

### 7.3.14 Salads and raw vegetables

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 line.

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

### 7.3.15 Fruit group (listed in alphabetical order)

Fruits have been divided into 4 columns:

- A column with sweetened, canned fruit
- A column with the raw / fresh 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, please record it as such. Use the tennis ball in your kit to indicate a medium fruit portion size.

### **7.3.16 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. When unsure, take the WM code. Use the tablespoon, serving spoon and the cup measure in your kit to determine portion sizes. If a different pudding was eaten that is not listed in the questionnaire, please write down the recipe in detail in Section B of page 15.

Sauces include:

- Cream
- Chocolate sauce
- Custard

If cream was eaten, please specify the type, e.g. plant: *Orley Whip*, canned or fresh. If custard was eaten, then specify the type of milk used and whether sugar was added. Different sauces can be entered under other. Refer to Training Manual: *Description of Food Items* (Section 7.3.16) for more details.

### **7.3.17 Cake, cookies and special bread 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

Refer to Training Manual: *Description of Food Items* (Section 11.17; 11.18; 8.2.3.5.4) for more details.

### **7.3.18 Sweets**

The weight of individual sweets and savoury snacks can be found in the Training Manual: *Description of Food Items* (Section 11.19). The *Sweets* group include:

- Chewing gum
- Chocolates
- Hard sweets
- Peanuts
- Crisps
- Snacks
- Soft sweets

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

### **7.3.19 “Other” group**

This group includes:

- Sauces, such as cheese sauce

- Condiments, such as atjar and chutney; and
- Gravy

### **7.3.20 Infant foods**

This group includes:

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

## **7.4 Completion of Interview**

Complete the interview by asking questions 10 to 12 on page 14, and to record a yes or no answer to each of these questions.

## **7.5 Quantification Exercises (Minimum - 1 day)**

- Field workers should make tea with different amounts of milk and use a cup and a mug.
- Field workers should practice liquid measures with cups, measuring jug and glass.
- Field workers should make the different types of maize porridge, e.g. stiff, soft and crumbly and measure out different portion sizes e.g. 1 c, 2c etc.
- Field workers should be shown different amounts of milk added to soft porridge e.g. little, medium and a lot.
- Field workers should cut bread in slices of different thickness and be able to recognize the thickness of the slices.

- Field workers should be shown margarine spread on bread: thin, medium and thick. Repeat with peanut butter.
- Meat, vegetables, and fruit portion sizes should be shown at the local supermarket. However, field workers should make a local stew and practice dishing up with different types of spoons.
- Field workers should be shown different amounts of maize and beans and be able to recognize the portion sizes.
- Field workers should make a note of all local brands at the supermarket especially: milk, margarine, maize porridge.
- Cake, tarts and puddings should also be viewed at the supermarket. Field workers should also determine portion sizes using the ruler and foam models.

**TEST:** To test final understanding, display the following and test the fieldworker's understanding of quantification:

- slices of bread (different thickness)
- maize portions
- 1 stew portion
- 1 bean portion
- margarine spread on bread
- 1 mealie rice portion
- 1 vegetable portion

**SCORE = \_\_\_\_\_ / 10**

## 7.6 24-Hour Recall Test

**Instructions: Please fill these food items in on the questionnaire as you have been taught**

### TEST 1

According to the mother the child ate the following food items on the previous day:

- 7:00 -            One 20 mm slice brown bread with Rama (in paper)  
                     Mug of black coffee  
                     2 teaspoons white sugar
- 10:30-           One 30 mm slice white bread  
                     Nothing on the bread  
                     Mug tea with 1 teaspoon *Cremora*  
                     2 teaspoons white sugar
- 12:30-           One cup stiff maize porridge (enriched)  
                     2 chicken feet (boiled)  
                     1 mug *Oros* (squash)
- 16:00-           One average size banana
- 18:00-           One cup samp & beans (commercial)  
                     Cup morogo  
                     Mug tea with 2 teaspoons condensed milk

What did you forget to ask? \_\_\_\_\_

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**TEST 2**

Early morning:	One mug of water, nothing to eat
11:00 -	2 x 30 mm slices white bread no margarine or fat jam spread very thickly on each slice 1 mug sweetened guava juice 1 small packet (30g) <i>Niknaks</i>
13:00-	1 x 8 cm diameter vetkoek with curry mince 1 tea cup with <i>Sweeto</i> 1 x average size apple
16:00-	1 x mug <i>Cool-aid</i> 1 x matchbox size sweetmilk cheese
19:00-	165 mm thick <i>boerewors</i> (fried) Cup mashed potato (WM + MM) 3 slices tomato Cup jelly Mug fresh whole milk
20:00-	2 handfulls of salted peanuts Mug sweetened orange juice

Did you forget to ask anything? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TEST 3**

8:00 -	1 mug apricot juice (unsweetened) 1 cup soft mabella porridge added 3 teaspoons white sugar added
10:00-	6 <i>mopani</i> worms 1 mug <i>Fanta</i> orange 1 packet <i>Simba</i> chips (40g) 1 vienna sausage
12:30	1 cup crumbly maize porridge (E) Cup <i>Imana</i> (soya mince) 1 serving spoon fried cabbage (in hard margarine) Mug mageau Cup instant chocolate pudding
16:00	1 packet wine gums 1 glass (in kit) <i>Low Cal</i>
18:00	1 serving spoon mutton stew with greenbeans Cup white rice 1 tablespoon sweetened gemsquash 1 big <i>koeksister</i>
20:00	1 mug tea lots of milk (blend) no sugar

Did you forget anything? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## **8. QUANTITATIVE FOOD FREQUENCY QUESTIONNAIRE \*\***

### **8.1 Introduction**

### **8.2 Detailed discussion of Quantitative Food Frequency Interview**

### **8.3 Training the field worker**

### **8.4 Checklist for Coordinators**

### **8.5 Quantification Exercises**

#### **8.1 Introduction**

The QFFQ consists of a list of foods and drinks that are most commonly used in South Africa. The purpose of the QFFQ 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 a week or a month the food is eaten;
- Whether there are any foods\*\*, which the child eats more than once a month, which are not on the QFFQ.

8.1.1 The questionnaire consists of 2 types of questions:

- 8.1.1.1 Information on food patterns and habits, e.g. breast feeding; supplement-use; meals away from home: these answers will be coded with numbers yes, no, and options 1 -10 etc.

\*\* The field worker must not do the coding or fill in the quantities in g/ mL. This will be done coordinator or data analyst.

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- 8.1.1.2 Information on foods **USUALLY** eaten: these answers are coded with **FOOD CODES** and **AMOUNTS** (gram, mL, 1T, cups).
- 8.1.2 The QFFQ is about **USUAL** intake; therefore, the concept of usual (*gewoonlik, gebruikelik, meestal*) must first be explained to interviewee.
- 8.1.3 Eventually, we want to know the amount of a particular food/dish/product eaten per day. Therefore, the amount **usually** eaten, (cups, etc grams/mL) either per day, week, month or seldom (only one of these), should be obtained from the interviewee. **MODELS, PICTURES, REAL FOODS**, etc., must be shown to assess portion sizes as accurately as possible.
- 8.1.4 It is of course important to have as good as possible description of a particular food / dish / product: e.g. Meat: beef; fat removed before cooking; type: rump steak; cooking method: fried in  $\pm$ 1 tablespoon of Sunflower Oil.
- 8.1.5 The QFFQ is a tool to assess **WHAT** is eaten and how often it is eaten. To get quality information, one should have a **DISCUSSION** about foods with the interviewee - listen carefully. Information may pop-up during a particular question, which is actually relevant to another question. For example: vegetable intakes may be described in the meat section as part of stews, pies, etc. **PATIENCE** is of prime importance.
- 8.1.6 The questions at the end of each section about how often or how many times meat and related products or fruits and vegetables etc., are eaten, is **NOT FOR CODING**. It is there to help you to

**DOUBLE CHECK** that, when broken-down into the different types in a particular category, the total amounts are more or less similar.

- 8.1.7 While you are filling in the form make sure that the **CODER** will eventually be able to decide on a particular **FOOD CODE** and **AMOUNT**. This will depend on the quality of information you get about the description of the food/dish/product and the portion size.
- 8.1.8 To get quality information (real, actual intake, the TRUTH) one must NEVER make moral or other judgements about foods or eating pattern during the interview. Be friendly and interested. Do not show disapproval or surprise. Remember, while interviewing your subject must be invited to tell all; he/she must feel it is **important** to be **truthful**; he/she must **TRUST** you, feel that you are really interested and that you will regard all information as confidential, worthwhile and important.

## 8.2 Detailed discussion of Quantitative Food Frequency Interview

### 8.2.1 Introduction

- 8.2.1.1 Follow the introduction on the questionnaire. Do not read it, but speak to the interviewee. Make sure that the interviewee understands what the interview involves and answer any questions she has. If you have any problems, or the interviewee wants to know something you are unable to answer, call the coordinator.
- 8.2.1.2 Details of Interviewee:  
Fill in the Subject number; date of birth; date of interview; Province; Enumerator area (EA); and

Interviewer's name and code, as already explained.

### 8.2.1.3 Questions on page 1 and 2

The first set of questions (page 1 and 2) asks for some general information about the mother/caregiver and the child.

