# UNHCR
# STANDARDISED EXPANDED NUTRITION SURVEY (SENS) GUIDELINES FOR REFUGEE POPULATIONS

## MODULE 4:
## FOOD SECURITY



A PRACTICAL STEP-BY-STEP GUIDE

VERSION 2 (2013)

UNHCR
The UN Refugee Agency

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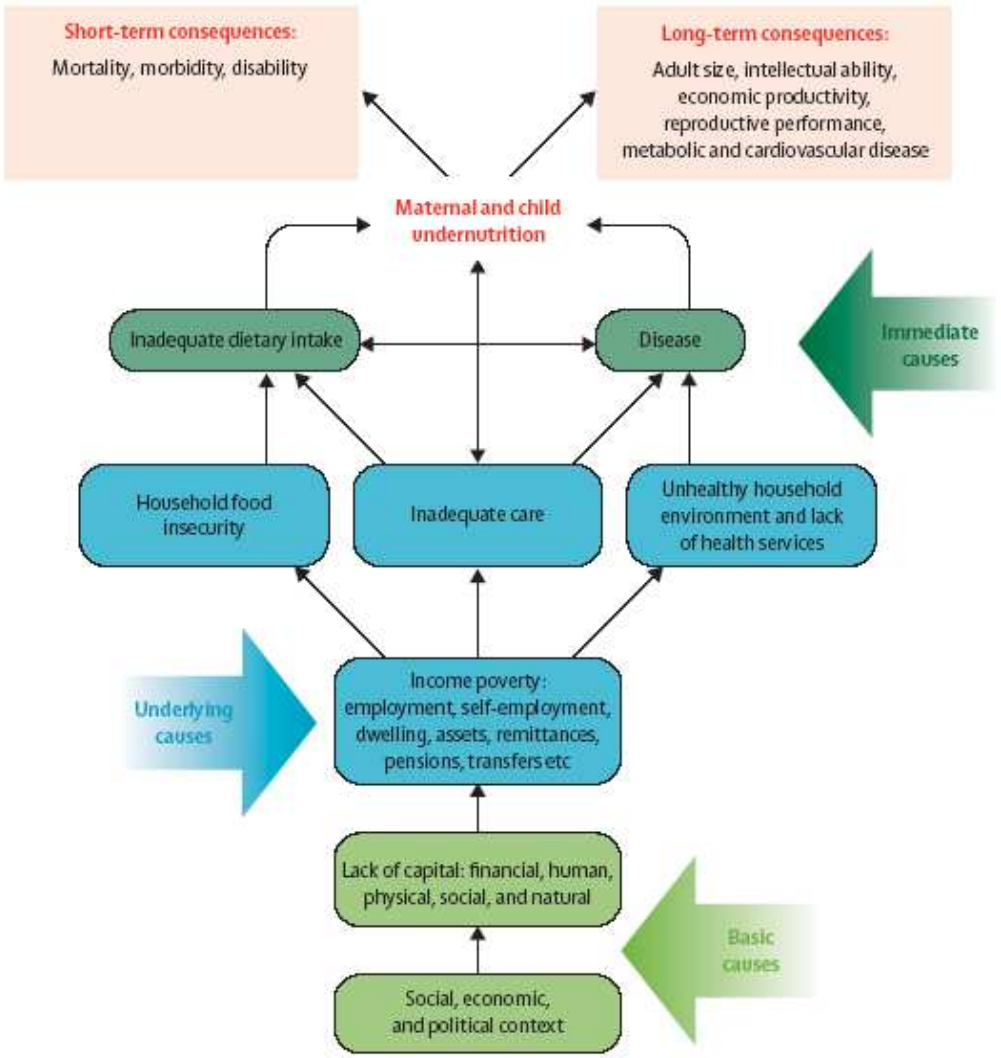
# KEY MESSAGES

– Food insecurity is one of the causes of undernutrition as shown in the conceptual framework of malnutrition (See below **Figure 1**). It directly affects the nutritional status of an individual. It is a direct cause of malnutrition in terms of dietary intake and an underlying cause in terms of access to and utilisation of food. Improving overall food security is therefore critical to improved nutrition, health and long-term development of children and other household members, and this is why collecting food security information is important.

**FIGURE 1** CONCEPTUAL FRAMEWORK OF MALNUTRITION (LANCET, 2008)



- The inclusion of this food security module in routine nutrition surveys will provide basic information on the existing food security situation among the surveyed population.

- Additional assessments will be required to gain a more detailed understanding of the causes and impacts of food insecurity, its dynamics and likely evolution in time, as well as for analysing the impact of responses. There are various methods for food security assessments and it is recommended to partner with experienced organisations such as WFP, ACF, Save the Children, or Oxfam to conduct these assessments.

- The majority of indicators proposed in this module have already been used and tested in previous nutrition surveys conducted in refugee populations, and the methods are based on international guidelines (by entities such as FANTA and FAO), that have been adapted to the refugee context.

- A standard questionnaire adapted to the local context should be used for the collection of data on general food ration, negative coping strategies, and household dietary diversity.

- The standard reporting format for food security indicators should be followed in all nutrition survey reports produced in refugee contexts.

- Interpretation of the results will require qualitative contextual analysis.

- Providing good quality training to survey teams and supervising them well will help ensure that data are reliable.

# DEFINITION OF SOME KEY TERMS

## GENERAL DEFINITIONS

**Food assistance:** food assistance refers to assistance provided to beneficiaries to enable them to access food. It can be done through three main modalities: 1) traditional in-kind food aid; 2) cash transfers where liquid cash is provided to beneficiaries for the purchase of food; and 3) vouchers for the purchase of food[1]. Alternative food assistance modalities, such as cash or vouchers for food, are increasingly being used by actors such as UNHCR or WFP. The size of the grant or the voucher is often set based on the dietary requirements and cost of food items at the market.

**Food security**: the most commonly used definition of food security was adopted in 1996 by the World Food Summit in Rome: "Food security, at the individual, household, national, regional and global levels exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (World Food Summit, 1996). As such, food security is much more than just how much people have to eat. The concept is articulated around three main pillars:

- Food availability: sufficient quantities of food available on a consistent basis.
- Food access: sufficient economic and social resources available to obtain appropriate foods for a nutritious diet.
- Food utilisation: appropriate use of the nutrients by the body based on individual health as well as knowledge of basic nutrition and care and the ability to prepare the food properly.

**Coping strategies:** coping strategies are behavioural responses to food insecurity, i.e. behaviours that people adopt when they do not have enough food or money to buy food. There are two basic types of coping strategies. One includes the immediate and short-term alteration of food consumption patterns. The other includes the longer-term alteration of income earning or food production patterns, and responses such as asset sales. Most, but not all, coping strategies have negative consequences on the overall wellbeing of the household and the individual.

**General Food Ration (GFR):** the general food ration is a basket of food aid commodities distributed to the entire population through a regular food distribution. An energy requirement of 2,100 kcal per person per day is used as the planning figure to set the in-kind food ration for refugees in developing countries, but this can be adapted based on the needs and the degree of self-sufficiency of the population, ambient temperature,

[1] In this module designed for nutrition surveys, only cash or vouchers directly targeting food assistance should be considered, not an overall cash or voucher programme covering broader basic needs.

demographic profile, activity level, and the degree of self-sufficiency of the population. The general food ration is the same for everyone in the population, irrespective of age or sex (i.e. same quantity and type of foods). The food basket should be nutritionally balanced and suitable for children and other vulnerable groups. Every effort should be made to provide familiar food items that are acceptable to the population. Fat should provide at least 17% of the dietary energy of the ration. Protein intake should provide at least 10% of the total energy. The diet should meet all vitamin and mineral requirements to prevent the occurrence of micronutrient deficiencies. If cash or vouchers are used for food assistance, the general food ration refers to the amount of the cash or voucher transfer that the beneficiary is entitled to.

**Blanket Supplementary Feeding Programmes (bSFP):** additional "blanket" distributions may be put in place to cover the specific needs of vulnerable groups, such as children under 2 or under 5 years of age or pregnant and lactating women, when the GFR is not adequate to meet their needs.

**Targeted Supplementary Feeding Programmes (tSFP):** individuals with acute malnutrition may also receive food from a targeted SFP, to treat moderate acute malnutrition.

## TECHNICAL DEFINITIONS

**Household Dietary Diversity Score (HDDS):** the Household Dietary Diversity Score (HDDS) is defined as the number of food groups consumed by any member of the household over a reference time period of 24 hours, and as such, it does not capture individual dietary intake. It reflects the intake of food groups at the household level and is used as a proxy for dietary intake and household food access. It can therefore be used to identify food access and consumption problems at the population level. For comparative purposes the score must be collected at the same period of the year. The score should not be used by itself as a proxy for food security as it reflects only part of food and nutrition security (i.e. food consumption).

**Food group**: a food group is a group of foods that have similar nutritional properties, such as the cereal group, tuber and roots group, or meat group.

# OBJECTIVES

*This Food Security module looks at three key sets of indicators to define the current state of food security among the surveyed population: 1) food assistance-related issues, 2) the use of negative coping strategies and 3) household dietary diversity. It aims to measure the following core indicators at the household level:*

- Access to food assistance and duration of the general food ration
- Use of negative coping strategies
- Level of household dietary diversity

Access to food assistance and duration of the general food ration, to be assessed in refugee populations dependent on food assistance, will provide information on the food assistance system. The extent to which negative coping strategies are used is indicative of the overall stress placed on the surveyed population to meet their food and other basic needs. Dietary diversity reflects the surveyed populations' final access to food, with or without the use of coping strategies. In addition, guidance and recommendations on how to compile data on the performance of the in-kind food aid distribution system to help interpreting the results found at the household level is included in SENS Food Security tools: [**Tool 1**-Analysis Food Aid Flow Guidance] and [**Tool 2**-Analysis Food Aid Flow Graphs].

*The objectives should be worded as follows in the survey protocol and report:*

1. To determine the coverage of ration cards and the duration the general food ration lasts for recipient households.

2. To determine the extent to which negative coping strategies are used by households.

3. To assess household dietary diversity.

If the survey is conducted in refugee contexts where there is no food assistance, Objective 1 should be excluded. **Contact UNHCR HQ / Regional Offices for assistance in adapting Objective 1 where several or alternative modalities such as cash transfers or vouchers are also used**.

# DATA COLLECTION

## MEASUREMENT METHODS

- Food security information is obtained from carrying out interviews with the person who is most involved in food preparation in the household. This is often the mother but can also be the father, grandparent, or a young person in a child-headed household.

- In order for the measurement methods to be reliable and for the survey results to be comparable from year to year, it is vital that the questions are asked exactly as they are written and that any modifications are agreed with all the surveyors prior to the survey so that the methodology is as standardised as possible. It is crucial that the translation of questions is precise and clearly understood in the local language. As much as possible, the survey should take place during the same season.

- To be able to do context analysis for the interpretation of results, the following secondary data should be reviewed to capture the current situation as well as recent or expected changes in the situation (list not exhaustive): reports from food security assessments, livelihood assessments, cash / voucher feasibility studies, market assessments, Joint Assessment Missions (JAM), Post Distribution Monitoring (PDM), Food Basket Monitoring (FBM), and other relevant assessments and monitoring tools.

- Where necessary, in-kind food aid flow is analysed using existing secondary data (optional). The method is explained in **SENS Food Security Module Tool 1**.

- **Food assistance**: the question (FS4 on questionnaire) on the duration of the general food ration needs to be adapted according to the food assistance cycle in the survey context (e.g. 15 days cycle, 30 days cycle).

- **Negative coping strategies**: the question on potentially risky or harmful activities (FS10 on questionnaire) used by households needs to be adapted, as these coping strategies may vary from context to context.

- **HDDS**: to calculate the HDDS (FS11 on questionnaire), the following set of 12 food groups is used (Guidelines for Measuring Household and Individual Dietary Diversity, FAO, 2011):

  1. Cereals
  2. White tubers and roots
  3. Vegetables (combination of 3 sub-groups: vitamin A rich vegetables and tubers, dark green leafy vegetables and other vegetables)
  4. Fruits (combination of 2 sub-groups: vitamin A rich fruits and other fruits)
  5. Meat (combination of 2 sub-groups: organ meat and flesh meat)
  6. Eggs
  7. Fish and other seafood
  8. Legumes, nuts and seeds
  9. Milk and milk products
  10. Oils and fats
  11. Sweets
  12. Spices, condiments and beverages

  - The respondent is asked about all foods eaten and beverages consumed inside or outside the home during the previous day and night, by ANY member of the household. This includes meals and snacks that were prepared in the home for consumption in the home or outside the home, and meals and snacks received or purchased and consumed outside the home.
  - Foods consumed by only one member of the household and not by the others are still recorded. For example if a child was given a piece of fruit to eat as a snack, this is recorded as 'yes' for fruit even if no other members of the household ate fruit.
  - When information is collected at the household level, there is no need to set minimum quantities below which foods are not considered. Even small amounts of foods (for example, a very small portion of meat included in a mixed dish) will be counted.
  - What people eat varies geographically, seasonally and according to wealth and customs. Locally used foods must be investigated and categorised correctly into the food groups listed on the generic questionnaire.
  - For analysis of the HDDS, it is necessary to combine all food sub-groups back into the original 12 food groups (as shown above) so that the total HDDS is based on the same 12 food groups (refer to Analysis section).