#### 8.2.1.3.1

Try to ask the question as it is written on the QFFQ. Sometimes, however, the interviewee may not understand the question or may give an answer you do not expect. In this case you may have to ask additional questions. We will show examples of how to do this as we go through the video.

#### 8.2.1.3.2

Do NOT read the instructions to the interviewee out loud. For example: Question 1, under *Remarks*, reads: If no, specify your relationship to the child. In other words, if the interviewee answers no to the question: Are you the mother of the child? the interviewer will only say: *What is your relationship to the child?*

### 8.2.2 Tick (✓) the number under the interviewee's (participant's) answer

Example: Question 1

Interviewer (I): *Are you the mother of the child?*

Participant (P): Yes I am.

Action: Tick 1 under the YES column. Do not write anything in the REMARKS/OTHER column.

QUESTION	YES	NO	DON'T KNOW	REMARKS / OTHER
1. Are you the mother of the child?	1✓	2		If no, please specify your relationship to the child

I: Are you the mother of the child?

P: No I am not.

I: What is your relationship to the child?

P: I am his grandmother.

Action: Tick 2 under the NO column. Write grandmother in the REMARKS/OTHER column.

QUESTION	YES	NO	DON'T KNOW	REMARKS/OTHER
1. Are you the mother of the child?	1	2✓		If no, please specify your relationship to the child <i>Grandmother</i>

Example : Question 2

I: Is the child being breast-fed at present?

P: No

Action: Tick 2 under the NO column. Do not write anything in the REMARKS/OTHER column.

QUESTION	YES	NO	DON'T KNOW	REMARKS/OTHER
1. Are you the mother of the child?	1	2✓		If no, please specify your relationship to the child <i>Grandmother</i>
2. Is the child being breast-fed at present?	1	2✓		

Example: Question 3

I: *Has the child been breast-fed as a baby?*

P: Yes

Action: Tick 1 under the YES column

Action: *Tick 1 under the YES column*

I: *How long was the child breast-fed*

P: For 5 months

Action: Tick 2 under the 4 - 6 month column.

QUESTION	YES	NO	DON'T KNOW	REMARKS/OTHER								
1. Are you the mother of the child?	1	2✓		If no, please specify your relationship to the child <i>Grandmother</i>								
2. Is the child being breast-fed at present?	1	2✓										
3. Has the child been breast-fed as a baby?	1✓	2		If yes, for how long? <table border="0"> <tr> <td>&lt;4 mo</td> <td>4-6 mo</td> <td>7-12 mo</td> <td>&gt;1 year</td> </tr> <tr> <td>1</td> <td>2✓</td> <td>3</td> <td>4</td> </tr> </table>	<4 mo	4-6 mo	7-12 mo	>1 year	1	2✓	3	4
<4 mo	4-6 mo	7-12 mo	>1 year									
1	2✓	3	4									

What does the interviewer fill in, if the participant's answer was no?

The interviewer would tick 2 under the no column and does not write anything under REMARKS/OTHER column.

Complete all the other questions in the same manner

You have now been through the first set of questions of the QFFQ. Your completed questionnaire should look like this:

QUESTION	YES	NO	DON'T KNOW	REMARKS/OTHER
1. Are you the mother of the child?	1	2✓		If no, please specify your relationship to the child <i>Grandmother</i>
2. Is the child being breastfed at present?	1	2✓		
3. Has the child been breast-fed as a baby?	1✓	2		If yes, for how long?
				* < 4 mo    4-6    7-12    > 1
				1    2✓    3    4
4. Does the child presently receive infant formulas (breast milk substitute)?	1✓	2		If yes, specify the type. <i>Nan</i>
				Specify dilution ratio (powder to water) <i>4 scoops: 250mL</i>
5. Does the child follow any special diet?	1	2✓		If yes, please specify
				Diabetic    Slim-    Aller-    Other
				1    2    3    4
6. Has the child eaten away from home during the last week?	1✓	2		Number : 5
				Place : <i>School</i>

\* < : younger than  
> : older than



**The interviewee must answer about what the child has eaten or drunk in the last six months (for one year olds: during the past month). Anything which he has not eaten in this time must be marked with an X under 'Seldom/Never'**

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

### **8.2.3.1 Samples and food models**

We will be using the same food models and samples that were used for the 24-H Recall Questionnaire to help the interviewee describe and estimate the types and amounts of food the child eats. We will also be using the same measurements. Whenever possible, let the interviewee show you what she is actually using at the moment.

### **8.2.3.2 Overview of the QFFQ**

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 QFFQ is divided into columns and rows, which the interviewer fills in as the interviewee answers the questions.

The first column gives the type of food; e.g. maize-meal porridge, sour porridge, *Mabella* porridge. The foods are listed in groups according to the types.

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The following main groups of foods are used:

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

It would be impossible to list all foods possibly eaten on the QFFQ. Therefore, at the end of each section there is space with the heading 'Other'. Any food not listed on the QFFQ, but eaten more than once a month, is written in this block.

**Description:** The description column describes 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-meals are enriched (that is, some vitamins are added to the meal by the manufacturer) while others are not. The different cooking methods and whether the maize-meal is enriched or not have a large effect on the energy and vitamin intake of the child. It is therefore very important that the correct descriptions of all the foods are used.

Some foods can be cooked in several different ways or a participant may have her own way of cooking the food that is not listed on the QFFQ. For these cases, no description is typed into the Description column. Instead you will see 'Specify the preparation method' as for sour porridge or 'specify types usually eaten' as for breakfast cereals. For example, the following could be the exchange between the interviewer and the interviewee about sour porridge:

*I: Does your child eat sour porridge?*

P: Yes, he does.

*I: How do you cook the sour porridge?*

P: I mix maize-meal with vinegar before I cook it

Action: Write maize-meal with vinegar in the description column.

**Code:** The code column gives the computer code of the particular food and is only used by the staff, who analyze the QFFQ. The interviewers must ignore this column.

**Quantity:** The quantity column gives a guide to the amounts of the food commonly eaten. The interviewer uses this information to help the interviewee explain the amount eaten.

**Amount usually eaten:** This is the amount of the food usually eaten by the child. The interviewer will write in the amounts as 1T, 1t, 1 cup, 1 med., etc. The interviewer **MUST NOT** write in the weights (g) or volumes (mL). These calculations will be done by the data analyst.

If the interviewee 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. Study page 20 of the QFFQ for the correct abbreviations to use.

**P/D, D/W, P/M, SELDOM/NEVER:** The last four columns are used to give the number of times per day (P/D), days per week (D/W) and per month (P/M). If a particular food is eaten less than once per month or is never eaten, then put an X under the last column indicating Seldom/ Never.

To fill in the frequency, ask the interviewee how many times the child has the food per day, then how many days he has it per week. If the child has the food less than once a week, ask how many times per month. Write the number under the column P/D, D/W or P/M. For example, a child eats half a cup stiff porridge (*Iwisa*) in the morning and evening every day. It will be filled in as follows:

FOOD	DESCRIPTION	Code	Quantity	AMOUNT USUALLY EATEN	P/D	D/W	P/M	SELD/NEV
Maize-meal porridge	Stiff(Pap)-plain	3400	1 cup = 250g 1T = 75g 1SP = 20g					
	✓ Enrich	4278		½ cup	2	7		

**Explanation:** *Iwisa* is an enriched maize-meal, so tick 'enrich' and fill in the row next to it. The child usually eats ½ cup of porridge, so write ½ cup under Amount Usually Eaten. He eats this amount in the morning and in the evening, thus twice a day, fill in 2 under P/D and because he eats this amount every day fill in 7 under P/W

**NB:** The frequency, days per week (D/W) refers to the number of days and not to number of portions. Therefore, the frequency in the D/W column must not exceed 7.

\* PM = Per month. P/M is the number of weeks in the month the food is eaten. If the D/W is completed, P/M must not be > 4. If the D/W column is filled in, P/M is the number of times eaten per month.

### 8.2.3.3 Filling in Amounts and Frequencies

Filling in the amounts and frequencies may not always be as straight forward as in the above example. The following examples show how to record a variety of responses to the same question. Please work through the QFFQ to familiarize yourself. Also refer to examples 1 and 2 below.

Example 1:

*I: How do you cook maize-meal porridge for your child? Is it soft, stiff, or crumbly?*

*P: Sometimes I make it soft and sometimes stiff*

Action: Circle stiff and soft

*I: What type of maize-meal do you use?*

*P: I use Iwisa*

Action: Tick Enrich next to stiff and soft

*I: Let us talk about the stiff porridge. How much stiff porridge does your child usually eat at a time?*

*P: He usually eats about a cupful*

Action: Fill in 1 cup under AMOUNT  
USUALLY EATEN

*I: How many times a day does he eat stiff porridge?*

*P: I give him stiff porridge in the evening*

*I: So, you give him stiff porridge in the evening.  
Do you give him stiff porridge at any other  
time of day?*

*P: No, only in the evening*

Action: Write 1 under P/D

*I: How many times a week does he eat stiff  
porridge?*

*P: We have stiff porridge in the evening  
everyday except Saturday and Sunday*

*I: So, he has 1 cup of stiff porridge on 5 days a  
week?*

*P: Yes*

*I: You said you also make him soft maize-meal  
porridge. How much soft porridge does he  
take at a time?*

*P: About half a cup*

Action: Write the amount under AMOUNT PER  
DAY

*I: How many times a day does your child eat  
soft maize-meal porridge?*

*P: He eats it every morning*

*I: Does he eat soft porridge at any other time  
of day?*

*P: No, only in the morning*

Action: Write 1 under P/D

I: *How many times a week does he eat soft porridge in the morning?*

P: One morning I give him soft maize-meal, the next soft *Mabella* and so on.

I: *Do you mean you use soft maize-meal porridge one day, *Mabella* the next, maize-meal the next.*

P: Yes. So he has soft maize-meal porridge 4 days week.

Action: As soon as the P mentions soft *Mabella*, circle soft *Mabella*. Write 4 next to soft, enrich under P/W for maize-meal.

I: *How much soft *Mabella* does your child eat at a time.*

P: The same as soft maize-meal

Action: Write the amount under AMOUNT PER DAY

I: *How many times a week does he eat soft *Mabella*?*

P: On the days he does not have maize-meal porridge.

I: *Is that three times a week?*

P: Yes

Action: Write 3 next to soft *Mabella* under P/W

The completed FFQ should look like this:

FOOD	DESCRIPTION	Code	Quantity	AMOUNT USUALLY EATEN	P/D	D/W	P/M	SELD/NEV
Maize-meal porridge	Stiff(Pap)-plain	3400	1 cup =250g 1T = 75g 1SP = 120g					
	✓ Enrich	4278		1 cup	1	5		
	Soft(slap-pap)-plain	3399	1 cup =250g 1T = 75g 1SP = 120g					
	✓ Enrich	4277		½ cup	1	4		
	Crumbly (phutu)-plain	3401	1 cup =140g 1T = 30g 1SP = 15g					
	Enrich	4279						
Sour porridge	Specify preparation method		1 cup = 250g 1T = 75g 1SP = 120g					
Mabella porridge	Stiff	3241	1 cup = 250g 1T = 75g 1SP = 120g					
	✓ Soft	3241		½ cup	1	3		

#### Example 2:

The participant cooks sour porridge twice a month

*I: Does your child eat sour porridge?*

*P: Yes*

*I: How do you cook sour porridge?*

*P: I mix Mabella with vinegar*

Action: Write *Mabella* and vinegar under description

*I: How much does he eat at a time?*

*P: About the same as stiff porridge*

*I: You said your child eats 1 cup of stiff porridge at a time. Does he also eat one cup of sour porridge at a time?*

*P: That's right*

*I: How many times a day does he eat sour porridge?*

P: He eats it twice a day when I cook it

I: *How many times a week do you cook sour porridge?*

P: I don't cook it every week

I: *How many times a month do you cook it?*

P: I cook it twice a month

Action: Write 2 under the P/M column

FOOD	DESCRIPTION	Code	Quantity	AMOUNT USUALLY EATEN	P/D	D/W	P/M	SELDOM/ NEVER
Sour porridge	Specify preparation method		1 cup = 250g 1T = 75g 1SP = 120g					
	<i>Mabella</i> and vinegar			1 cup	2		2	

#### 8.2.3.4 Summary of filling in amounts and frequencies

The above examples have used porridge to show how to fill in the amount and frequencies of the foods eaten. The same procedure applies to all the other foods listed on the QFFQ. To summarize:

##### 8.2.3.4.1

Ask whether the food under the FOOD column is eaten. If the answer is NO, write a X under SELDOM/NEVER and go on to the next food on list.

##### 8.2.3.4.2

Ask how the food is cooked or for the description of the food.

##### 8.2.3.4.3

Mark the interviewee's answer. She may give more than one description, in which case mark all her answers.

#### 8.2.3.4.4

Ask about each food description on its own.

#### 8.2.3.4.5

First find out the amount eaten and write it down.

#### 8.2.3.4.6

Ask how many times a day it is eaten and fill in the number.

#### 8.2.3.4.7

Then ask how many days a week it is eaten. Ask if this is number of times eaten every week. If not eaten every week, ask how many times a month it is eaten.

#### 8.2.3.4.8

If a food is eaten less than once a month, put a X under SELDOM / NEVER.

#### 8.2.3.4.9

Remember that we only want to know about the **past** 6 months (or one month for the 1-year-olds).

#### 8.2.3.4.10

Keep the age of the child in mind. Do the answers

correspond to the child's age?

#### 8.2.3.4.11

At the end of each section there is a checking or control question, which asks the number of times a week the previous group of foods is used. (For example: the middle of page 4.) Ask the question and fill in the answer. This should correspond to the total times per week of the individual foods in the section.

### 8.2.3.5 Notes on Specific Foods

#### 8.2.3.5.1 Brand names

In some sections such as breakfast cereals, infant cereals and soy products, the interviewee is asked what brand she uses. This is so that we can be sure to use the correct item for nutrient analyses. For example, some maize-meals have vitamins added, others do not. The interviewee may not know whether the 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 margarine, milk powders, fruit juices, breakfast cereals.

#### 8.2.3.5.2 See Training Manual

For some foods you will see the comment. Refer to Training Manual: *Description of Food Items*. This is a note to the field worker to check the correct amount in the Manual. The interviewer must fill in

the description, amount usually eaten and frequency.

#### **8.2.3.5.3 Milk**

Note that milk appears several times on the FFQ - 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 description. For example, on page 3, the question refers only to *milk used on porridge*. The same applies to *sugar and fat*.

#### **8.2.3.5.4 Dumpling and vetkoek (page 5)**

Dumpling and vetkoek are prepared in different ways in different areas. For example for some people dumpling is a bread dough mixture, which is steamed in a large pot and pieces are broken or cut off (like a round loaf of bread) (Note for coding: use white bread code for this). 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 they may be fried in deep or shallow fat. It is therefore very important to obtain the correct description from the interviewee.

#### **8.2.3.5.5 Vegetables and fruit**

Ask the interviewee which vegetables and fruits the child eats and mark them on the questionnaire. Then go back to each answer and ask about the

preparation, amount and frequency. Do not read the list to the interviewee.

#### 8.2.3.5.6 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 interviewee's answer. If the answer does not fit one of the options, circle other and write in the description. Also, check if the interviewee cooks the food in more than one way.

#### Example

The interviewee sometimes cooks cabbage with potato and onions and sometimes fries it (page 10).

FOOD	DESCRIPTION	Code	Qty	AMOUNT USUALLY EATEN	P/D	D/W	P/M	SELD/ NEV
Cabbage	Boiled nothing added	3756						
	Boiled with potato, onion and fat	3813		1 T	1	3		
	Fried nothing added	3812		1 T	1		2	
	Boiled then fried with potato onion	3815						
	Other							

#### **8.2.3.5.7 Drinks, snacks, cakes and puddings**

Ask the interviewee what the child eats or drinks and mark them on the questionnaire. Then go back to each answer and ask about the preparation or type, amount and frequency. Do not read the list to the interviewee.

#### **8.2.3.5.8 Additional protein-rich foods**

On page 9 there is space for describing protein-rich foods which have not been covered by the QFFQ. Please only fill in foods here that have not already been mentioned and which are eaten once a month or more. Give a full description of the type and preparation method of the food.

Do not write anything in the code column. The analyzers will do this.

#### **8.2.3.5.9 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, how they are prepared and eaten.

### **8.2.4 Conclusion**

Pages 19 and 20 of the QFFQ contain some general questions, which must be treated, as were the questions on page 1 and 2. That is, tick the option corresponding to the participant's answer. There is also space to list any foods eaten more than once a month that have not already been listed.

### 8.3 Training the field worker: Important points to stress or clarify

8.3.1.1 Explain the **difference** between the 24-H Recall and the QFFQ. The 24-H Recall only asked about what the child ate or drank the previous day. With the QFFQ, we want to find out what the child's intake is over a period of time, that is his or her usual intake. It is important that the interviewee understands the idea of usual that is normal, common. Although the 24-H Recall and QFFQ may appear very similar and the same visual aids are used, they are actually obtaining very different information. It is extremely important that the field workers understand this difference and can explain it to the interviewees.

8.3.1.2 The field worker must understand the **differences** between the 24- H Recall and the QFFQ and the **different techniques** used. They must follow the instructions for the specific questionnaire, even if these are different for each questionnaire (especially coding and quantities). The **time covered** by the QFFQ is the last six months for children older than two years OR the last month for 12 - 24 months old children. For example, if the interview is conducted at the beginning of March, the 6-month period would be from the beginning of September last year (or for a one year old child, February). Actually tell the interviewee the months covered rather than just the last six months.

The period must be kept in mind throughout the QFFQ to make sure that foods and quantities are realistic. For example, the period September to February, falls outside the peak orange season. It is therefore unlikely that oranges would be eaten every day. On the other hand, it covers the peak maize season, so a high intake of fresh maize, especially in rural and farm areas, could be possible.

- 8.3.1.3 The QFFQ includes ALL food eaten by the child including food eaten at school/preschool or other instances away from home. Getting accurate information about foods consumed away from home gets more difficult as the child gets older as the mother/caretaker may not actually be aware of what the child eats away from home. Remind the mother/caregiver that we need to know what the child eats away from home as far as possible. If the child participates in a school feeding scheme (page 15 of 24-H Recall) cross check this information with the QFFQ. For example, if the preschool provides half a cup of soft maize-meal porridge every week day, then the amount usually eaten and the frequency of soft maize-meal porridge should be at least 2 c, 1 P/D, 5 D/W. (If this is not so, make sure that the interviewee has remembered about the feeding scheme and if she is aware of what the child may eat at school.)