## MATERIAL NEEDED

- Food security survey questionnaires: 1 per household surveyed (always carry extra copies).

- The SENS food security questionnaire is shown in **Annex 1** or see SENS Pre-Module tool: [**Tool 9-**Full SENS Questionnaire].

## ETHICAL CONSIDERATIONS

- A standard Food Security questionnaire will be administered with the consent of the householder. Refer to **SENS Pre-Module Step 13** for guidance on approaching households and seeking informed consent.

## STANDARD PROCEDURE AND QUALITY ASSURANCE

- A standard questionnaire on food security will be administered on a sub-sample of households (refer to **SENS Pre-Module Step 8** for guidance).

- The respondent should be the mother or main caregiver of the household who is responsible for meal preparation for the household.

# TRAINING

- The training should contain a mix of theory, practical exercises (especially role plays where the questionnaire is tested either with a group of refugees or among the surveyors themselves), a standardisation exercise as well as a written test. **Annex 2** provides some training ideas.

- It is crucial that the coordinator(s) refresh their skills before beginning the training and read all of the background material provided.

- The training on the SENS Food Security questionnaire will require at least half a day.

- The Food Security questionnaire should be adapted prior to the training by 1) adding the appropriate food assistance cycle; 2) listing the potentially risky or harmful activities such as illegal activities known to be used in the survey context; and 3) listing the locally available foods that apply to the specific context, categorised into the 12 standard food groups.

- The training session is a useful opportunity to identify any previously unseen problems with the food lists or question formats.

- If some aspects of the module remain unclear or if alternative food assistance modalities such as cash or vouchers are used, seek advice from UNHCR HQ / Regional Offices.

## THEORETICAL COMPONENT

*The theoretical component of the training on the Food Security module should include:*

- Overview of the module, questionnaire and procedure to be followed
- The rationale for asking specific questions
- Information on food assistance modality and adaptation of questions as required
- Information on locally used negative coping strategies
- Information to help surveyors distinguish different foods specific to their area
- A short written or verbal test

***Things to watch out for:***

- **Table 1** describes the most common errors experienced by survey workers in data collection. These should be emphasised during the training and the survey supervisor / coordinator should focus on these when assessing the teams' performance during supervision visits throughout the survey.

**TABLE 1** COMMON ERRORS AND CHALLENGES IN DATA COLLECTION

| Common errors | Examples | Solution |
|---|---|---|
| **Respondents feel embarrassed to answer the questions** | Women may not feel comfortable answering questions if the enumerator is male. | Investigate the likelihood of this being a problem prior to the survey and ensure that there are female enumerators. |
| **Surveyors feel embarrassed to ask the questions** | Some surveyors may feel embarrassed to ask questions regarding the negative coping strategies. | Have a frank discussion during the training with the surveyors, and find solutions that are adapted to the given culture. Ensure surveyors are familiar with the negative coping strategies used in the area. |
| **Respondents do not understand the questions or the information is too difficult to report** | One team consistently reports that no negative coping strategies are being used by the households surveyed. | Review questions, translation and understanding of the questions by the surveyors. Ensure that the respondent is 'knowledgeable' i.e. that s/he knows the various coping strategies used by household members, if any. |
| **Inconsistencies in data collection** | It is written that the household does not have a ration card but the average number of days the GFR lasts is filled out. | The supervisor must check the questionnaires either in the field throughout the day or at the end of the day, and rectify any errors as quickly as possible. |
| **Question is not read exactly as it is written** | The average number of days that the GFR lasts is not explained properly and the caregiver thinks that the surveyor is asking about the current cycle. | The training needs to highlight the common pitfalls. During supervision visits, close attention must be paid to these pitfalls. |
| **Surveyor does not understand the question well enough** | Surveyors are not confident in asking about the different foods and food groups. | The training needs to ensure that surveyors are well prepared so that they can explain questions to the respondents in a standardised fashion. |

## PRACTICAL COMPONENT

- The practical component should form the main part of the training and should employ role play to ensure that surveyors are following standard procedures, understand the questions well and that they communicate effectively and respectfully with respondents.

*Guidance for coordinators*

- **Tables 2-4** provide instructions on the questionnaire for adaptation to the local context and instructions to be given to the surveyors.
- The Food Security module training should ensure that surveyors have adequate practice in using the questionnaire.
- Discuss with key informants, such as NGOs working in food security, WFP, refugee leaders and community workers, on the potentially risky or harmful activities such as illegal activities used by the population in the area and add to the list to reflect the specific context of the survey. Use the training to cross-check the information, given that surveyors are likely to know the context well.
- Conduct a market visit, and discuss with nutritionists, community leaders, women and health workers on the types of foods that are available and used in the area, and adapt the list of foods to reflect the specific context of the survey.
- It is very important that the survey teams discuss definitions of key terms such as 'household', 'meal' and 'snack' and then decide on the most appropriate local terms to use.
- Negative coping strategies may be a sensitive topic in some situations. This should be assessed prior to the survey and acceptable ways of asking about negative coping strategies should be determined.
- Prepare / translate and back translate the questionnaire: do not change the wording of the questions.
- Some participants will learn more quickly than others and they should be paired with the less able surveyors both in the training and in the field.

*Basic instructions for survey teams*

- Survey teams need to be trained on interview techniques: introduction, consent, confidentiality etc.
- It is very important that surveyors ask each question exactly as it is written on the questionnaire. The question may need to be repeated again but the wording should not be changed too quickly as it may be that the respondent did not hear properly or was not concentrating.
- When a question is unclear, it should be asked again or with slightly different wording but care must be taken not to change the meaning or lead the respondent into giving a specific response.

# QUESTIONNAIRE AND RATIONALE OF QUESTIONS

- **Tables 2-4** below provide instructions on the questionnaire for adaptation to the local context, explain the rationale of each question and highlight special instructions to be given to the surveyors.
- The recommended names and descriptions of the standard variables (as shown in the SENS Food Security questionnaire shown in **Annex 1**), and the correct codes are shown in **Tables 2-4**.
- A standard Epi Info View for data entry is shown in **Annex 3**. Free guidance on the use of Epi Info for Windows and training material on Epi Info can be found at the following site: http://www.cdc.gov/EpiInfo.

**TABLE 2** FOOD SECURITY MODULE: QUESTIONS ON ACCESS TO FOOD ASSISTANCE (HOUSEHOLD LEVEL)

| Question number/ Section FS1 | Suggested variable name | Question | Rationale | Special instructions |
|---|---|---|---|---|
| **FS1** | RCARD | **Does your household have a ration card?**<br><br>1=Yes, IF YES GO TO FS3<br>2=No | This question measures the coverage of the general food assistance. The question applies to all households, even if they have several ration cards. | Make sure the respondent is aware that this question will remain confidential and will not affect the assistance their household is entitled to. The number of ration cards per household is not measured. |
| **FS2** | YNORCARD | **Why do you not have a ration card?**<br><br>1=Not given one at registration, even if eligible; 2= Lost card; | The aim of this question is to understand why some households do not have a ration card. | If the response '6' or 'other' is given by a large proportion of respondents, focus group discussions and key informant interviews should be conducted after the survey to investigate the specific reasons. Usually, there should be a small percentage of '6' or 'other' responses. If there is a |

| Question number/ Section FS1 | Suggested variable name | Question | Rationale | Special instructions |
|---|---|---|---|---|
| | | 3=Traded/sold card; 4=New arrival who is eligible but not yet registered; 5=Not eligible (not included in the targeting criteria, if any); 6=other<br><br>GO TO FS5 | | large proportion of '1', key informant interviews should be conducted after the survey to understand why. |
| **FS3** | RSIZE | **Does your household receive full or reduced ration?**<br><br>1=Full; 2=Half; 6=Other<br><br>(OPTIONAL)<br><br>IF ANSWER IS 2 OR 6 GO TO FS5 | This question is to determine the households that receive full general food assistance ration from those households that receive reduced general food assistance ration and is solely used for the interpretation of question FS4. | If a full ration is given to all households, exclude this question.<br><br>Due to complex interpretation, analysis of how long the food ration last (question FS4) will only be applied to households receiving full food ration. |
| **FS4** | GFDLAST | **How many days did the food from the general food aid ration last from the [INSERT] cycle of [INSERT MONTH] last?**<br><br>RECORD THE NUMBER OF DAYS IF KNOWN<br><br>(RECORD 98 IF UNKNOWN) | This question assumes that people are able to reliably estimate the duration of the last cycle.<br><br>**It is important to ask about the last cycle and not the current cycle in order to capture the entire cycle duration.** | This relates to the ration as a whole. It is acknowledged that different commodities last different lengths of time. In this case, cereals are most likely to be the defining commodity as they often last the longest. Salt should not be taken into account mainly because it has almost no nutritional value (except for the iodine) and is very cheap, hence it cannot be 'converted into' other foods. In addition, salt almost always lasts much longer than the other items and sometimes even longer than the distribution cycle. If alternative modalities such as cash and vouchers are used, contact UNHCR HQ / Regional Offices. |

**Note on food assistance**: If this Food Security module is included in a refugee context where there is no food assistance, the questions on food assistance should be excluded from the questionnaire. If alternative food assistance modalities, such as cash transfers or vouchers, are used, the questionnaire should still be administered and question FS4 should particularly be adapted accordingly to gather the needed information. **Contact UNHCR HQ / Regional Offices for assistance in adapting the questions where alternative modalities such as cash transfers or vouchers are used**.

**TABLE 3** FOOD SECURITY MODULE: QUESTIONS ON NEGATIVE COPING STRATEGIES USED BY ONE OR MORE MEMBERS OF THE HOUSEHOLD IN THE LAST MONTH

| Question number/ Section FS1 | Suggested variable name | Question | Rationale | Special Instructions |
|---|---|---|---|---|
| | | **In the last month, have you or anyone in your household [see negative coping strategies below]?:**<br><br>1=Yes<br>2=No<br>8=Don't know | A one month recall period is used in order to capture as much as possible the different coping strategies the households engaged in. | Ensure that the respondent understands that the question applies to all household members and not only to them.<br><br>There should only be a limited number of 'don't know' responses. If a team is getting many 'don't know' responses, it may be an indication that the team is not asking the questions properly. |
| FS5 | BRW | Borrowed cash, food or other items with or without interest | Borrowing is a common coping strategy in many parts of the world and indicates increased vulnerability. | - |
| FS6 | SOLD | Sold any assets that you would not have normally sold (furniture, seed stocks, tools, jewellery, other NFI, livestock etc.) | Decapitalisation is a common form of coping, with likely negative long term impacts (loss of capital). | Ensure that the surveyors and respondents take into account the sales of all assets, including personal items such as jewellery, phones etc. |
| FS7 | ASKMORE | Requested increased remittances or gifts as compared to normal | Requests for increased remittances and gifts indicate increased vulnerability, but this is not necessarily a negative coping strategy. | Remittances are often a sensitive issue and the question may require some probing. |
| FS8 | LESSMEAL | Reduced the quantity and / or frequency of meals and snacks | Reducing the quantity and / or frequency of meals is a severe form of coping, given the negative short and long term impacts it may have on the individuals. | The scope of the question includes both meals and snacks. |

| Question number/ Section FS1 | Suggested variable name | Question | Rationale | Special Instructions |
|---|---|---|---|---|
| FS9 | BEG | Begged | Begging is a severe form of coping and often indicates destitution. | Begging is a sensitive issue and the question may require some probing. The wording of the question needs to be adapted to each context.<br><br>Note that begging is to ask for 'something' from someone whom one does not know and therefore this does not include asking family members, friends or neighbours for 'something'. |
| FS10 | RISKYACT | Engaged in [ADD LIST OF POTENTIALLY RISKY OR HARMFUL ACTIVITIES SUCH AS ILLEGAL ACVITITIES] for example hunting, fishing or wage labour outside the camp if these are prohibited or commercial sex work] or any other risky or harmful activities | Engaging in risky or harmful activities is a severe form of coping, given the inherent risk in the activity. | The survey coordinator needs to adapt this question to the local context.<br><br>The activities noted in the question are examples only, e.g. in some cases hunting may be authorised and in such a case, cannot be considered as a risky or harmful activity. Illegal activities are always considered as risky or harmful.<br><br>This question will point out to protection issues. See below the note for the procedure to follow. |

**Note on protection issues**: If an incident is raised during the survey, an identified UNHCR protection person should be contacted and provided with the details of the respondent confidentially if the respondent agrees. If the respondent does not give permission to provide information to the UNHCR protection person, the incident is still reported, but without any name or geographical data attached.