- 8.3.1.4 Use all the techniques of interviewing already discussed. Remind the interviewee that this is not a test and that there are no right or wrong answers. Encourage him/her to answer to the best of her ability. As pointed out in the Training Manual, the QFFQ requires much patience from both the interviewer and interviewee to get good quality information.

### **8.3.2 Filling in the QFFQ**

- 8.3.2.1 The sequence of questions must be followed exactly as on the QFFQ.
- 8.3.2.2 Follow the instructions for filling in the quantities and amounts, as explained in the video and manual.
- 8.3.2.3 Make sure that you fill in the correct row and column.
- 8.3.2.4 We want to know what the child actually eats, not what is served or given to the child.
- 8.3.2.5 Continually ask yourself whether it is reasonable for a child of his or her age and weight to consume the quantities of foods given. For example, could a five-year old child consume 3 cups of stiff porridge, 2 cups of samp and beans and 2 cups of rice on one day?

- 8.3.2.6 Do not do mental arithmetic to calculate quantities while conducting the interview. Do not convert amounts from household measures to g or ml. Also, do not mark the codes. You have enough other things to be thinking of!
- 8.3.2.7 The quantities given on the QFFQ are average or most commonly used amounts. Write down the exact amount the caregiver tells you. This could be 1c, 1c, 3, etc. The quantities on the QFFQ are a guide. Do not think that these are the only amounts that could be consumed.
- 8.3.2.8 When writing descriptions, keep them brief, clear and legible. Remember that the coder will only have your description to go by when selecting the appropriate code or codes to enter into the computer.

### **8.3.3 Checking questions**

- 8.3.3.1 The purpose of the questions at the end of each section (How many times a week does the child eat starches?) is to check that the frequencies given for each food in that group are reasonable when the group is considered as a whole, as so try to limit over or underestimation.

- 8.3.3.2 Ideally, the frequency given in the check question should equal the sum of the frequencies per week including frequency per month converted to D/W. The field worker should add frequencies, without obviously doing so and compare this to the answer given by the interviewee.
- 8.3.3.3 If there is a small difference (1 or 2 portions) between the total frequency and the interviewee's answer, continue with the questionnaire. If the difference is larger than 2, go back and double check the section with the interviewee.
- 8.3.3.4 The field worker must ask these questions; the field worker must not add the frequencies and fill the answer in him/herself.

#### **8.3.4 Frequencies**

- 8.3.4.1 P/D = per day, that is the number of times that particular food is eaten per day.
- 8.3.4.2 D/W = days per week, that is the number of days a week the number of portions given P/D are eaten. This frequency **MUST NOT** be more than 7.

- 8.3.4.3 Different numbers of portions P/D may be eaten at different frequencies P/W. For example, a child may eat 4 slices of bread on five days a week (at school), 2 slices on Saturday and none on Sunday. These differences must be very clear on the QFFQ (see examples).
- 8.3.4.4 PM = per month. PM is the number of weeks in the month the food is eaten. If the D/W is completed P/M must not be >4. If D/W columns filled in, P/M is the number of times the food is eaten per month.
- 8.3.4.5 Seldom = less than once a month.
- 8.3.4.6 Different quantities of the same food may be eaten with different frequencies. These differences must be very clear on the QFFQ (see examples).
- 8.3.4.7 Watch out for answers like now and then, we eat it when we have it, at month end; insist on getting definite frequencies.

### **8.3.5 Specific food items**

- 8.3.5.1 Go through the points made in the manual (Section 8.2.3.5) with QFFQ to make sure that field worker understand how to deal with each food group.
- 8.3.5.2 Emphasize the importance of knowing the food availability, customs and preparation methods of the community of the EA.

- 8.3.5.3 Refer to Chapter 11 for detailed descriptions of food items.
- 8.3.5.4 Quantities for meat: if the food models of meat (30g, 60 and 100g) are used to quantify amounts, the quantity must be given as g (an exception to the rule that only household measures should be used for the QFFQ) but do not do any calculations with the quantity. For example, if the child eats half the 30g portion write  $\frac{1}{2} \times 30$  and not 15g. Make sure that you write in the g.
- 8.3.5.5 Quantities for bread slices: give the thickness of the bread in mm according to the slice thickness shown by the interviewee. Do not do any calculations with the quantity. For example, write 2 x 20 mm and not 40 mm. Make sure that you write in the mm.
- 8.3.5.6 Make sure that you write in the correct unit for all quantities.

### **8.3.6 Question 16 - 34**

- 8.3.6.1 All these questions must be asked.
- 8.3.6.2 Question 16 refers to foods that are available, but are not eaten by the child, because of religious or traditional restrictions, allergies, the child refuses to eat it, the mother thinks it is harmful etc. Describe the food and preparation method and reason. Do not write in the code.

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- 8.3.6.3 Question 18: mark the option that is closest to the child's eating pattern.
- 8.3.6.4 Question 19 must be asked even if field worker thinks all food have been dealt with. Do not fill in codes. Remember that we only want to know about foods eaten in the last six (or one) month and that are eaten at least once a month.
- 8.3.6.5 Question 20: Elsewhere refers to any place away from the home. If the answer is no, go on to question 24.
- 8.3.6.6 There can be more than one type of supplement specified for questions 30.
- 8.3.6.7 Questions 31, 32, 34: mark the responses closest to the interviewee's answer.

### **8.3.7 Coding and Quantities**

It is the responsibility of the coordinator to mark the codes and convert the measures to grammes or mL.

- 8.3.7.1 Circle the code next to the ticked item.  
If the item is given a description, check for the code in (Addendum A) on the food code list. (DO NOT USE THE CODE FROM THE FOOD QUANTITIES MANUAL). Fill in the code.

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- 8.3.7.2 If you cannot find a food code to match the description, leave the code blank. It will be decided by the central coder.
- 8.3.7.3 Convert all quantities into grammes or mL. If the conversion factor does not appear on the QFFQ, refer to Addendum A or Food Quantities Manual. If you cannot find a food code to match the description, leave the code blank. It will be decided by the central coder.
- 8.3.7.4 Remember that the quantities on the QFFQ are the most common amounts for a food. Thus, for example, sugar may be given as 1 t, milk as 1/3 cup, rice as 1 SP etc., cooldrink as 12 glasses etc. Make sure that these amounts are correctly converted into grams. Check the Food Quantities Manual whenever you are unsure of the conversion factor. Do not rely on your memory! Make sure that the fieldworkers are filling in the amounts told them by the caregivers and not taking a short cut by just writing the amounts given on the QFFQ.
- 8.3.7.5 As you calculate the quantities, ask yourself whether the amount is reasonable for a child of that particular age. If not, go back to check with the fieldworker.
- 8.3.7.6 Do the coding and quantities as soon after the interview as possible.

- 8.3.7.7 Make sure that all items marked on the QFFQ have been coded and quantified.

**VERY IMPORTANT:**

The video, Training Manual and training sessions have tried to give examples of how to deal with as many types of responses to the QFFQ as possible. It is however impossible to cover all likely responses. When unsure of how to complete the QFFQ, write down exactly what the interviewee has told you (use the back of the page if necessary, do not rely on your memory) and discuss with your team leader or coordinator and reach consensus as to how best to fill in the response. If you have to make a change on the QFFQ make sure that you cross out the incorrect response as already explained and that the correct response is clear.

**8.3.8 Guidelines for field worker training**

- 8.3.8.1 Before showing video, explain the purpose of the QFFQ and emphasize the differences to the 24-H Recall.
- 8.3.8.2 Show the video, pausing and doing the exercises as shown on the script. Clarify and emphasize points that come out of the video before going on to the next section. During exercises, circulate among field workers to pick up problems and mistakes. Discuss the exercise before going on to the next part of the video.

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- 8.3.8.3 After the video, before interviewing each other, do the examples together. Use the transparency FFQ to demonstrate. Field workers should fill in on a practice FFQ as you go through the examples.
- 8.3.8.4 Divide into pairs for practice interview. Swop pairs after each interview. Go through each completed FFQ individually with the field worker. Identify common problems. Discuss these with the group.
- 8.3.8.5 Interview real caregivers. If possible, ask mothers with children of different age groups (1-2, toddler, 7-9 year old). Role play the interview, with the coordinator conducting the interview, but all field workers recording responses. (With larger numbers of field workers, split into groups, with the Team leader doing the interview.) Discuss the completed QFFQ's. Make sure that field workers understand where and why they have made mistakes.
- 8.3.8.6 Show the video without pauses as a review exercise.
- 8.3.8.7 Give the field worker the test, correct it and discuss.
- 8.3.8.8 As an exercise for yourself and also to make sure that fieldworkers are getting reasonable information, code and quantify the QFFQs. This will also ensure that you pick up missing or unclear information that you may not see by just reading through a QFFQ.

## **8.4 Checklist for Coordinators**

### **8.4.1 General**

- Subject number, birth date, interview date, province, interviewer and interviewer code filled in
- All pages present and in correct order
- All pages completed
- All answers legible
- The rows next to the marked foods are filled in
- Quantities given on QFFQ are most common and average amounts. Amounts not specified on QFFQ must be checked in Addendum A or in the Food Quantities Manual.