**Note on child labour:** If the survey is conducted in a refugee context where child labour is particularly important to measure through the SENS, a question on child labour may be added to the negative coping strategies listed above. However, note that the analysis of the indicator 'Proportion of households reporting using none of the coping strategies over the past month' will be more complex. **Contact UNHCR HQ / Regional Offices for assistance with wording and analysis when adding a question on child labour.**

**TABLE 4** FOOD SECURITY MODULE: QUESTIONS ON HDDS

| Question number/ Section FS2 | Suggested variable name | Food groups | Examples: these are only examples and need to be adapted to local context | Special Instructions |
|---|---|---|---|---|
| **FS11** | | **Have you or anyone else in your household eaten [see food groups below] yesterday during the day and at night?** I am interested in whether you or anyone else in your household had the item even if it was combined / mixed with other foods.<br><br>1=Yes<br>0=No | **The list that is provided below is an example. Adapt to the context.** | 'Yesterday during the day and at night' is equivalent to asking about the time from when they woke up to when they went to sleep, and they should account for snacks and meals prepared in the home and eaten in the home or outside the home by anyone from the household.<br><br>It is important that the surveyors and respondents understand that the components / ingredients used in mixed dishes should all be accounted for.<br><br>Do not count the number of times a certain food was eaten; simply write '1' if the any of the food was consumed by any member of the household. If the food was not consumed, record a '0' (ZERO) for the specific food group or sub-group. |
| **1** | CRL | **1. Cereals food group** | Barley, buckwheat, corn / maize, millet, oats, rice, rye, sorghum, wheat, fortified blended foods or any other grains or foods made from these (e.g. bread, noodles, porridge, paste or other grain products) | Include products and foods derived from cereal crops found in the local setting.<br><br>Insert food aid cereals that are distributed.<br><br>Any staple dishes or products such as bread, savoury biscuits, porridge and noodles made from grains listed, and from flours of these grains should be included. Local names should be used.<br><br>Sweet biscuits and cakes should not be included.<br><br>Fortified blended foods are included in the cereals food group. |

| Question number/ Section FS2 | Suggested variable name | Food groups | Examples: these are only examples and need to be adapted to local context | Special Instructions |
|---|---|---|---|---|
| **2** | WHTRT | **2. White roots and tubers** | Green bananas, lotus root, parsnip, taro, plantains, white potatoes, white yam, white cassava, white sweet potato or other foods made from roots | Include non-pigmented items mainly providing carbohydrates.<br><br>This group includes all non-grain-based starchy staples. Any staple dishes / casseroles and pastes made from roots, tubers, and plantains should also be included. |
| **3** | VEG | **3. Vegetables food group includes:** | | |
| **3A** | VITAVEG | a. Vitamin A rich vegetables and tubers | Carrot, red sweet pepper, pumpkin, squash, or sweet potato that are orange inside | Include only roots, tubers, and other red/yellow/orange vegetables that are sources of vitamin A.<br><br>Several items that are botanically fruits but are typically used as vegetables for culinary purposes are also included here. |
| **3B** | GREENVEG | b. Dark green leafy vegetables | Dark green leafy vegetables, including wild forms, vitamin A rich leaves such as amaranth, arugula, cassava leaves, kale, spinach | Include in this category only medium to dark leafy vegetables that are a source of vitamin A. |
| **3C** | OTHVEG | c. Other vegetables | Other vegetables like bamboo shoots, cabbage, green pepper, tomato, onion, eggplant, zucchini | - |
| **4** | FRT | **4. Fruits food group includes:** | | |
| **4A** | VITAFRT | a. Vitamin A rich fruits | Mango (ripe, fresh and dried), cantaloupe melon (ripe), apricot (fresh or dried), ripe papaya, passion fruit (ripe), dried peach, and 100% fruit juice made from these | Include locally available dark yellow or orange fruits that are sources of Vitamin A. |
| **4B** | OTHFRT | b. Other fruits | Other fruits such as apple, avocados, banana, coconut flesh, lemon, , orange, including wild fruits and 100% fruit juice made from these | This group includes various parts of a plant; leaves, stem, fruit and flowers. |

| Question number/ Section FS2 | Suggested variable name | Food groups | Examples: these are only examples and need to be adapted to local context | Special Instructions |
|---|---|---|---|---|
| **5** | MEAT | **5. Meat food group includes:** | | |
| **5A** | ORGMT | a. Organ meat | Liver, kidney, heart or other organ meats or blood-based foods | This group includes different types of red organ meats that are usually rich in haem iron.<br><br>Any processed / cured products made from these organ meats should also be included in this group. |
| **5B** | FLSHMT | b. Flesh meats | Beef, goat, lamb, mutton, pork, rabbit or other large wild (bush meat) or domesticated mammals<br>chicken, duck, or other wild or domesticated birds, cane rat, guinea pig, rat, agouti or other small wild (bush meat) or domesticated mammals, frogs, snakes, and other reptiles<br>insects | This group includes flesh foods.<br><br>Any processed / cured products made from these meats should also be included. |
| **6** | EGGS | **6. Eggs** | Eggs from chicken, duck, guinea fowl or any other egg | This group includes all kinds of bird eggs. This does not include roe / fish eggs (see fish and seafood) |
| **7** | FISHSF | **7. Fish and seafood** | Fresh or dried fish, canned fish (anchovies, tuna, sardines), shark, whale, roe / fish eggs, shellfish (clam, crab, lobster, crayfish, mussels, shrimp), octopus, squid, sea snails | This group includes all types of fish and seafood.<br><br>Any processed food made from these should also be included. This does not include small amounts of fish powder/dried fish/fish sauce for condiment. |
| **8** | PULSE | **8. Legumes, nuts and seeds group** | Dried beans, chickpeas, dried peas, lentils, peanuts, nuts (almond, cashew, chestnut, hazelnut, macadamia, pistachio, walnuts), seeds (pumpkin, sunflower, sesame, pine nut, poppy) or foods made from these (e.g. hummus, peanut butter) | Include beans, dried peas, lentils, nuts or seeds and also products made from these found in the local setting.<br><br>Insert food aid legumes, nuts and seeds that are distributed.<br><br>Include seeds here if they represent a substantial ingredient in mixed dishes or if they are eaten as a substantial snack or side dish. |

| Question number/ Section FS2 | Suggested variable name | Food groups | Examples: these are only examples and need to be adapted to local context | Special Instructions |
|---|---|---|---|---|
| **9** | MILK | **9. Milk and milk products** | Milk, infant formula, cheese, yogurt or other milk products (e.g. kefir, yogurt) | Include all food items in this group that are made from dairy, with the exception of butter and cream. Due to their high fat content and most typical culinary uses, these are classified with fats and oils.<br><br>This does not include small amounts added to tea / coffee.<br><br>This does not include breastmilk given to infants and young children. |
| **10** | FATS | **10. Oils and fats group** | Oil, fats, ghee or butter added to food or used for cooking | Include all food items in this group that have visible fat found in the local setting.<br><br>Insert food aid oils and fats that are distributed and added to food or used for cooking.<br><br>Do not include vitamin A rich red palm oil. |
| **11** | SWTS | **11. Sweets** | Sugar, honey, sweetened soda or sweetened juice drinks, sugary foods such as chocolates, candies, cookies, sweet biscuits and cakes | Include food items with a high content of different sweetening agents (sugar, corn syrup, other syrup, honey, molasses or jaggery, sweetened beverages). |
| **12** | SPICE | **12. Spices, condiments, beverages** | Spices (black pepper, salt, chillies), condiments (soya sauce, hot sauce, fish powder, fish sauce, ginger, herbs, magi cubes, ketchup, mustard), coffee, tea, alcoholic beverages (beer, wine, hard spirits) | - |

**Note on the HDDS:** Refer to FAO 2011, Annex 2 Guidance on assigning individual foods to food groups for more details on the general food groups. The HDDS questions and the analysis are based on the original HDDS created by FANTA (see reference section) and guidance provided by FAO (see reference section). Snacking and consumption of meals outside the home **should be included** in the HDDS questionnaire, given eating outside the home is common in refugee camp situations.

***Things to watch out for:***

- **Individual food items that could be classified into more than one food group**: the team will have to decide on the most appropriate food group classification for foods which can be classified into more than one food group. E.g. fish powder could be classified as either 'fish and seafood' or 'spices, condiments and beverages'. These decisions are best made after taking into consideration the particular local context, including the typical amount of the food consumed. For example, many cultures use hot pepper as a spice or condiment added to meals. Depending on the context, this may mean that one small spoonful of dried hot pepper flakes is added to an entire dish, or that several spoonfuls of fresh hot pepper are eaten as an accompaniment to the meal. In the first case, the dried pepper is best included in the "spices, condiments and beverages" food group, while in the second case, as a larger quantity of fresh hot peppers is consumed, it is more appropriate to include this in the "other vegetable" food group.

- **Mixed dishes**: many cultures commonly prepare and eat mixed dishes (such as casseroles or sauces that accompany a staple). Respondents should be asked to recall all foods eaten even if they were mixed with other foods.

- **As a rule, some basic foods are listed only under their main ingredient:** for example, bread is put into the cereals group even if oil, eggs or sugar are added in small amounts during the making.

- **Atypical consumption**: consumption patterns can be atypical during festive periods. It is recommended not to use the HDDS questions during national holidays / celebrations or during periods such as Ramadan, in which it is likely that food consumption does not reflect a typical diet. Questions related to atypical days can be added to the questionnaire either to screen out households or to use in analysis as appropriate for the purposes of the survey. You may add the following question to the questionnaire: 'Was yesterday a celebration or a feast day where you ate special foods or where you ate more, or less than usual?

- **Red palm oil**: another important issue to monitor in the community, area or country where the survey is taking place is whether red palm oil or palm nuts are consumed, as these are extremely good sources of vitamin A. When these foods are part of the culture, even if only used by a small percentage of persons, it is important to ask about them. A question on red palm products (e.g. red palm oil, palm nut or palm nut pulp sauce) should be inserted into the questionnaire in areas where red palm products are available.

# DATA CLEANING

## DAILY QUESTIONNAIRE CHECK AND OVERSEEING INTERVIEWS

- Supervisors will not have the chance to observe every interview conducted but they are responsible for reviewing every questionnaire for errors.

- Reviewing questionnaires should be done in the field, if possible, so that any problem can be resolved immediately and if not then at the end of each day.

- Check that consent was given. If consent was not given, ask the surveyors if they know the reasons. If there are many refusals, understanding why will help clarify any misunderstandings, concerns or misconceptions with the community being surveyed.

- Check for missing data, 'don't know' answers (these should always be minimal) or inconsistencies in data e.g. no ration card but GFR duration filled out.

- Check for wrong codes in answers.

## DATABASE CHECK

- Brief guidance on the data cleaning process is provided in **Annex 4** using Epi Info (version 3.5.4 July 2012). Free guidance on the use of Epi Info for Windows and training material on Epi Info can be found at the following site: http://www.cdc.gov/EpiInfo

# PRESENTATION OF RESULTS

- Food Security results should be descriptive and presented as proportions (with 95% confidence interval) and means where applicable.

- The used food assistance modality or combination of these (in-kind food aid, cash transfers and / or vouchers) should always be stated clearly. A brief description is required in the Discussion section of the report on the state of the pipeline and any recent changes in food assistance.

- When presenting the results from several camps with a representative sample drawn from each camp into one report, it is recommended to present results from each camp separately. See SENS Pre-Module tools: [**Tool 4b**-Dolo SENS Survey Report 2013] and [**Tool 5**-Dadaab Survey Report 2011].

- When several camps are surveyed with a representative sample drawn from each camp, it is not necessary to report combined results for each indicator; see **Annex 5** for the recommended combined indicators to report. See the SENS Pre-Module tool that will automatically generate weighed prevalence results: [**Tool 14**-Weighting Data Tool].

- All survey reports should present results following the tables and figures shown below.

- Where an exhaustive (census) survey is conducted, confidence intervals should not be presented.

## RESULTS TABLES AND FIGURES

- There are several graphs that are recommended to be included in the final survey report. For a tool that will automatically generate trend graphs, see SENS Pre-Module tool: [**Tool 12**-Trends and Graphs].

**TABLE 5** FOOD SECURITY SAMPLING INFORMATION

| Household data | Planned | Actual | % of target |
|---|---|---|---|
| Total households surveyed for Food Security | | *[only include households with data; exclude absent households and refusals]* | |

## ACCESS TO FOOD ASSISTANCE

**TABLE 6** RATION CARD COVERAGE

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households with a ration card** | | |

Out of the households reporting not to have a ration cards, add the following text description when relevant:

[INSERT PROPORTION] said it was because they were not given one at registration, even if they were included in the targeting criteria; [INSERT PROPORTION] said it was because they lost their ration card; [INSERT PROPORTION] said it was because they traded or sold their card; [INSERT PROPORTION] said it was because they were new arrivals who were eligible but were not yet registered; [INSERT PROPORTION] said it was because they were not included in the targeting criteria; and [INSERT PROPORTION] gave other reasons.

**TABLE 7** REPORTED DURATION OF GENERAL FOOD RATION 1[2]

| Average number of days the general food ration lasts (Standard deviation or 95% CI) | Average duration (%) in relation to the theoretical duration of the ration* |
|---|---|
| **Days** | **%** |

*For example, if the average number of days the food ration lasts is 21 days out of the 30 days, then the average duration in relation to the theoretical duration of the ration is calculated as follows: 21 days/30 days x 100=70%.

**TABLE 8** REPORTED DURATION OF GENERAL FOOD RATION 2

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households reporting that the food ration lasts the entire duration of the cycle** | | |
| **Proportion of households reporting that the food ration lasted:** | | |
| ≤75% of the cycle [INSERT DAYS] | | |
| >75% of the cycle [INSERT DAYS] | | |

[2] In contexts where a mix of full rations and half rations are given, only report this value for the households receiving the full ration. If vouchers and/or cash is used, contact UNHCR HQ / Regional Offices for further guidance.