### **8.4.2 Pages 1 - 2**

- Question 1 - 6: each question ticked either Y or N
- If question 3 Yes, one option ticked
- If question 4 Yes, type of special diet ticked
- If question 5 Yes, type of special diet ticked
- If question 6 Yes, number of times and place of meals away from home given
- Question 7, 8, 9 only one box ticked
- If question 7 Yes, brand given or don't know/grind self ticked
- Question 8 - 14 answered

### **8.4.3 Quantitative Food Frequency Questionnaire**

- Quantities filled in amount usually eaten with measure (t, T, SP, c, g)
- Frequency per day given for all foods eaten
- Frequency per week AND per month given. (Always fill in the number of times per week even if eaten daily i.e. 7 Days/week; 4 weeks / month)

- Frequency per week never greater than 7
- Frequency per month filled in if there is no frequency given per week. This is the total number of days in the month the food is eaten, if not eaten on a weekly basis.
- If no amount and frequency given, seldom/never column ticked.
- Types described whenever the other/specify option is given.
- All checking questions at end of sections completed.
- Answer to checking questions must be within a maximum of 2 difference from the total frequency per week for the section.
- Answer to Question 7 (page 2) should correspond with maize meal on page 3.
- No vague make notes like Both once a week, fill in amounts and frequency.
- Check that answers are possible for the age of the child. For example, is it possible for someone to eat 4 boiled eggs 4 times a day, every day of the week, as well as everything else he is eating?
- Cross check the frequency per day with Question 18 (eating patterns). For example, if child eats 2 meals per day only, but the QFFQ frequency of eating a food is 4 times per day, something is wrong. Keep in mind that if there is eating between meals, the frequency per day may be more than the number of meals.
- Fruit marked as either fresh or canned. If both, the amounts and frequency of both canned and fresh given.
- Cross check information from feeding schemes (24-H Recall, page 15) with QFFQ.

#### **8.4.4 Pages 19 - 20**

- Questions 16 - 34 answered.
- Only one option marked for question 18.

- Only one option marked for questions 24 to 34.

Where applicable, specify option described.

#### 8.4.5 Codes and Quantities

- Correct code circled for all items marked. If unsure of a code, refer to the Food Quantities Manual or discuss with your coordinator.
- Amounts not given on QFFQ checked either in Addendum A or in Food Quantities Manual.
- All amounts correctly converted from measures.

### 8.5 Quantification Exercises

Fill in the following responses:

- Stiff porridge twice a day 5 days per week, once a day on Saturday and Sunday.
- Sour porridge fermented 1 cup once per month.
  - Breakfast for the same child
    - 1 c soft maize meal (*Iwiza*) porridge once a week
    - 1c *Oats* once a week
    - Weet-bix* 1 biscuit twice a week
    - Corn flakes* 1 cup twice a week
    - All with milk and sugar
- How do you fill in milk and sugar for breakfast? Remember that different amounts may be used for different cereals.
- The mother's response to Question 15 (page 2) was sometimes. How will you deal with this?
- One brown bread sandwich a day at school
  - One slice of white bread every every day at home

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Two white bread rolls on Saturday every second week

- What is an acceptable answer to the checking question on bread?
- In response to spreads on bread:
  - The child always spreads thin hard margarine on bread
  - For school he has peanut butter (thick) one day, marmite (thin) the next and jam the next day (thick)
  - At home he can choose between marmite, jam, peanut butter or fish paste
  - He has cheese with the rolls.
- The family buys *Kentucky* fried chicken once a month. The child likes the drum stick.
- The mother buys beef liver once a month and they eat it for supper on 2 days in that week. The child eats a piece about the size of the small meat model.
- Cabbage eaten three times a week (1 - 2 tablespoons) sometimes plain boiled, sometimes with potato, onion and tomato. How will you decide on frequencies?
- For an 8-year old child the following fruit is filled in:
  - Fruit: apple 1 med 3 P/D 5 D/W
  - Banana 1 small 2 P/D 7 D/W
  - Orange 1 P/D, nothing filled in for frequency
  - Comment on the above
- Could the following responses be possible?
  - Tea - 1 mug 2/day 7/wk

1 T sugar 1/day 7/wk

Small amount milk 2/day 7/wk

Cheese curls 50g 2/day 5/wk

Rice 1 cup 2/day 2/wk

The total frequency that vegetables are eaten per week is 12, but the answer to the checking question is seven. What do you do?

## 9. FOOD PROCUREMENT AND HOUSEHOLD FOOD INVENTORY QUESTIONNAIRE

### 9.1 Introduction

### 9.2 Part I: Food Procurement Section

### 9.3 Part II: Household Food Inventory Section

### 9.4 Checklist

### 9.5 Training for food procurement and household inventory questionnaire

#### 9.1 Introduction

**The first part of the questionnaire is for the 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 also includes food purchased. The **aim** of this section of the questionnaire is to find out where people procure or get their household food from. This is to help the government decide which foods to fortify with micronutrients.

**The second part of the questionnaire 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 in an EA, 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.

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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 note down their name. Establish the relationship of the food procurer to the child and note their relationship by ticking the appropriate box. 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, you need to return to interview him/her. Make an appointment to see him/her and note down the day, date and time of the appointment in the appropriate section of the questionnaire. If the person who procures the food will not return the same day, then ask if there is anyone else in the house who could give you information about food procurement who you could interview. (For example the person responsible for preparing the food who would receive the food in the house.) If the answer is “yes” you can interview that person. Then 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.

The purpose of having the food procurer to provide the information on food procurement is to obtain the most accurate information. Every effort should therefore be made to obtain the necessary information from the person who procures the food for the HH for most of the time. There will however be HHs where more than one person procures food. In such cases, any person in the HH who has knowledge of the food that is brought to the HH can provide the information required in the survey. In cases where the interviewee does not know the prices of the food items, a note to that effect should be made in the relevant column.

**NB:** You will only return **ONCE** on the same day to this household for completing any missing parts of the questionnaire. If, when you visit the household, you cannot estimate the weight, volume or the code is not there, please write down as much information as possible so that the team leader can fill in the amounts or code. Record the time to revisit in a 24 hour clock.

Then, using the *explanation to be given to the person being interviewed* section of the questionnaire, you should explain to the person that you are interviewing the purpose of this questionnaire and what you would like the interviewee to tell you. 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.

### **Instructions to field workers**

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.

The order of the foods in the Food Procurement and Household Food Inventory Questionnaire is very similar to the 24-H Recall Questionnaire.

In carrying out the Food Procurement Questionnaire you will simply read out each food in the order as it is written. In carrying out the Household Food Inventory you will deal with each food as it is shown to you in the house and therefore you need to be very familiar with the order of the foods in the Food Procurement and Household Food Inventory Questionnaire.

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** 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. **List** these foods in Section D labeled COOKED FOOD STORED on page 31 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 their house, and turn to page 2 of the questionnaire.

## 9.2 Part I

### 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. Codes 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 labeled:

- 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 Food column. 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 description column, 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 under 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 labeled. The label can give you the necessary information. If any food items or drinks are not labeled, then the description is unknown and it must be listed as unknown under the Other option.

Then ask, for example, *Where do you procure (get) the Rooibos 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 as a present, you should record the codes 1 and 11. Write this down as 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.

If the food was purchased (code 1), you need to ask further questions as described below. If the food was not purchased and was obtained by an other means (codes 2 - 12), you do not ask any other questions about this type of food. You will move straight on to asking whether the household uses any other types of the food and use the listed food types as prompts. Ask, Does your household use another types of tea, for example, do you use Ceylon tea? If the answer is “yes”, repeat the procedure outlined above.

If the food was homemade from ingredients brought into the house, e.g. brown bread made with bought brown bread meal flour, you will record the brown bread as homemade (code 9) and there will be no further information recorded about the brown bread. You will, however, record the brown bread meal flour as purchased (code 1) and there will be further information recorded about the frequency, place and amount purchased.

If the food was 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. Choose **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.

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

If the person gives you more than one answer to the question about frequency of food purchase ask them what they would normally do and record that answer.

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** 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. Write this down as 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 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 "amount purchased" column, 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 bring home.

Record the "amount purchased" of food or drinks, either in weight (grams) or volume (mL). **Please do not forget to record** the unit of measurement, e.g. 400g (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 estimate the weight or volume, e.g. 10 medium potatoes = 10 x 90g = 900g.

If the person gives you more than one answer to the question about amount of food purchased ask them what they would normally do.

You can also use the quantity column in the 24-H-Recall or Food Frequency Questionnaire or Addendum A to estimate 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 or description.**

Finally, you should ask: *does your household use any other types of tea?* Also use the list of food types as prompts. Ask: For example, do you use Ceylon 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, repeat the procedure outlined above.

**Complete this procedure** for all the foods and drinks listed on the following pages of Section A of the questionnaire, including the Dietary Supplements and Wild Birds (page 27) of the questionnaire. Any other major food items or drinks not listed in the questionnaire must be recorded in the appropriate section (page 28) of the questionnaire.

Then complete all details required in Section B (page 29 and 30) 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, there are two pages in the questionnaire, which 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 (page 29), 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 description column. If the person gives you more than one answer to the question about type of food used, ask what type they would normally use. Then ask whether 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 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 unit purchased column you must write down 200g. Record the unit purchased in weight (grams) or volume (mL). Remember to write down both the amount and the unit of measurement, e.g. 200g (not only 200, which can be either weight or volume).