## NEGATIVE HOUSEHOLD COPING STRATEGIES

**TABLE 9** COPING STRATEGIES USED BY THE SURVEYED POPULATION OVER THE PAST MONTH

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households reporting using the following coping strategies over the past month*:** | | |
| Borrowed cash, food or other items with or without interest | | |
| Sold any assets that would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.) | | |
| Requested increased remittances or gifts as compared to normal | | |
| Reduced the quantity and/or frequency of meals and snacks | | |
| Begged | | |
| Engaged in potentially risky or harmful activities [LIST ACTIVITIES] | | |
| **Proportion of households reporting using none of the coping strategies over the past month** | | |

***** The total will be over 100% as households may use several negative coping strategies.

## HOUSEHOLD DIETARY DIVERSITY

The following information needs to be added as text in the results:

"The last general food distribution ended [INSERT NUMBER] days prior to the start of the survey data collection. OR Vouchers or cash grants for food were last provided on [INSERT DATE] [i.e. [INSERT NUMBER] days prior to the start of the survey data collection"

The general food distribution usually lasts more than one day and may be organised by family size, particularly if in-kind food aid is used, hence the surveyed households will be at different times of the cycle which may have an impact on the HDDS results and this needs to be considered in interpreting the data.

You should also provide an explanation on the season when the survey was conducted and its impact on the overall food availability. For example: "The survey was conducted during the annual lean season, during which the overall food availability is limited. It is hence likely that the household dietary diversity score is lower than it would be e.g. after the harvest." Note also any extraordinary event that may have affected household dietary intake, such a drought or a festivity. Use of cash or vouchers rather than in-kind food items is also likely to have an impact on the HDDS and this should be discussed in the report.

**TABLE 10** AVERAGE HDDS*

| | **Mean (Standard deviation or 95% CI)** |
|---|---|
| **Average HDDS** | |

* Maximum HDDS is 12.

**FIGURE 2** PROPORTION OF HOUSEHOLDS CONSUMING DIFFERENT FOOD GROUPS WITHIN LAST 24 HOURS *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*

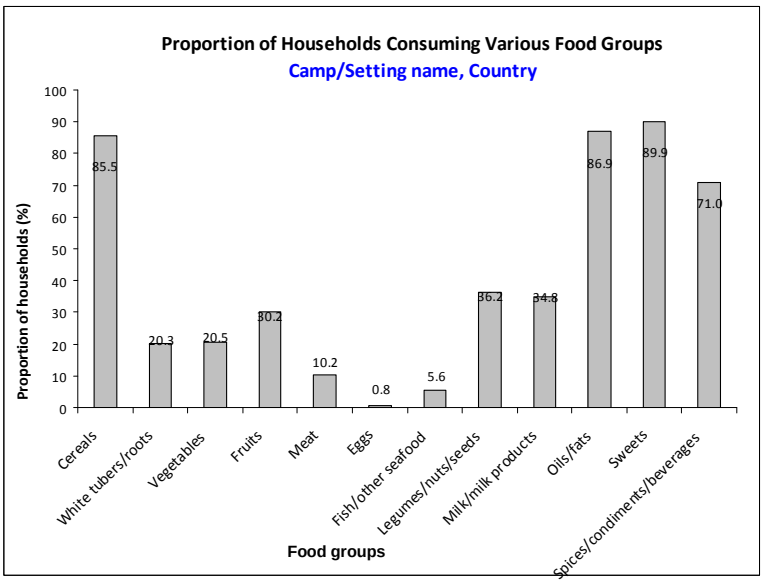



**TABLE 11** CONSUMPTION OF MICRONUTRIENT RICH FOODS BY HOUSEHOLDS

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households *not consuming any* vegetables, fruits, meat, eggs, fish/seafood, and milk/milk products** | | |
| **Proportion of households consuming either a plant or animal source of vitamin A** | | |
| **Proportion of households consuming organ meat/flesh meat, or fish/seafood (food sources of haem iron)** | | |

# DATA ANALYSIS

## ANALYSIS PROCEDURES

- The first step in the data analysis process is to classify the categories into more easily manageable variables that relate to the indicators you are trying to measure. This involves recoding *some* of the responses into 'new' variables. **Tables 12-16** provide some guidance on calculating the indicators and recoding the variables and on using Epi Info software.

- Make sure that the data has been cleaned before starting the analysis process.

- Brief guidance on using Epi Info software for analysis is provided below. Refer to **Annex 4** for standard analysis commands using Epi Info (version 3.5.4 July 2012). Free guidance on the use of Epi Info for Windows and training material on Epi Info can be found at the following site: http://www.cdc.gov/EpiInfo

**TABLE 12** SUMMARY TABLE OF CALCULATION FOR FOOD ASSISTANCE INDICATORS AND RECODING INSTRUCTIONS (WHERE APPLICABLE)

| QUESTION / Section FS1 | REPORTED RESULTS (ORIGINAL VARIABLE NAMES) | ACTION |
|---|---|---|
| **FS1. Does your household have a ration card?**<br><br>1=Yes; 2=No | Proportion of households with a ration card (RCARD) | No recoding needed.<br><br>Run the 'Frequencies' / 'Complex Sample Frequencies' command on the variable termed RCARD to fill out **Table 6**. The frequency of answer 1 ('yes') is reported. |
| **FS2. Why do you not have a ration card?**<br><br>1=Not given one at registration, even if eligible; 2=Lost card; 3=Traded card; 4=New arrival who is eligible but not yet registered; 5=Not eligible (not included in the targeting criteria); 6=other | [insert proportion] said it was because they were not given one at registration, even if they were included in the targeting criteria; [insert proportion] said it was because they lost their ration card; [insert proportion] said it was because they traded card; [insert proportion] said they were new arrivals who were eligible but were not yet registered; [insert proportion] said it was because they were not included in the targeting criteria; and [insert proportion] gave other reasons. (YNORCARD) | No recoding needed.<br><br>This question should only be analysed for households answering '2' or 'no' to Question FS1, Section FS1.<br>Run the 'Frequencies' / 'Complex Sample Frequencies' command on the variable termed YNORCARD to complete the text to be shown at the bottom of **Table 6**. The frequency of all answers is needed. |
| **FS3. Does your household receive full or reduced food ration?**<br><br>1=Full; 2=Half; 6=Other (OPTIONAL) | This data is used for the analysis of FS4. (RSIZE) | Households with answer 1 ('Full') will be analysed in question FS4. |

| QUESTION / Section FS1 | REPORTED RESULTS (ORIGINAL VARIABLE NAMES) | ACTION |
|---|---|---|
| **FS4. How many days did the food from the general ration from the [INSERT] cycle of [INSERT] month last?**<br><br>RECORD THE NUMBER OF DAYS IF KNOWN<br><br>(RECORD 98 IF UNKNOWN) | Average number of days the food ration lasts (GFDLAST) | Run the 'Means' / 'Complex Sample Means' command on the variable termed GFDLAST to calculate the mean and fill out **Table 7**. |
| | Average duration in relation to the theoretical duration of the ration (%) | Do a hand calculation to obtain the percentage and fill out **Table 7** based on the calculated mean. |
| | Proportion of households reporting that the food ration lasts the entire duration of the cycle | Define a new variable for this analysis (GFDFULL). Recode GFDLAST to GFDFULL using the 'Recode' command: (1) 15 or 30 days or (2) <15 or <30 days<br><br>Make sure to adapt the cycle days to the context.<br><br>(1) e.g. 15 or 30 days [answer 15 or 30]<br>(2) e.g. <15 or <30 days [answer 0-14 or 0-29]<br>Use the 'Frequencies' / 'Complex Sample Frequencies' command to analyse the variable GFDFULL to fill out **Table 8**. The frequency of answer 1 is reported. |
| | Proportion of households reporting that the food ration lasted: ≤75% and >75% of the cycle [INSERT DAYS] | Define a new variable for this analysis (GFD75). Recode GFDLAST to GFD75 using the 'Recode' command: (1) ≤75% or (2) >75%<br><br>Make sure to adapt the cycle days to the context.<br><br>(1) ≤75% [e.g. answer 0-11 days or 0-22 days]<br>(2) >75% [e.g. answer 12-15 or 23-30]<br>Use the 'Frequencies' / 'Complex Sample Frequencies' command to analyse the variable GFD75 to fill out **Table 8**. The frequency of answers 1 and 2 are reported. |

**TABLE 13** SUMMARY TABLE OF CALCULATION FOR COPING MECHANISMS INDICATORS AND RECODING INSTRUCTIONS (WHERE APPLICABLE)

| QUESTION / Section FS1 | REPORTED RESULTS (ORIGINAL VARIABLE NAMES) | ACTION |
|---|---|---|
| **In the last month, have you or anyone in your household:** | Proportion of households reporting using the following coping strategies over the past month: | No recoding needed.<br><br>Exclude from analysis households with answers '8' ('Don't know').<br><br>Run the 'Frequencies' / 'Complex Sample Frequencies' command on all of the negative coping strategies variables to complete **Table 9**.<br><br>The frequency of answer '1' ('yes') is reported for each question. |
| **FS5. Borrowed cash, food or other items with or without interest**<br>1=Yes; 2=No; 8=Don't know | Borrowed cash, food or other items with or without interest (BRW) | |
| **FS6. Sold any assets that you would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.)**<br>1=Yes; 2=No; 8=Don't know | Sold any assets (furniture, seed stocks, tools, other NFI, livestock etc.) (SOLD) | |
| **FS7. Requested increased remittances or gifts as compared to normal**<br>1=Yes; 2=No; 8=Don't know | Requested increased remittances or gifts (ASKMORE) | |
| **FS8. Reduced the quantity and / or frequency of meals or snacks**<br>1=Yes; 2=No; 8=Don't know | Reduced the quantity and / or frequency of meals (LESSMEAL) | |
| **FS9. Begged**<br>1=Yes; 2=No; 8=Don't know | Begged (BEG) | |

| QUESTION / Section FS1 | REPORTED RESULTS (ORIGINAL VARIABLE NAMES) | ACTION |
|---|---|---|
| **FS10. Engaged in [ADD LIST OF POTENTIALLY RISKY OR HARMFUL ACTIVITIES SUCH AS ILLEGAL ACVITITIES] for example hunting, fishing or wage labour outside the camp if these are prohibited or commercial sex work] or any other risky or harmful activities**<br>1=Yes; 2=No; 8=Don't know | Engaged in potentially risky or harmful activities, such as: [ADD LIST OF LOCAL ILLEGAL ACTIVITIES]<br>(RISKYACT) | |
| | Proportion of households reporting using none of the coping strategies over the past month | Define a new variable for this analysis (NONE).<br><br>Using the 'Assign' and 'If' commands, recode coping strategies answers to (1) none or (2) >1.<br><br>(1) None [answers 2 ('no') to all 6 coping strategies]<br>(2) >1 [answer 1 ('yes) for at least 1 of the 6 coping strategies]<br><br>Use the 'Frequencies' / 'Complex Sample Frequencies' command to analyse the variable NONE to complete **Table 9**. |

**TABLE 14** SUMMARY TABLE OF CALCULATION AND RECODING INSTRUCTIONS FOR HDDS (WHERE APPLICABLE)

| FOOD GROUPS / Section FS2 | ORIGINAL VARIABLE NAMES | ACTION |
|---|---|---|
| **Step 1:** Create new food group variables for those food groups that need to be aggregated:<br><br>1. Vegetables<br>2. Fruits<br>3. Meat | 1. The 'Vegetables' food group is a combination of 3 sub-groups: 'vitamin A rich vegetables and tubers' (VITAVEG), 'dark green leafy vegetables' (GREENVEG) and 'other vegetables' (OTHVEG) | A new variables (VEG) should be created.<br><br>If answer is '1' for one of the sub-groups or all 3, then recode to '1'. If answer is '0' for all three of the sub-groups, then recode to '0'.<br><br>Use the 'Define' and 'if' commands to create the new aggregated variable for the vegetables food group. |
| | 2. The 'Fruits' food group is a combination of two sub-groups: 'vitamin A rich fruits' (VITAFRT) and 'other fruits' (OTHFRT) | A new variable (FRT) should be created.<br><br>If answer is '1' for either one of the sub-groups or both, then recode to '1'. If answer is '0' for both of the sub-groups, then recode to '0'.<br><br>Use the 'Define' and 'if' commands to create the new aggregated variable for the fruits food group. |
| | 3. The 'Meat' food group is a combination of 2 sub-groups: 'organ meat' (ORGMT) and 'flesh meats' (FLSHMT) | A new variable (MEAT) should be created.<br><br>If answer is '1' for either one of the sub-groups or both, then recode to '1'. If answer is '0' for both of the sub-groups, then recode to '0'.<br><br>Use the 'Define' and 'if' commands to create the new aggregated variable for the meat food group. |

| FOOD GROUPS / Section FS2 | ORIGINAL VARIABLE NAMES | ACTION |
|---|---|---|
| **Step 2:** Create the HDDS score for each household | There should be 12 food group variables as follows:<br><br>1. Cereals (CRL)<br>2. White roots and tubers (WHTRT)<br>3. Vegetables (VEG)<br>4. Fruits (FRT)<br>5. Meat (MEAT)<br>6. Eggs (EGGS)<br>7. Fish and seafood (FISHSF)<br>8. Legumes, nuts and seeds (PULSE)<br>9. Milk and milk products (MILK)<br>10. Oils and fats (FATS)<br>11. Sweets (SWTS)<br>12. Spices, condiments, beverages (SPICE) | The HDDS is calculated by summing the number of food groups consumed in the household over the 24 hour recall period.<br><br>Use the 'Define' (e.g. HDDS) and 'Assign' commands to create the score for each household. |
| **Step 3:** Calculate the average HDDS for the surveyed households | Use the newly defined variable HDDS | Use the 'Means' / 'Complex Sample Means' command to calculate the mean HDDS and fill out **Table 10.** |

**TABLE 15** SUMMARY TABLE OF CALCULATION INDIVIDUAL FOOD GROUPS CONSUMED BY HOUSEHOLDS

| FOOD GROUPS / Section FS2 | REPORTED RESULTS (ORIGINAL VARIABLE NAMES) | ACTION |
|---|---|---|
| There should be 12 food group as follows:<br><br>1. Cereals<br>2. White roots and tubers<br>3. Vegetables<br>4. Fruits<br>5. Meat<br>6. Eggs<br>7. Fish and seafood<br>8. Legumes, nuts and seeds<br>9. Milk and milk products<br>10. Oils and fats<br>11. Sweets<br>12. Spices, condiments, beverages | Proportion of households consuming individual food groups:<br><br>1. Cereals (CRL)<br>2. White roots and tubers (WHTRT)<br>3. Vegetables (VEG)<br>4. Fruits (FRT)<br>5. Meat (MEAT)<br>6. Eggs (EGGS)<br>7. Fish and seafood (FISHSF)<br>8. Legumes, nuts and seeds (PULSE)<br>9. Milk and milk products (MILK)<br>10. Oils and fats (FATS)<br>11. Sweets (SWTS)<br>12. Spices, condiments, beverages (SPICE) | No recoding needed.<br><br>Run the 'Frequencies' / 'Complex Sample Frequencies' command on each food group variable to draw **Figure 2**. The frequency of answer '1' is reported. |

**TABLE 16** SUMMARY TABLE OF CALCULATION FOR CONSUMPTION OF MICRONUTRIENT RICH FOODS BY HOUSEHOLDS

| **FOOD GROUPS / SUB-GROUPS/ Section FS2** | **REPORTED RESULTS** | **ACTION** |
|---|---|---|
| 1. Vegetables<br>2. Fruits<br>3. Meat<br>4. Eggs<br>5. Fish and sea food<br>6. Milk and milk products | Proportion of households *not consuming any* vegetables, fruits, meat, eggs, fish/seafood, and milk/milk products | Define a new variable for this analysis (NODIVERS).<br><br>Using the 'Assign' and 'If' commands, recode answers to: (1) No diversify or (2) Other.<br><br>(1) No diversify [answer '0' to VEG and FRT and MEAT and EGGS and FISHSF and MILK ]<br>(2) Other [all other answer combination]<br><br>Use the 'Frequencies' / 'Complex Sample Frequencies' command to analyse the variable NODIVERS to complete **Table 11**. The frequency of answer 1 is reported. |
| 1. Vitamin A rich vegetables and tubers<br>2. Dark green leafy vegetables<br>3. Vitamin A rich fruits<br><br>Note that you can add food group with palm oil or products made from red palm oil if appropriate. | *Note: This analysis step is needed for analysing the proportion of households consuming either a plant or animal source of vitamin A (see below)* | Define a new variable for this analysis (VITAPLT).<br><br>Using the 'If' command, recode answers to: (1) Vitamin A plants or (0) None.<br><br>(1) Vitamin A plants [answer '1' to VITAVEG or GREENVEG or VITAFRT ]<br>(0) None [answer '0' to VITAVEG and GREENVEG and VITAFRT] |

| FOOD GROUPS / SUB-GROUPS/ Section FS2 | REPORTED RESULTS | ACTION |
|---|---|---|
| 1. Organ meat<br>2. Eggs<br>3. Milk and milk products | *Note: This analysis step is needed for analysing the proportion of households consuming either a plant or animal source of vitamin A (see below)* | Define a new variable for this analysis (VITAANL).<br><br>Using the 'If' command, recode answers to: (1) Vitamin A animals or (2) None (0).<br><br>(1) Vitamin A animals [answer '1' to ORGMT or EGGS or MILK]<br>(0) None [answer '0' to ORGMT and EGGS and MILK] |
| 1. Vitamin A rich vegetables and tubers<br>2. Dark green leafy vegetables<br>3. Vitamin A rich fruits<br>4. Organ meat<br>5. Eggs<br>6. Milk and milk products | Proportion of households consuming either a plant or animal source of vitamin A | Define a new variable for this analysis (VITAFOOD).<br><br>Using the 'If' command, recode answers to: (1) Vitamin A plants/animals or (0) None.<br><br>(1) Vitamin A plants/animals [answer '1' to VITAPLT or VITAANL]<br>(0) None [answer '2' to VITAPLT and VITAANL]<br><br>Use the 'Frequencies' / 'Complex Sample Frequencies' command to analyse the variable VITAFOOD to complete **Table 11**. The frequency of answer 1 is reported. |

| FOOD GROUPS / SUB-GROUPS/ Section FS2 | REPORTED RESULTS | ACTION |
|---|---|---|
| 1. Meat<br>2. Fish and seafood | Proportion of households consuming organ meat/flesh meat, or fish/seafood | Define a new variable for this analysis (HAEMFE).<br><br>Using the 'If' command, recode answers to: (1) Haem iron or (0) None.<br><br>(1) Haem iron [answer '1' to MEAT or FISHSF]<br>(0) None [answer '0' to MEAT and FISHSF]<br><br>Use the 'Frequencies' / 'Complex Sample Frequencies' command to analyse the variable HAEMFE to complete **Table 11**. The frequency of answer 1 is reported. |

## COMMON ERRORS AND CHALLENGES IN DATA ANALYSIS

**Table 17** describes the most common errors experienced by survey coordinators / supervisors when conducting the final data analysis.

**TABLE 17** COMMON ERRORS AND CHALLENGES IN DATA ANALYSIS

| Common errors | Examples | Solution |
|---|---|---|
| **Miscalculating the numerator and / or denominator when reporting the duration of the general food ration variables** | All households are included in the calculation, including those without ration card or with reduced ration. | Only conduct the analysis on households who reported to have a ration card and reported to receive full ration. |
| **Miscalculating the HDDS score** | Some of the food items are skipped and not included due to a mistake in the analysis codes. | Ensure to follow the analysis guidance provided in **Annex 4.** |
| **Not taking into consideration a weighting factor when combining coverage estimates from several camps** | When surveying several camps with a representative sample drawn from each camp, combining the samples from all camps to calculate the overall prevalence without taking into consideration a weighting factor. | For a tool that will automatically generate weighed prevalence results, see SENS Pre-Module tool: [**Tool 14**-Weighting Data Tool].  |
| **Reporting food security results according to certain aggregates of clusters** | Reporting the food security results per groups of cluster. | Do not disaggregate cluster surveys according to clusters in the presentation of results. All clusters merged together from all section / blocks of the camp are representative of the camp as a whole and should not be disaggregated. |

## FOOD AID FLOWS (OPTIONAL)

- An analysis of food security in a food aid dependent population needs to take into account the overall performance of the in-kind food distribution system[3], in addition to the household-level questions as listed above. This analysis is optional and is done only in contexts with significant in-kind food aid flows.

- This analysis will look at the General in-kind Food Distribution and other significant in-kind food distributions targeting the *entire* population. This analysis will not include selective feeding programmes, such as distributions targeted to children under 5 years of age (e.g. bSFP or "blanket" for under-5) or to pregnant and lactating women, or food assistance provided through cash-based interventions such as cash grants or vouchers.

- The analysis of the performance of the food aid system involves looking at the following three main components:

  **A: Analysis of the adequacy of the planned theoretical in-kind food aid ration**

  **B: Analysis of actual food aid flows during the past year as compared to the planned theoretical ration**

  **C: Reviewing the key findings of Food Basket Monitoring and Post Distribution Monitoring**

- For guidance on how to collate information on the performance of the food aid system, see SENS Food Security tools: [**Tool 1**-Analysis Food Aid Flow Guidance] & [**Tool 2**-Analysis Food Aid Flow Graphs].

[3] For technical reasons, this analysis does not comprise cash-based interventions (cash and vouchers), even if these are used for food assistance purposes

# USE OF RESULTS

## COMPARISONS, TRENDS AND CONTEXT ANALYSIS

- A crucial step in the interpretation of the results is comparing them to results from *previous* nutrition surveys (if these include relevant food security data) or *previous* food security, livelihood or other relevant surveys or assessments in the surveyed area, in order to define how the situation has changed over time.

- Even if statistical comparisons are not possible, e.g. due to lack of data from an adequate sample or differing methodologies, trends in food security indicators may be compared.

- Results should also be compared with *any recent* assessments, to determine if the findings of the nutrition survey are in line with the findings of the other assessments.

- As indicated below, a thorough understanding of the context is crucial in the interpretation of the results.

- Any changes in the food assistance modalities or in the coverage (e.g. changes in the ration composition in terms of items, quality or quantity, introduction of targeting or cash-based assistance instead of food aid) should be taken into consideration when interpreting the results.

- When interpreting any significant changes in the HDDS and comparing the use of negative coping strategies from year to year in a refugee context dependent on food assistance, the following needs to be taken into consideration:

**Food assistance-related issues:**

  - Changes in the general food ration, assistance modality (e.g. cash or vouchers, or combination of cash-based and in-kind assistance), distribution cycle, as well as prices and availability of foods in the local markets, particularly if cash or vouchers are used.
  - The performance of assistance delivery, including the food assistance pipeline.
  - Different timing of the nutrition survey with regards to the distribution cycle, e.g. in the beginning, middle or end of the cycle. Food security indicators tend to be better just after the distribution.
  - Changes in supplementary and complementary foods.

**Opportunities for income generation, access to food and seasonality:**

- Changes in labour opportunities, agricultural activities, and income generating activities, including assistance for these activities.
- Changes in refugees' right to work or freedom of movement.
- Different timing of the nutrition survey with regards to seasons. Food security indicators tend to be better just after the harvest and worse during the lean season. Even if the main source of food for the refugees is food assistance, if the nutrition surveys are undertaken at different times of the year, the impact of seasonality must be taken into consideration and discussed in the report Discussion. In particular, the impact of the harvest, seasonal morbidity and the lean season when prices tend to be higher must be considered.

**Service delivery:**

- Changes in overall service delivery, e.g. has the delivery of health services changed? Has cost recovery been introduced for any services, e.g. education, meaning resources are diverted away from food purchases? Has assistance to food security and livelihoods activities remained stable?

**External adverse events:**

- Any unexpected shock or stress that have impacted access to, availability of or utilisation of food, such as adverse natural events (e.g. drought, flooding), new influx of people, insecurity, restriction of movement, and epidemics.

– In theory, food security indicators should improve over time, as refugees have had more time to get settled to their new environment and have found positive livelihood strategies that are adapted to their new situation.

– Food security indicators also provide valuable data on the underlying causes of malnutrition, as conceptualised in **Figure 1**. They will hence help explain changes in the prevalence of acute malnutrition and may provide early warning indications of a worsening situation.
  - If, for example, the prevalence of acute malnutrition remained stable but there was a marked increase in the use of negative coping strategies as compared to previous nutrition surveys, it is likely that dietary diversity will decrease in the near future and that eventually there will be an increase in acute malnutrition if corrective action is not put in place.
  - If, on the other hand, there was a marked increase in acute malnutrition but all food security indicators included in this module remained stable at acceptable levels as compared to previous nutrition surveys, there is a need to explore other potential causes of malnutrition, such as care and infant feeding practices, disease outbreaks or inadequate water and sanitation in

more detail. In such situations, additional vulnerability analysis is necessary to determine the causes of the situation, identify those most at risk and define adequate responses.

## ANALYSIS OF THE USE OF NEGATIVE COPING STRATEGIES

- There are no established cut-off points in terms of number of coping strategies used by a household. In addition, negative coping strategies are not weighted in terms of severity in this Food Security module for refugee contexts. It is hence not possible to establish a score for the use of coping strategies.

- Results are presented as the proportion of households using negative coping strategies. When these proportions increase from year to year, it indicates that the food security situation is likely to have deteriorated and may cause an increase in acute malnutrition unless actions are taken**. Table 3** above provides explanations on the severity of each of the listed coping mechanisms.

- Knowing about the proportion of households reporting using none of the negative coping strategies over the past month is important because it illustrates the proportion of households that are not under significant stress to meet their needs.

- As UNHCR collects more data on the use of negative coping strategies, it may be possible to establish a coping strategy "index" or a "score" for camp contexts.

## ANALYSIS OF HDDS

- There are no internationally established cut-off points in terms of number of food groups to indicate adequate or inadequate dietary diversity for the HDDS. Because of this, the mean score is recommended to be used for analytical purposes in this Food Security module for refugee contexts.

- In order to use the HDDS to assess improvements in food security, the changes must be compared to some meaningful target level of diversity. Unfortunately, normative data on 'ideal' or 'target' levels of diversity are not available. As UNHCR collects more data on HDDS it may be possible to provide further guidance on acceptable HDDS scores for camp contexts.

- When interpreting the dietary diversity score, it is important to keep in mind that:
  - The dietary diversity score does not indicate the quantity of food consumed.
  - Diet varies across seasons and some foods can be available in large quantities and at low cost for short periods. HDDS only represents what was consumed by the household the day before, and only indicates the general situation for the household.
  - There may be differences in dietary diversity in urban as compared to rural settings, where variety may be greater due to better access to markets.