In some cases, if it is impossible to determine the weight or volume of the unit bought, it is necessary to write down the number of the food items counted and a description, e.g. 200 teabags. For some foods you may also need to use a description of the number of food items to estimate 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 or Addendum A to estimate 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 or description.**

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

In Section C (page 30 and 31) of the questionnaire, you are requested to obtain some additional information. Ask the questions listed and tick the appropriate box 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 you 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 row, i.e. None, 1/4, 1/2, 3/4. Then ask what other crop is grown and repeat the process.

Question 3: Establish whether any member of the household has his/her own any 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 for 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 a longer period of time. If you tick the yes option, record in the table provided the foods and the preservation method used. Record one food per line.

Question 5: Tick the yes or no option to indicate whether enough food is grown to last until the next harvest.

This completes the collection of the information required for the Food Procurement Section of the questionnaire.

### 9.3 Part II

#### 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 remember that this section is to be filled in, in **ALL** households but in **SELECTED** EAs only. For the household food inventory, please fill in the amount and location of food in the house in the appropriate columns.

#### 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 use in 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". 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 row 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 row 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 gram, mL for millilitre, kg for kilogram and L for litre.

**Important notes on quantifying the amount of food stored:**

- If food items are in full packets, bottles, cans or containers: Note the weight or volume 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 in 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 measure the amount, or you estimate that the amount is more than 50kg or 50L, then you leave the column amount in storage blank. Then you ask the interviewee: *How long do you expect this food to last for?* Fill in the next If >50kg stored column, noting either the number of days, number of weeks or the number of months. Remember to record together with the number, also the unit of time, e.g. 5 weeks.

Start by completing all the information required in the columns of this section, which is on the right hand side page of 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 (page 31) of the questionnaire.

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. There may be some unusual places of storage, e.g. on a table in an entrance room, on a table by a bed.

## **9.4 Checklist**

### **9.4.1 General**

- Check that the writing is legible and all data is entered clearly and on the appropriate line.
- If any corrections need to be made remember that a black pen should be used for crossing out the incorrect information and a red pen used for entering the correct data.
- Check that all the information at the top of the page is entered, i.e. from Subject through to Interviewer Code.
- Check that the name of the person responsible for procuring the food, and their relationship to the child are entered. (Note the video is not clear on this point - use the information in the training manual if in doubt.)

### **9.4.2 Food procurement part of the questionnaire**

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- If the food description is Other, check that either a description or "unknown" is written next to other. Check that there is enough information for coding. **Remember that the team leader should enter the codes, which are missing. If the team leader is unsure how to do this, the coordinator will help.**
  - **If the source of the food is entered as 1** (i.e. purchased), then check that **the next three columns are completed** for that food item, i.e. frequency of food purchase, place of food purchase and amount of food purchased.
  - **If the source of the food is entered as 2 - 12**, then check that **the next three columns are not completed for that food item**, i.e. frequency of food purchase, place of food purchase and amount of food purchased.
  - Check that in the column labeled Amount purchased (as well as any number, e.g. tea bags) the unit of purchase is also given. If a description is given, **remember that the team leader should convert description to weights or volumes with the appropriate units. Check that there is enough information for the amount to be estimated. If the team leader is unsure how to do this, the coordinator will help.**
  - Check that in the column labeled Amount purchased, the amount appears reasonable, i.e. not very little and not very large.

- If the household food inventory has been completed, check that there are no omissions in the Food Procurement section of the questionnaire. For example, if you find cheese in the household inventory, but cheese is not listed in the food procurement section it should be checked with the household.

Check that the prices for the commonly used foods appear reasonable.

### 9.4.3 Household inventory

For each food item which is ticked in the column entitled Description please tick, check that the columns to the right are completed, i.e. Place of food storage and either “Amount in storage in the house or If > 50 kg stored, how long will stored food last (Day/Week/Month).

Check that units are given for the amount stored (g, kg, ml, L). If a description is given, **remember that the team leader should convert descriptions to weights or volumes with the appropriate units. If the team leader is unsure how to do this, the coordinator will help.**

Check that the amount entered looks reasonable, i.e. not too small and not over 50kg.

Remember the field workers must check that they have seen all the sites of food storage in the house.

## 9.5 Training for food procurement and household inventory questionnaire

### 9.5.1 Aim of training:

#### **Fieldworkers**

- To familiarise yourself with the questionnaire
- Ensure that you know how to fill in the questionnaire correctly
- Ensure that you know what to do if there are problems in filling in the questionnaire
- Ensure that you are aware of the checklist the team leaders will be using to check the questionnaire

#### **Team leaders**

- To familiarise yourself with the questionnaire
- Ensure that you know how to fill in the questionnaire correctly
- Ensure that you know what to do if there are problems in filling in the questionnaire
- To know how to check the questionnaire when completed by the fieldworkers
- To know your role as a team leader (refer to Section 4.2)

#### **Coordinators**

- To familiarise yourself with the questionnaire
- Ensure that you know how the fieldworkers should fill in the questionnaire correctly
- Ensure that you know what to do if there are problems in filling in the questionnaire
- To know how to oversee the checking by the team leaders
- To know how to use detailed information from field worker to write down missing quantities
- To know how to train field workers and team leaders

## **9.5.2 Responsibilities with regard to the Food Procurement and Household Food Inventory Questionnaire**

### **Fieldworkers**

Collect data, revisit house once on the same day if the person responsible for procuring the food is not present in the house

### **Team leaders**

Help solve problems in data collection, check questionnaires, fill in missing quantities and codes. If there are complex recipes, write them down in detail, but the coding will be done centrally.

### **Coordinators**

Train field workers and team leaders in using and checking (respectively) the Food Procurement and Household Food Inventory Questionnaire.

## **9.5.3 General points**

- The order of the foods in the food procurement and household food inventory questionnaire is very similar to the 24-Hr Recall Questionnaire.
- In carrying out the Food Procurement Questionnaire, you will simply read out each food in the order as it is written. In carrying out the Household Food Inventory, you will deal with each food as it is shown to you in the house and therefore you need to be very familiar with the order of the foods in the Food Procurement and Household Food Inventory Questionnaire.

- **If, when you visit the household you cannot complete the questionnaires, you return to the household once only on the same day.**
- If, when you visit the household you cannot estimate the weight, volume or the code is not there, please write down as much information as possible so that the team leader can fill in the amounts or code. Record the time to revisit in a 24 hour clock.

**9.5.4 Show the video on the Food Procurement and Household Food Inventory Questionnaire. (Up to the end of the section on commonly consumed Foods where the slide for the first exercise is shown.)**

#### **Exercise following the Food Procurement Inventory**

- Pause the video
- Practice with a partner the Food Procurement Part of the Questionnaire, from filling the headings at the top to the end of the section on commonly consumed foods. Each of you should practice acting as the interviewer and interviewee.

Remember as you go through asking about the different foods listed to check if any other types of foods were used. You should use the types listed as for example:

Condensed milk

Evaporated milk

Non dairy creamer

- If, as you practice you experience problems, please ask your coordinator for help
- When the forms are completed please give your forms to some one else in the group to check using the check list (Section 9.4)
- Look through the completed questionnaire and check the food procurement part.

**9.5.5 Show the video on the food procurement and household food inventory questionnaire; show the rest of the video on the household inventory**

- At end of this section of the video: If possible practice with examples of food and different size containers, quantifying amounts, completing the questionnaire.
- If unsure ask the coordinator.
- General discussion of any clarification needed.
- Collate all the data collected, and give it to the coordinator

## 10. HUNGER SCALE QUESTIONNAIRE

- This questionnaire is available in all the South African official languages.
- Please make sure that the mother/caregiver is given one in her own language as she should complete this questionnaire 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 mother/caregiver that she should make a cross in either the yes or 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 of the 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.**

## 11. DESCRIPTION OF FOOD ITEMS\*\*

11.1 Tea and coffee

11.2 Milk drinks

11.3 Fruit juice and cold drinks

11.4 Breakfast cereals

11.5 Bread and rolls

11.6 Spreads

- 11.7 Eggs**
- 11.8 Cheese**
- 11.9 Meat**
- 11.10 Fish**
- 11.11 Starch**
- 11.12 Legumes and soup**
- 11.13 Cooked vegetables**
- 11.14 Salads and raw vegetables**
- 11.15 Fruit**
- 11.16 Puddings and sauces**
- 11.17 Cakes and biscuits**
- 11.18 Tarts**
- 11.19 Sweets**

\*\* Also refer to Addendum A for non-listed food items and quantities.

### **11.1 Tea and coffee**

Always ask the subject whether sweetener, such as sugar, was added to the tea or coffee **and** how much. If the subject replies in teaspoons show him a household teaspoon to confirm the exact size. A sugar spoon holds approximately 6g of sugar. (Check the size of the teaspoon in the kit with the size of the teaspoon used in the household.)

Try to determine as accurately as possible the type of milk used in tea or coffee. Fresh milk will usually be whole milk, but may be skim or 2% milk. Powdered milk may either be skim, blend or non-dairy creamer. If the subject is unsure of the brand name, show him some sample packets and let him select the correct one.