- Looking at the proportion of households consuming individual food groups is also important.
  - An increase in the average number of different food groups consumed does provide a quantifiable measure of improved household food access. It may reflect improved practices or improved economic access to food.
  - In general, low proportions of households consuming food groups containing vitamin A and iron on a given day may be indicative of inadequate diets that lead to morbidity related to micronutrient deficiencies.

## RECOMMENDATIONS

- The results of this Food Security module should be used in conjunction with qualitative assessments and monitoring data to help UNHCR, WFP and partners plan and prioritise public health and food security interventions.

- The results provide a basic overview of the food security situation in the survey context at one point in time, and are valuable in monitoring evolution in the food security situation.

- They may help explain any increases or decreases in acute malnutrition in the refugee population in order to take the necessary actions to address the problems.

- In addition, the results can:
  - Provide a quantitative baseline for subsequent monitoring and evaluation of progress and effectiveness of food security programmes.
  - Show that an expanded food security assessment needs to be implemented to understand the causes of food insecurity at the household level.
  - Show the need for strengthening the monitoring system of food distributions, including the implementation of on-site Food Basket Monitoring (FBM) to monitor the efficiency and equity of the general food distribution system, and Post Distribution Monitoring (PDM) to analyse the adequacy of the distributed ration as compared to the needs.
  - Identify areas of concern with regards to negative coping mechanisms used by the refugee populations.
  - Suggest the revision of the existing food assistance strategy, including the composition of the ration.
  - Highlight the need to design food security interventions that can support, complement or provide alternatives to current assistance, such as introduction of cash-based assistance for other sectors or increasing livelihood support in the form of agricultural interventions or income generation.
  - Help to inform advocacy efforts to improve funding and / or the deployment of resources.

# REFERENCES

Guidelines for measuring household and individual dietary diversity. FAO 2011

Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide Version 2. FANTA 2006.

# ANNEXES



## ANNEX 1 - SENS FOOD SECURITY QUESTIONNAIRE

See SENS Pre-Module **Tool 9** for the full SENS Questionnaire.

| No | QUESTION | ANSWER CODES | |
|---|---|---|---|
| **SECTION FS1** | | | |
| **FS1** | Does your household have a ration card?<br>**RCARD** | Yes.....1<br>No.....2 | \|___\|<br>**IF ANSWER IS 1 GO TO FS3** |
| **FS2** | Why do you not have a ration card?<br>**YNORCARD** | Not given one at registration.....1<br>Lost card.....2<br>Traded/sold card.....3<br>Not registered but eligible.....4<br>Not eligible (not in targeting criteria).....5<br>Other.....6 | \|___\|<br>**GO TO FS5** |
| **FS3** | Does your household receive full or reduced ration? (OPTIONAL)<br>**RSIZE** | Full.....1<br>Half.....2<br>Other.....6 | \|___\|<br>**IF ANSWER IS 2 OR 6 GO TO FS5** |
| **FS4** | How many days did the food from the general ration from the [INSERT] cycle of [INSERT] month last?<br>**GFDLAST** | RECORD THE NUMBER OF DAYS IF KNOWN (RECORD 98 IF UNKNOWN) | \|___\|___\| |
| **FS5** | In the last month, have you or anyone in your household borrowed cash, food or other items with or without interest?<br>**BRW** | Yes.....1<br>No.....2<br>Don't know.....8 | \|___\| |
| **FS6** | In the last month, have you or anyone in your household sold any assets that you would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.)?<br>**SOLD** | Yes.....1<br>No.....2<br>Don't know.....8 | \|___\| |
| **FS7** | In the last month, have you or anyone in your household requested increased remittances or gifts as compared to normal?<br>**ASKMORE** | Yes.....1<br>No.....2<br>Don't know.....8 | \|___\| |
| **FS8** | In the last month, have you or anyone in your household reduced the quantity and / or frequency of meals and snacks?<br>**LESSMEAL** | Yes.....1<br>No.....2<br>Don't know.....8 | \|___\| |
| **FS9** | In the last month, have you or anyone in your household begged?<br>**BEG** | Yes.....1<br>No.....2<br>Don't know.....8 | \|___\| |
| **FS10** | In the last month, have you or anyone in your household engaged in: [ADD LIST OF POTENTIALLY RISKY OR HARMFUL ACTIVITIES SUCH AS LOCAL ILLEGAL ACTIVITIES] or any other risky or harmful activities?<br>**RISKYACT** | Yes.....1<br>No.....2<br>Don't know.....8 | \|___\| |
| **SECTION FS2** | | | |
| **FS11** | Now I would like to ask you about the types of foods that you or anyone else in your household ate yesterday during the day and at night. I am interested in whether you or anyone else in your household had the item even if it was combined with other foods. I am interested in knowing about meals, beverages and snacks eaten or drank inside or outside the home.<br><br>READ THE LIST OF FOODS AND DO NOT PROBE. PLACE A *ONE* IN THE BOX IF ANYONE IN THE HOUSEHOLD ATE THE FOOD IN QUESTION, PLACE A *ZERO* IN THE BOX IF NO ONE IN THE HOUSEHOLD ATE THE FOOD.<br><br>REPLACE AND ADAPT THE TEXT HIGHLIGHTED IN GREY TO THE CONTEXT.<br><br>THE TEXT IN *ITALICS* NEEDS TO BE DELETED FROM THE FINAL SURVEY QUESTIONNAIRE – THE LIST THAT IS PROVIDED BELOW IS AN EXAMPLE. | | |
| | **1**. Any [INSERT CEREALS LOCALLY AVAILABLE] (*e.g. wheat, corn/maize, barley, corn soy blend, buckwheat, millet, oats, rice, rye, sorghum, teff*) or any foods made from these such as [INSERT LOCAL FOODS] (*e.g. bread, porridge, noodles, ugali, nshima, paste*)<br>**CRL** | 1.....\|___\| | |
| | **2**. Any [INSERT WHITE ROOTS AND TUBERS LOCALLY AVAILABLE] *(e.g. green bananas, lotus root, parsnip, taro, plantains, white potatoes, white yam, white cassava, white sweet potato)* or any foods made from roots such as [INSERT LOCAL FOODS]<br>**WHTRT** | 2.....\|___\| | |

| No | QUESTION | ANSWER CODES | |
|---|---|---|---|
| | **3A**. Any [INSERT VITAMIN A RICH VEGETABLES AND TUBERS LOCALLY AVAILABLE] *(e.g. carrot, pumpkin, squash, or sweet potato that are orange inside, red sweet pepper)*<br>**VITAVEG** | | 3A.....\|___\| |
| | **3B.** Any [INSERT DARK GREEN LEAFY VEGETABLES LOCALLY AVAILABLE INLCUDING WILD FORMS AND VITAMIN A RICH LEAVES] (*e.g. amaranth, arugula, cassava leaves, kale, spinach*)<br>**GREENVEG** | | 3B.....\|___\| |
| | **3C**. Any [INSERT ANY OTHER VEGETABLES LOCALLY AVAILABLE] *(e.g. bamboo shoots, cabbage, green pepper, tomato, onion, eggplant, zucchini)*<br>**OTHVEG** | | 3C.....\|___\| |
| | **4A**. Any [INSERT VITAMIN A RICH FRUITS LOCALLY AVAILABLE], and 100% fruit juice made from these *(e.g. mango (ripe, fresh and dried), cantaloupe melon (ripe), apricot (fresh or dried), ripe papaya, passion fruit (ripe), dried peach)*<br>**VITAFRT** | | 4A.....\|___\| |
| | **4B.** Any [INSERT ANY OTHER FRUITS LOCALLY AVAILABLE INCLUDING WILD FRUITS], and 100% fruit juice made from these *(e.g. apple, avocados, banana, coconut flesh, lemon, orange)*<br>**OTHFRT** | | 4B.....\|___\| |
| | **5A**. Any [INSERT ORGAN MEAT OR BLOOD-BASED FOODS LOCALLY AVAILABLE] *(e.g. liver, kidney, heart)*<br>**ORGMT** | | 5A.....\|___\| |
| | **5B.** Any [INSERT FLESH MEAT LOCALLY AVAILABLE] *(e.g. beef, goat, lamb, mutton, pork, rabbit, chicken, duck, cane rat, guinea pig, rat, agouti frogs, snakes, insects)*<br>**FLSHMT** | | 5B.....\|___\| |
| | **6**. Any eggs from [INSERT EGGS LOCALLY AVAILABLE] *(e.g. eggs from chicken, duck, guinea fowl)*<br>**EGGS** | | 6.....\|___\| |
| | **7.** Any [INSERT FRESH, DRIED OR CANNED FISH OR SHELLFISH LOCALLY AVAILABLE] *(e.g. anchovies, tuna, sardines, shark, whale, roe/fish eggs, clam, crab, lobster, crayfish, mussels, shrimp, octopus, squid, sea snails)*<br>**FISHSF** | | 7.....\|___\| |
| | **8**. Any [INSERT LEGUMES, NUTS AND SEEDS LOCALLY AVAILABLE] *(e.g. dried peas, dried beans, lentils, nuts, seeds)* or any foods made from these such as [INSERT LOCAL FOODS] *(e.g. hummus, peanut butter)*<br>**PULSE** | | 8.....\|___\| |
| | **9**. Any [INSERT MILK AND MILK PRODUCTS LOCALLY AVAILABLE] *(e.g. milk, infant formula, cheese, kiefer, yogurt)*<br>**MILK** | | 9.....\|___\| |
| | **10**. Any [INSERT OILS AND FATS LOCALLY AVAILABLE] added to food or used for cooking *(e.g. vegetable oil, ghee or butter)*<br>**FATS** | | 10.....\|___\| |
| | **11**. Any [INSERT SWEETS, SWEETENED SODA OR JUICE DRINKS AND SUGARY FOODS LOCALLY AVAILABLE] *(e.g. sugar, honey, soda drinks, chocolates, candies, cookies, sweet biscuits and cakes)*<br>**SWTS** | | 11.....\|___\| |
| | **12**. Any [INSERT SPICES, CONDIMENTS AND BEVERAGES LOCALLY AVAILABLE] *(e.g. black pepper, salt, chillies, soy sauce, hot sauce, fish powder, fish sauce, ginger, herbs, magi cubes, ketchup, mustard, coffee, tea, beer, alcoholic beverages like wine, hard spirits)*<br>**SPICE** | | 12.....\|___\| |

## ANNEX 2 - TRAINING IDEAS

### EXERCISE

**The questionnaire**

- Divide participants into pairs and ask them to go through the questionnaire taking turns to be the respondent and the surveyor.
- Ask them to note any problem they have as they go along. Discuss in plenary.

### ROLE PLAYS

**Role Play 1**

- Divide the participants into their interview teams.
- In front of the whole group the coordinator takes the role of the respondent, and each interview team gets to practice delivering the questionnaire and recording their answers.
- The coordinator uses this opportunity to identify the possible pitfalls or to identify issues that you think might be a problem in your context.
- After each questionnaire, review the answers and discuss any problems identified such as poor communication or showing displeasure at a particular response.
- The other survey teams will take the opportunity to observe their colleagues and contribute with feedback.

**Role Play 2**

- Two sets of interview teams will be paired together to practice delivering and answering the questions.
- The coordinator will provide each survey team with a scenario to re-enact where there will be different challenges that may be encountered in the field:
  - Refusal to tell you about the used coping mechanisms
  - Respondent delivers conflicting information
- After the questionnaires have been completed, the coordinator will review the questionnaires with the interview teams and compare them with the scenario given to assess whether the data recording has been performed properly.
- Ask the participants to identify the problems in each role-play once it has been performed and clarify the correct procedure.

### FIELD PRACTICE

- Interview teams will go to the field in a location where the survey will not be taking place.
- Teams will practice the following: Delivering the questionnaire to the household
- Field practice will assist the coordinator and interview teams in identifying any additional difficulties that may present themselves when in the field.

**TEST**

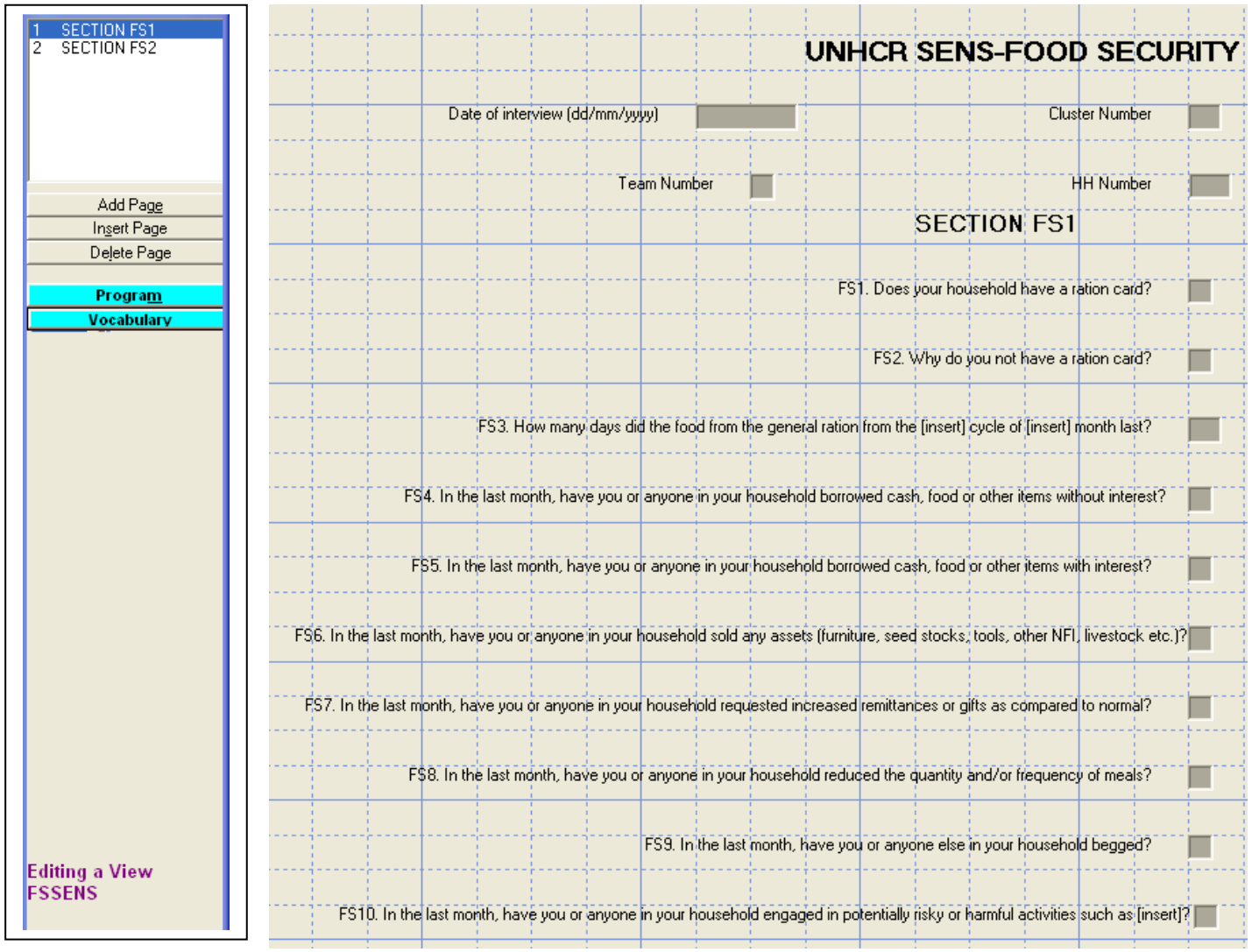
- The questions in the training test shown below can be used as a basis for the written test and can be adapted according to circumstances.
- A passing grade of at least 70% should be achieved to continue as a surveyor.
- The results of the test can help the coordinator to assess which of the surveyors will need more support in the field. The weaker surveyors can also be paired with stronger ones.
- The questions should be given out with a copy of the finalised questionnaire so that participants can refer to this.

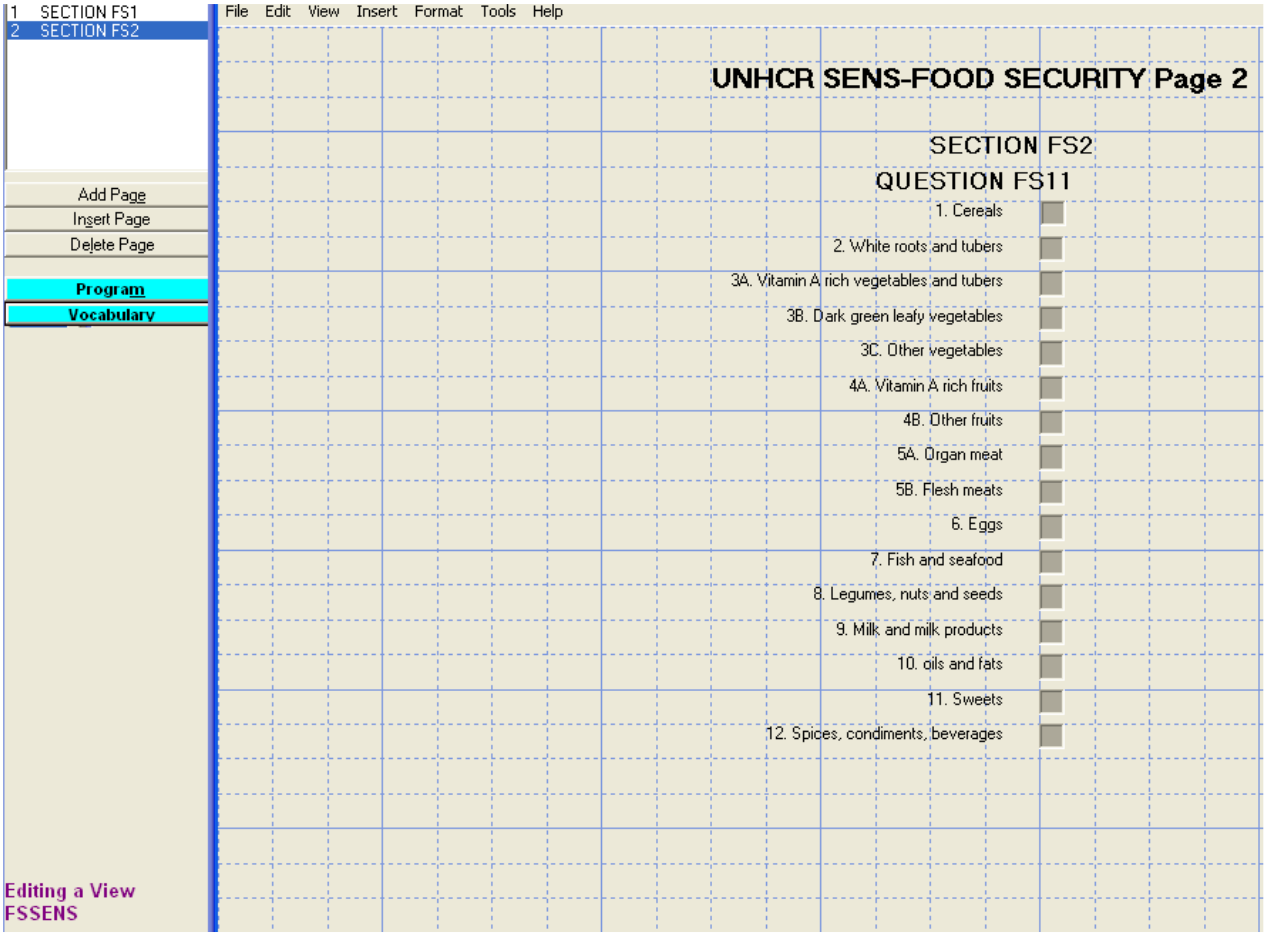
### TABLE 18 - TRAINING TEST

| **Food Security Module** | | |
|---|---|---|
| **PRACTICE** | | |
| **1.** | **When was the first day of the general food distribution we are investigating?**<br>Answer: Add date for the recall. | |
| **2.** | **What do you do if the respondent says that they lost their ration card?**<br>Answer: Record it as lost in FS2. | |
| **3.** | **What do you do if the respondent says that they don't know how long the ration lasted?**<br>Answer: Probe and explain the question in a different way. | |
| **4.** | **If only one member of the household used a negative coping strategy over the last month, should you write 'yes' as a response option?**<br>Answer: Yes | |
| **5.** | **Who should the respondent be for the dietary recall?**<br>Answer: The main caregiver responsible for cooking the meals in the household | |
| **6.** | **When asking about all foods eaten and beverages consumed inside the home, what is the recall period to use?**<br>Answer: 24 hours or yesterday during the day and at night. | |
| **7.** | **In the dietary recall, do all meals and snacks count?**<br>Answer: Yes | |
| **8.** | **If a certain food was only consumed by one household member, should it be recorded on the questionnaire?**<br>Answer: Yes | |
| **9.** | **Should foods consumed outside the home that were not prepared in the home be included?**<br>Answer: Yes | |
| **10.** | **Is there a need to set a minimum quantity of food below which foods are not considered?**<br>Answer: No | |

## ANNEX 3 - EPI INFO DATA ENTRY

Below is the standard Epi Info view available in the Epi Info mdb file entitled HUN1207FSBUDA in the SENS Food Security tool: [**Tool 3**-FS Data]. To access the view, go to the Make View module and open the corresponding View entitled FSSENS.




1 SECTION FS1
2 SECTION FS2
Add Page
Insert Page
Delete Page
Program
Vocabulary
Editing a View
FSSENS
File Edit View Insert Format Tools Help
UNHCR SENS-FOOD SECURITY Page 2
SECTION FS2
QUESTION FS11
1. Cereals
2. White roots and tubers
3A. Vitamin A rich vegetables and tubers
3B. Dark green leafy vegetables
3C. Other vegetables
4A. Vitamin A rich fruits
4B. Other fruits
5A. Organ meat
5B. Flesh meats
6. Eggs
7. Fish and seafood
8. Legumes, nuts and seeds
9. Milk and milk products
10. oils and fats
11. Sweets
12. Spices, condiments, beverages

## ANNEX 4 - EPI INFO DATA ANALYSIS

Below are the standard Epi Info codes to use for analysis. The standard PGM files containing these Epi Info codes can be found in the Epi Info mdb file entitled HUN1207FSBUDA in the SENS Food Security tool: [**Tool 3**-FS Data]. To access the PGM files, go to Program Editor window and open the corresponding PGM file needed for the analysis.

Refer to the fictitious dataset available for practical purposes; Go to SENS Food Security **Tool 3**, and see the Excel database HUN_1207_FS_BUDA.

The practical Excel database HUN_1207_FS_BUDA is from a survey using *cluster sampling*.

### DATA CLEANING

Run these commands (together or separately) and make sure that the range of the variables entered in the database matches the standard codes shown in **Tables 2-4** above.

FREQ RCARD
FREQ YNOCARD
FREQ RSIZE (OPTIONAL)

MEANS GFDLAST (note that the range should not exceed by much the cycle days; you should check that no obvious data entry errors occurred, e.g. entering 200 instead of 20.)

FREQ BRW
FREQ SOLD
FREQ ASKMORE
FREQ LESSMEAL
FREQ BEG
FREQ RISKYACT

FREQ CRL
FREQ WHTRT
FREQ VITAVEG
FREQ GREENVEG
FREQ OTHVEG
FREQ VITAFRT
FREQ OTHFRT
FREQ ORGMT
FREQ FLSHMT
FREQ EGGS
FREQ FISHSF
FREQ PULSE
FREQ MILK

FREQ FATS
FREQ SWTS
FREQ SPICE

You should check the missing data in your database and double-check that this was not a data entry oversight. The commands below need to be run separately, one by one. After selecting the variable using the codes shown below, use the LIST command to view the specific records with missing data and double-check with the original data collection questionnaire. Then cancel the selected variable by typing SELECT.

SELECT RCARD=(.)
SELECT (this will cancel the selected variable)

SELECT YNOCARD=(.)

SELECT RSIZE=(.) (OPTIONAL)

SELECT GFDLAST=(.)

SELECT BRW=(.)

SELECT SOLD=(.)

SELECT ASKMORE=(.)

SELECT LESSMEAL=(.)

SELECT BEG=(.)

SELECT RISKYACT=(.)

SELECT CRL=(.)

SELECT WHTRT=(.)

SELECT VITAVEG=(.)

SELECT GREENVEG=(.)

SELECT OTHVEG=(.)

SELECT VITAFRT=(.)

SELECT OTHFRT=(.)

SELECT ORGMT=(.)

SELECT FLSHMT=(.)

SELECT EGGS=(.)

SELECT FISHSF=(.)

SELECT PULSE=(.)

SELECT MILK=(.)

SELECT FATS=(.)

SELECT SWTS=(.)

SELECT SPICE=(.)

## DATA ANALYSIS

Results from the training dataset are illustrated below.

## RATION CARD COVERAGE ANALYSIS

## RATION CARD COVERAGE

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households with a ration card** | 294/300 | 98.0 (95.9-100) |

FREQ RCARD PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ RCARD

| RCARD | TOTAL |
|---|---|
| 1 | 294 |
| Row % | 100.000 |
| Col % | 98.000 |
| SE % | 1.006 |
| LCL % | 95.943 |
| UCL % | 100.057 |
| 2 | 6 |
| Row % | 100.000 |
| Col % | 2.000 |
| SE % | 1.006 |
| LCL % | -0.057 |
| UCL % | 4.057 |
| TOTAL | 300 |
| Design Effect | 1.543 |

Out of the households reporting not to have a ration cards, add the following text description:
[insert proportion: **2 / 6** said it was because they were not given one at registration, even if they were included in the targeting criteria; [insert proportion: **1** / 6 said it was because they lost their ration card; [insert proportion: **1 / 6** said it was because they traded or sold their card; [insert proportion: **none** said it was because they were new arrivals who were eligible but were not yet registered; [insert proportion: **1 / 6** said it was because they were not included in the targeting criteria; and [insert proportion**: 1 / 6** gave other reasons.

SELECT RCARD=2
FREQ YNRCARD PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:
FREQ YNRCARD

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| YNRCARD | TOTAL |
|---|---|
| 1 | 2 |
| Row % | 100.000 |
| Col % | 33.333 |
| SE % | 12.830 |
| LCL % | -7.497 |
| UCL % | 74.164 |
| 2 | 1 |
| Row % | 100.000 |
| Col % | 16.667 |
| SE % | 18.703 |
| LCL % | -42.854 |
| UCL % | 76.187 |
| 3 | 1 |
| Row % | 100.000 |
| Col % | 16.667 |
| SE % | 15.045 |
| LCL % | -31.212 |
| UCL % | 64.545 |
| 5 | 1 |
| Row % | 100.000 |
| Col % | 16.667 |
| SE % | 18.703 |
| LCL % | -42.854 |
| UCL % | 76.187 |
| 6 | 1 |
| Row % | 100.000 |
| Col % | 16.667 |
| SE % | 15.045 |
| LCL % | -31.212 |
| UCL % | 64.545 |
| TOTAL | 6 |
| Design Effect | 0.370 |

## DURATION OF GENERAL FOOD RATION ANALYSIS

Before all these analyses you need to select the households who receive full ration only. This selection should not be cancelled until all analyses on the general food ration are completed. In addition, you need to adapt the days of the cycle. In the example provided below, the cycle is supposed to last 15 days.