#### **Remember**

Creamers: *Cremora, Ellis Brown, Coffee Mate, Tea Mate, Krem*

*Top, and Gold Cross Creamer*

Blends: *Sunblest, Sungold, Carnation, Millico, Make a Litre*

Whole Milk: *Nespray, Ideal, Nu Mel, Every Day, Ultra Mel*

Condensed Milk: *Gold Cross (whole milk), Nestlé (skim and full cream), Gold Medal (skim milk)*  
*Nestlé and Gold Cross (non-dairy products)*

Condensed

Creamers: *Gold Cross.*

Evaporated milk: *Carnation (which can be full cream, skimmed or blend)*  
*Nestlé Ideal (whole milk); Nestlé Ideal Life (skim milk)*

Please note that the volume 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. The amount of milk used in tea or coffee should be determined by using the following table as well as the cups and mugs in your kit as a guide:

CONTAINER	MILK IN TEA (ml)		MILK IN COFFEE (ml)
Tea cup or small mug (180 - 200 ml)	Little	10 ml	20 ml
	Medium	20 ml	40 ml
	Lot	30 ml	60 ml
Large mug (250 ml)	Little	20 ml	60 ml
	Medium	35 ml	75 ml
	Lot	50 ml	90 ml

Formula Milks: Specify the product used (note the different types at the footnote (p2): 24-H-Recall Questionnaire).

Determine the number of scoops used per bottle

## 11.2 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 drink:

- 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 the kit. You can use the glass, mug and teaspoon provided in the kit, to assist you in determining portion sizes.

Cultured buttermilk (*karringmelk*) is available in small (175mL) and large (500mL) containers. *Maas* is made from skim and whole milk. It is frequently home made. One should determine whether it has been made from whole milk or skim milk and use the appropriate code. *Amasi* should also be indicated under the *Maas* code.

Custard can be home made or commercial. The commercial custard is made from whole milk or skim milk and is available in 500ml and 1 litre containers made by *Ultra Mel* and *Mandi*.

If a milk drink has been made, mark off the amount of milk it contained and add the flavouring used under its specific code. Use the cups and glasses in your kit to verify the amount of milk used.

Different types of yoghurt are available, so it is important that you determine the exact type, which has been consumed. Plain yoghurt is made from skim milk and is available in 350mL, 500mL and 1litre containers (*Bulgarian Drinking Yoghurt*). Flavoured yoghurt includes Yogi-sip and *Super M* flavoured milk. Both of these are made with low fat milk and are available in 350mL and 1 litre containers. Fruit containing yoghurt are available in 175mL, 500mL and 1 litre containers. New yoghurt and fruit sauce combinations are available in a 175mL container with 25mL fruit sauce, *Muesli*, sweet sprinkles, chocolate sprinkles or biscuit sprinkles extra. Record the relevant sauce or sprinkle under the correct code.

### 11.3 Fruit juice and cold drinks

Fruit juice is available in sweetened and unsweetened packs. It is important to make sure whether the juices consumed contains sugar. *Ceres* and *Liquifruit* brands are unsweetened juices. Normally the juices in the tetra brick pack were pure unsweetened juices. Recently however, Pick 'n Pay stated selling *No name* brand sweetened juice in the tetra brick pack. It is quite important to keep some cartons in your kit so that the respondents can identify the correct item.

*Appeltizer*, *Grapetizers* and *Just Juice* are regarded as unsweetened fruit juices. Concentrated fruit nectars like *Halls* should be regarded as sweetened juice. 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.

Carbonated and home made cold drinks must be entered under the same code. 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*. Diet drinks must also be entered.

A dairy-fruit mix is a mixture between milk and fruit juice (*Tropica* is a typical example).

*Mageu* is a drink made from fermented maize which is purchased in a carton. Refer to Training Manual: *Description of Food Items* (Section 11.3 for more details).

#### **11.4 Breakfast cereals**

This includes cooked porridge and instant cereals. Cooked porridge includes *Maltabella*, *Mabella*, Maize-meal, oats and *Tasty Wheat*. Please pay special attention to maize porridge. You need to determine the texture and consistency, i.e. 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*

Check other brand names in the area where you are working. Most maize-meal at present are enriched. When in doubt use the enriched code unless the subject uses a home ground product.

Determine what size plate was used than pour the cereal until the subject is satisfied with the quantity. A fairly accurate measure should be obtained in this manner. You should use the following food models to determine portion sizes:

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

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

- Fat may be added: check the type of fat
- Sugar or other sweetener (e.g. honey/syrup) may be added
- Raisins, bananas, etc., may be added
- Milk added: check the type of milk and the quantity. On 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 Training Manual. Notice that the amount of milk added differs for instant cereal, porridge and for *Pronutro*.

Milk on porridge:

Little = 30g

Medium = 60g

Much = 125g

Condensed milk:

1 teaspoon = 10g

Evaporated milk:

1 teaspoon = 4g

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

Where a cereal consumed is not listed in the questionnaire, try to find one most similar in composition or write it under other, which can be verified using the Food Composition Tables.

It is very important to determine the texture and consistency of the maize-meal porridge, which has been consumed. It may have the consistency of a drink as in *Mageu*, or a thin porridge or a stiff porridge or a crumbly porridge. Record the one consumed under the relevant code.

### 11.5 Bread and rolls

As bread is the item most commonly eaten, the type and quantity of bread eaten should be very clearly specified. A normal thin slice of white bread weighs 30g, (i.e. machine sliced) (measuring 10mm) and brown weighs 35g. A 20mm thick slice would weigh 60g (white) and 70g (brown). The thickest one measures 30mm. Use the models of bread slices to obtain accurate data regarding the thickness and size of the slice eaten.

Vetkoek is also very popular and is made with yeast or baking powder. A small medium or large vetkoek weighs 40g, 60g and 80g respectively.

Dumplings of vetkoek made without yeast or baking powder. All these items can be estimated using a ruler and the food models.

Remember to distinguish between white, and whole wheat items and to write the code of the item in the appropriate space.

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, 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 wholewheat flour. Also distinguish whether whole or skim milk was used.

## 11.6 Spreads

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*).

It is important to establish what type of fat has been used. The following types are available with their own codes:

- Butter - *Cherry, Darling, Dairy Belle, Gold Medal*
- *Butro* - A mixture of polyunsaturated margarine and butter
- Polyunsaturated margarine (in tubs) - *Rama Soft, Floro, Olé, Golden Spread, Kraft*
- Hard Margarine (in foil) - *Blossom, Rondo, Stork SB, Rama, Sunshine D, Golden Spread*. Both yellow and white margarine are classified under this code
- Medium fat spread - *Floro Light, Blossom Light*. This type of margarine is normally not suitable for baking

- White Fat - *Holsum* is frequently used for baking and cooking

Try to find the hidden fat in food. Very often margarine or cooking fat is added to porridge. Black people frequently use *Holsum* fat in cooking.

When a spread has been used on bread, try to establish whether it was spread thickly or thinly. Also determine whether the spread was placed on one or two slices when a closed sandwich was eaten. In rural areas, children frequently have their bread without fat. If another type of fat such as chicken fat or lard is used, it must be indicated under the appropriate codes.

### 11.7 Eggs

It is important to determine what type of cooking method was used to cook the egg, namely, whether it was boiled, poached, curried, fried or scrambled. You also need to determine whether the type of fat and milk, that 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. In case of doubt regarding the type of fat used when frying eggs, select vegetable oil and use hard margarine in school hostels.

### 11.8 Cheese

The most commonly used cheeses are Cheddar/Colchester 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

There may be some difficulty in establishing whether the cheese eaten was Cheddar or *Sweetmilk*. In cases of doubt, Select *Sweetmilk*. Commercial cheese products available include cheese spread, wedges (30g), slabs and *Cheezies* (30g).

When recording cheese as low fat or reduced fat cheese, it is important to bear in mind that *Tussers*, and *Lichten Blanc* have a fat content of 27%, which is the same as *Sweetmilk*, so it would be appropriate to use the *Sweetmilk* code. *Bon Blanc* has a fat content of 33-35%, which is the same as Cheddar, so it would be appropriate to use the Cheddar code.

Very many people are unable to distinguish between Cream cheese, Creamed Cheese and Cottage cheese:

- Cream cheese: Made with cream rather than milk curd. The total fat content is 34.9%.
- Creamed cheese: Made from curd plus cream. The total fat content is 21.5%.
- Cottage cheese: Can be smooth and this makes it appear like cream or smooth creamed cheese. It can also be chunky. This product is available in fat free form (1% fat) or low fat (4.5% fat).

## 11.9 Meat

- 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. When you are asking about meat always check the following:

- The type of meat and the cut of meat eaten
- The cooking method used
- Whether fat was added in cooking
- Whether the fat was trimmed off the meat (FT) or retained (F). (If the mother/caregiver is unsure, use the code *with fat*)
- Whether the 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
- What type of fat was used
- 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

Stews are very common items. The following are available: vegetable, cabbage, bean or plain. With the exception of plain stew, the composition per 90g portion is approximately:

---

1 Meat	40%	(44.4g)
Potato	20%	(22.2g)
Vegetable	20%	(22.2g)
Water	11%	(12g)
Starch	3%	(3g)
Onion	6%	(6g)

Keep this in mind, you can make the necessary additions when required. Some additional commercial meat products that are very popular, are meat patties. Their weight differs greatly and the following guide can be used:

**Patties of 50g each**

*BB Steak Burgers*

*Big T burgers*

*Renown Brunch Burgers*

*Renown Frikkadelle*

*Tiger Protein Sossies*

*Lil Burgers*

**Patties of 100g each**

*Bull Brand Chompers*

*Tiger Protein Burgers*

*Estcourt Patties*

**Patties of 125g each**

*Bull Brand Super Burgers*

*Bull Brand Super Chompers*

*Renown Choice Beef Burgers*

*Table Top Ranch Burgers*

### 11.10 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.

### 11.11 Starch

The food models should be used to estimate the amount of starch consumed. Black children usually have more than one cup of starch with their main meal, where white children normally have less than one cup.

When samp and beans were consumed, take one third as cooked beans. It is not uncommon for children in the rural areas to have only samp, or maize with some gravy as their main meal. Remember to determine whether fat has been added to the starch.

### 11.12. Legumes and soup

This group includes:

- Dry beans (cooked)
- Lentils
- Samp and beans (Commercial 1:10; home made 2:1)
- Samp and peanuts
- Soups (If home made, record recipe)
- Dry bean stew

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

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

### 11.13 Cooked vegetables

With cooked vegetables, it is very important to ask the subject if any fat has been added. The models should be used to estimate the portion sizes. It is not uncommon for some people to have only cabbage and potato as a main course. Ensure that no other additions like fat has been added and use the appropriate code. Tomato and onion is also very popular as gravy over porridge as the main meal.

The cooked vegetables are easily identified and are presented in alphabetical order. You will notice 5 specific columns that present you with instructions on 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.

### 11.14 Salads and raw vegetables

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 line. If a mixed or green salad has been eaten, it must be determined whether a dressing was used. Add the dressing under the correct code. One teaspoon of dressing will suffice for one serving.

Dressings:

- French dressing (vinegar and oil)

- Mayonnaise (home made or commercial)
- Mayonnaise low in fat e.g. *Trim*
- Oil
- Salad dressing

### **11.15 Fruit**

Fruits have been divided into 4 columns:

- A column with sweetened, canned fruit
- A column with the raw / fresh 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, please record it as such. Use the tennis ball in your kit to indicate a medium fruit portion size. If the fruit was canned the weight of the syrup should be considered.

### **11.16 Puddings and sauces**

Puddings include:

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

Baked egg custard type puddings include bread-, sago-, rice- and tapioca-pudding. Dough-type includes roly-poly. You need to select whether baked puddings were made with SM or with WM. When unsure, take the WM code. Use the tablespoon, serving spoon and cup measure in your kit to determine portion sizes. If a different pudding was eaten that is not listed in the questionnaire, please write down the recipe in detail in Section B of page 15.

If pancakes were eaten, sugar should be added separately.

Determine whether a sauce (cream, custard, chocolate sauce) was added. If custard was eaten, specify the type of milk used and whether sugar was added. The type of cream used should also be established, e.g. plant: *Orley Whip*, fresh or canned. Unless farm cream (heavy) is available, light cream is the one generally used. *Orley Whip* and *Instant Whip* are made from plant oils and are also very popular. The fact that they are available in rectangular boxes and not cartons may help you to identify them. If sweetened cream is used, add 6g sugar per serving.

Ice cream should also be classified as *sorbet* is often mistaken for ice cream. *Country Fresh*, *Dairy Maid*, *Rich and Creamy* and *Little School*

*House* is classified as Ice cream. Sorbet is usually found in a cardboard box and ice cream in a tub.

### 11.17 Cakes and biscuits

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

Cookies with a filling include those biscuits with jam or icing. Biscuits without a filling include all those plain biscuits such as *Digestives*, *Marie*, and *Ginger* biscuits. Determine whether biscuits were bought or home made. Example: *Marie* biscuits will be entered under commercial plain cookies. *Lemon Creams* will be entered under commercial cookies with a filling.

### **11.18 Tarts**

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

- SM or WM
- HM or PM
- Whether a filling was added

Portion sizes can be estimated using:

- The ruler
- The bread slices

Pizzas and tarts have difficult weights to estimate. A small commercial pizza weighs 160g. Tart sizes may be estimated by using food models. Determine whether the type of pastry shell used, was a low fat (short pastry), medium fat (flaky pastry or high fat (puff pastry). Use the appropriate code.

### **11.19 Sweets**

#### **Bubble-/chewing gum**

1 Chappi	=	2g
1 Packet bubble gum	=	40g
1 Large bubble gum (Wicks)	=	8g
1 Packet chewing gum	=	20g
1 Beechie	=	2g
1 Packet gum strips	=	18g
1 Gum strip	=	3g
1 Jaw ball small	=	8g
1 Jaw ball medium	=	15g
1 Jaw ball massive	=	30g

### Chocolates

1. Assorted = 6g
2. Coated bars:

NAME	SMALL (g)	MEDIUM (g)	LARGE (g)
<i>Flake</i>	22	42	
<i>Tex</i>	25	44	
<i>Lunch Bar</i>	22	32	50
<i>Chocolate Log</i>		35	
<i>Bar One</i>	40	58	
<i>Caravan</i>	30	54	
<i>Peppermint Crisp</i>	26	54	
<i>Star Bars</i>		46	
<i>Kit Kat</i>	22	50	100
<i>Aero</i>	24	30	
<i>Cadbury Slabs</i>		50	100
<i>Chomp</i>	10	20	
<i>Smarties</i>	24	50	
<i>Munchies</i>		54	
<i>Sweetie Pie</i>	26		

Some of the slab chocolates may be classified as plain, milk or with nuts and raisins.

### Dry Fruit Sweet

1 Fruit bar	=	30g
1 Sweet	=	15g
1 Mebos	=	5g
1 Packet Fidos		
1 Fruit roll		

### Fruit gums

1 packet Wine gums	=	40g
1 Sweet	=	3g

### Hard Jelly Sweets

- Fruit drops
- Acid drops
- Menthol
- Buttermilk 1 Packet = 30g
- *Dimes* 1 Sweet = 3g
- *Cola*
- *Wilson*
- 1 Chocolate eclair pop = 20g
- 1 Fruit chew = 7g
- 1 Chocolate éclair = 5g
- 1 Sweet = 3g
- Jelly Tots* (small) = 40g
- 1 *Bulls Eye* = 8g
- 1 *Sugus* = 3g
- 1 *Nut Puff* = 5g
- 1 *Joystick* = 1g

### Ice Lollies

Fruit Sherbet (big round sucker)	=	70g
Other plain suckers	=	50g

**Marshmallows**

1 Round	=	10g
1 Marshmallow fish	=	6g

**Peanuts/Brittle**

Small packet peanuts	=	50g
Small Brittle	=	40g
Large Brittle	=	95g
Hand full of peanuts	=	30g

**Peppermints**

1 Peppermint	=	2g
Mint Imperials (small)	=	30g
(medium)	=	40g
(large)	=	50g

**Popcorn**

Hand full	=	6g
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**Raisins**

Small packet	=	60g
Hand full	=	27g

**Snacks**

Chips	=	30g
<i>Fritos</i>	=	30g
<i>Big Corn Bites</i>	=	25g
<i>Nik Naks</i>	=	24g
<i>Cheesenaks</i>	=	24g
Cheese Curls and <i>Flings</i>	=	16g

Snack Puffs (home packaged)	=	15g
All other packets	=	16g

**Soft sweets**

1 <i>Wilson</i> toffee	=	7g
1 Small fudge	=	6g
1 Small <i>Toff-o-lux</i>	=	34g
1 Medium <i>Toff-o-lux</i>	=	60g
1 Small <i>Rolo</i>	=	34g
1 Medium <i>Rolo</i>	=	52g

## **ADDENDUM A**

### **FOOD ITEMS AND QUANTITIES**

**This so-called “comprehensive Food Frequency Questionnaire” was handed out to the coordinators during their training. Ask them for a copy. Its first page is marked with a hand written note in red pen “NOT FOR THE SURVEY”. It was also emailed to all directors.**

**ADDENDUM B: NATIONAL FOOD CONSUMPTION SURVEY**

**CLAIM FORM**

Name \_\_\_\_\_ Province \_\_\_\_\_

Address \_\_\_\_\_ EA No \_\_\_\_\_

\_\_\_\_\_

Postal Code \_\_\_\_\_ Date Started \_\_\_\_\_

Date Finished \_\_\_\_\_

**List of items claimed for:**

Transport Type of vehicle: Private \_\_\_\_\_ University \_\_\_\_\_ Hired \_\_\_\_\_

Number of Persons \_\_\_\_\_ Engine volume: \_\_\_\_\_

Km Travelled: \_\_\_\_\_ Rate per Km: \_\_\_\_\_

**Accommodation:**

Number of persons: \_\_\_\_\_

Place of accommodation: Hotel \_\_\_\_\_ BB \_\_\_\_\_ Other \_\_\_\_\_

Number of nights: \_\_\_\_\_

**Food:**

Number of persons: \_\_\_\_\_

**Honorariums:**

Coordinator No of days \_\_\_\_\_

Team leaders No of days \_\_\_\_\_

Fieldworkers No of day \_\_\_\_\_

Other expenses Please specify and motivate:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**DIRECTORS SIGNATURE**

**DATE**

\_\_\_\_\_

**COORDINATORS SIGNATURE**

**DATE**

\_\_\_\_\_

**CLAIMANT'S SIGNATURE**

**DATE**

**Supportive Documentation must be attached**

**For office use:** Date received: \_\_\_\_\_ Date payment was mailed: \_\_\_\_\_