SELECT RSIZE = 1

***Duration of general food ration***

### REPORTED DURATION OF GENERAL FOOD RATION 1

| Average number of days the food ration lasts (Standard deviation or 95% CI) | Average duration (%) in relation to the theoretical duration of the ration |
|---|---|
| 10.4 (9.8-10.9) days out of 15 | 69.3% |

MEANS GFDLAST PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

MEANS GFDLAST

| | GFDLAST | | | | | | |
|---|---|---|---|---|---|---|---|
| | Count | Mean | Std Error | Confidence Limits | | Minimum | Maximum |
| | | | | Lower | Upper | | |
| TOTAL | 289 | 10.374 | 0.278 | 9.805 | 10.943 | 2.000 | 17.000 |

**Hand calculation:**
The ration cycle is 15 days in this example, therefore the average duration in relation to the theoretical duration of the ration is calculated as follows: 10.4 days / 15 days x 100= ~69.3%

### REPORTED DURATION OF GENERAL FOOD RATION 2

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households reporting that the food ration lasts the entire duration of the cycle** | 58/289 | 20.1 (14.3-25.8) |
| **Proportion of households reporting that the food ration lasted:** | | |
| ≤75% of the cycle 15 days | 171/289 | 59.2 (53.1-65.2) |
| >75% of the cycle 15 days | 118/289 | 40.8 (34.8-46.9) |

***Households reporting that the food ration lasts the entire duration of the cycle***

```
DEFINE GFDFULL

RECODE GFDLAST TO GFDFULL
        LOVALUE - 14 = "<15"
        15 - HIVALUE = ">=15"
END

FREQ GFDFULL PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ GFDFULL
```

| GFDFULL | TOTAL |
|---|---|
| <15 | 231 |
| Row % | 100.000 |
| Col % | 79.931 |
| SE % | 2.804 |
| LCL % | 74.196 |
| UCL % | 85.666 |
| >=15 | 58 |
| Row % | 100.000 |
| Col % | 20.069 |
| SE % | 2.804 |
| LCL % | 14.334 |
| UCL % | 25.804 |
| TOTAL | 289 |
| Design Effect | 1.412 |

***Percentage of the cycle (< 75% and >=75%)***

```
DEFINE GFD75

RECODE GFDLAST TO GFD75
        LOVALUE - 11 = "<=75%"
        12 - HIVALUE = ">75%"
END

FREQ GFD75 PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ GFD75
```

| GFD75 | TOTAL |
|---|---|
| <=75% | 171 |
| Row % | 100.000 |
| Col % | 59.170 |
| SE % | 2.954 |
| LCL % | 53.128 |
| UCL % | 65.212 |
| >75% | 118 |
| Row % | 100.000 |
| Col % | 40.830 |
| SE % | 2.954 |
| LCL % | 34.788 |
| UCL % | 46.872 |
| TOTAL | 289 |
| Design Effect | 1.040 |

When you have finalised all analyses on the general food ration you can cancel the “full ration selection” (i.e. SELECT RSIZE = 1):

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

## NEGATIVE HOUSEHOLD COPING STRATEGIES ANALYSIS

## COPING STRATEGIES USED BY THE SURVEYED POPULATION OVER THE PAST MONTH

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households reporting using the following coping strategies over the past month*:** | | |
| Borrowed cash, food or other items with or without interest | 178/300 | 59.3 (41.1-77.5) |
| Sold any assets that would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.) | 37/300 | 12.3 (0.3-24.4) |
| Requested increased remittances or gifts as compared to normal | 75/300 | 25.0 (9.8-40.2) |
| Reduced the quantity and/or frequency of meals and snacks | 118/299 | 39.5 (21.9-57.0) |
| Begged | 6/300 | 2.0 (0.5-3.5) |
| Engaged in potentially risky or harmful activities [LIST ACTIVITIES] | 58/300 | 19.3 (5.5-33.2) |
| **Proportion of households reporting using none of the coping strategies over the past month** | 34/299 | 11.4 (1.8-21.0) |

***** The total will be over 100% as households may use several negative coping strategies.

***All negative coping strategies***

SELECT BRW<>8

FREQ BRW PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ BRW

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| BRW | TOTAL |
|---|---|
| 1 | 178 |
| Row % | 100.000 |
| Col % | 59.333 |
| SE % | 8.905 |
| LCL % | 41.121 |
| UCL % | 77.546 |
| 2 | 122 |
| Row % | 100.000 |
| Col % | 40.667 |
| SE % | 8.905 |
| LCL % | 22.454 |
| UCL % | 58.879 |
| TOTAL | 300 |
| Design Effect | 9.826 |

SELECT SOLD<>8

FREQ SOLD PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ SOLD

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| SOLD | TOTAL |
|---|---|
| 1 | 37 |
| Row % | 100.000 |
| Col % | 12.333 |
| SE % | 5.905 |
| LCL % | 0.256 |
| UCL % | 24.411 |
| 2 | 263 |
| Row % | 100.000 |
| Col % | 87.667 |
| SE % | 5.905 |
| LCL % | 75.589 |
| UCL % | 99.744 |
| TOTAL | 300 |
| Design Effect | 9.643 |

SELECT ASKMORE<>8

FREQ ASKMORE PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ ASKMORE

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| ASKMORE | TOTAL |
|---|---|
| 1 | 75 |
| Row % | 100.000 |
| Col % | 25.000 |
| SE % | 7.408 |
| LCL % | 9.848 |
| UCL % | 40.152 |
| 2 | 225 |
| Row % | 100.000 |
| Col % | 75.000 |
| SE % | 7.408 |
| LCL % | 59.848 |
| UCL % | 90.152 |
| TOTAL | 300 |
| Design Effect | 8.752 |

SELECT LESSMEAL<>8

FREQ LESSMEAL PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ LESSMEAL

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| LESSMEAL | TOTAL |
|---|---|
| 1 | 118 |
| Row % | 100.000 |
| Col % | 39.465 |
| SE % | 8.584 |
| LCL % | 21.908 |
| UCL % | 57.022 |
| 2 | 181 |
| Row % | 100.000 |
| Col % | 60.535 |
| SE % | 8.584 |
| LCL % | 42.978 |
| UCL % | 78.092 |
| TOTAL | 299 |
| Design Effect | 9.192 |

SELECT BEG<>8

FREQ BEG PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ BEG

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| BEG | TOTAL |
|---|---|
| 1 | 6 |
| Row % | 100.000 |
| Col % | 2.000 |
| SE % | 0.743 |
| LCL % | 0.481 |

| | |
|---|---|
| UCL % | 3.519 |
| **2** | 294 |
| Row % | 100.000 |
| Col % | 98.000 |
| SE % | 0.743 |
| LCL % | 96.481 |
| UCL % | 99.519 |
| **TOTAL** | 300 |
| Design Effect | 0.842 |

SELECT RISKYACT<>8

FREQ RISKYACT PSUVAR=CLUSTER

If you are analysing a simple random survey, the code is as follows:

FREQ RISKYACT

SELECT (this will cancel the selected variable(s); only to be executed after the analysis is done and the results recorded)

| RISKYACT | TOTAL |
|---|---|
| **1** | 58 |
| Row % | 100.000 |
| Col % | 19.333 |
| SE % | 6.763 |
| LCL % | 5.502 |
| UCL % | 33.164 |
| **2** | 242 |
| Row % | 100.000 |
| Col % | 80.667 |
| SE % | 6.763 |
| LCL % | 66.836 |
| UCL % | 94.498 |
| **TOTAL** | 300 |
| Design Effect | 8.768 |

***Households reporting using none of the listed coping strategies***

```
DEFINE NONESUM

ASSIGN NONESUM=BRW+SOLD+ASKMORE+LESSMEAL+BEG+RISKYACT

DEFINE NONE

IF NONESUM=12 THEN
    NONE="YES"
ELSE
    NONE="NO"
END

IF BRW= (.)  OR SOLD= (.)  OR ASKMORE= (.)  OR LESSMEAL= (.)  OR BEG= (.)  OR RISKYACT= (.)
THEN
    NONE= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
IF BRW= 8 OR SOLD= 8 OR ASKMORE= 8 OR LESSMEAL= 8 OR BEG= 8 OR RISKYACT= 8 THEN
    NONE= (.)
END

FREQ NONE PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ NONE
```

| NONE | TOTAL |
|---|---|
| **NO** | 265 |
| Row % | 100.000 |
| Col % | 88.629 |
| SE % | 4.704 |
| LCL % | 79.008 |
| UCL % | 98.249 |
| **YES** | 34 |
| Row % | 100.000 |
| Col % | 11.371 |
| SE % | 4.704 |
| LCL % | 1.751 |
| UCL % | 20.992 |
| **TOTAL** | 299 |
| Design Effect | 6.543 |

**HDDS ANALYSIS**

**AVERAGE HDDS**

| | Mean (95% CI) |
|---|---|
| **Average HDDS** | 5.1 (4.7-5.6) |

This is the programme that should be written, however Epi Info finds it too complex to be run at once. Therefore, the following steps (Steps 1-2) need to be followed.

```
DEFINE VEG

IF VITAVEG=1 OR GREENVEG=1 OR OTHVEG=1 THEN
    VEG=1
ELSE
    VEG=0
END

IF VITAVEG= (.) AND GREENVEG= (.) AND OTHVEG= (.) THEN
    VEG= (.)
END (this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

DEFINE FRT

IF VITAFRT=1 OR OTHFRT=1 THEN
    FRT=1
ELSE
    FRT=0
END

IF VITAFRT= (.) AND OTHFRT= (.) THEN
    FRT= (.)
END (this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

DEFINE MEAT

IF ORGMT=1 OR FLSHMT=1 THEN
    MEAT=1
ELSE
    MEAT=0
END
```

```
IF ORGMT= (.) AND FLSHMT= (.) THEN
    MEAT= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
DEFINE HDDS

ASSIGN HDDS=CRL+WHTRT+VEG+FRT+MEAT+EGGS+FISHSF+PULSE+MILK+FATS+SWTS+SPICE

IF CRL= (.) OR WHTRT= (.) OR VEG= (.) OR FRT= (.) OR MEAT= (.) OR EGGS= (.) OR FISHSF= (.)
OR PULSE= (.) OR MILK= (.) OR FATS= (.) OR SWTS= (.) OR SPICE= (.) THEN
    HDDS= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
MEANS HDDS PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
MEANS HDDS
```

**The following steps should be followed for analysis:**

**STEP 1**

```
DEFINE VEG

IF VITAVEG=1 OR GREENVEG=1 OR OTHVEG=1 THEN
    VEG=1
ELSE
    VEG=0
END

IF VITAVEG= (.) AND GREENVEG= (.) AND OTHVEG= (.) THEN
    VEG= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
DEFINE FRT

IF VITAFRT=1 OR OTHFRT=1 THEN
    FRT=1
ELSE
    FRT=0
END
```

```
IF VITAFRT= (.) AND OTHFRT= (.) THEN
    FRT= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
DEFINE MEAT

IF ORGMT=1 OR FLSHMT=1 THEN
    MEAT=1
ELSE
    MEAT=0
END

IF ORGMT= (.) AND FLSHMT= (.) THEN
    MEAT= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

**STEP 2**

Right after running the PGM codes from Step 1, write (export) the data table under a new name in Epi Info format in the respective mdb file (e.g. HUN1207HDDS1). Then read (import) the results back into Epi info. Continue with the analysis and coding as follows:

```
DEFINE HDDS

ASSIGN HDDS=CRL+WHTRT+VEG+FRT+MEAT+EGGS+FISHSF+PULSE+MILK+FATS+SWTS+SPICE

IF CRL= (.) OR WHTRT= (.) OR VEG= (.) OR FRT= (.) OR MEAT= (.) OR EGGS= (.) THEN
    HDDS= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
IF FISHSF= (.) OR PULSE= (.) OR MILK= (.) OR FATS= (.) OR SWTS= (.) OR SPICE= (.) THEN
    HDDS= (.)
END
```
(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
MEANS HDDS PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
MEANS HDDS
```

| | HDDS | | | | | | |
|---|---|---|---|---|---|---|---|
| | Count | Mean | Std Error | Confidence Limits | | Minimum | Maximum |
| | | | | Lower | Upper | | |
| TOTAL | 300 | 5.127 | 0.221 | 4.675 | 5.578 | 0.000 | 11.000 |

**CONSUMPTION OF MICRONUTRIENT RICH FOODS BY HOUSEHOLDS**

| | Number/total | % (95% CI) |
|---|---|---|
| **Proportion of households *not consuming any* vegetables, fruits, meat, eggs, fish/seafood, and milk/milk products** | **134/300** | **44.7 (35.3-54.0)** |
| **Proportion of households consuming either a plant or animal source of vitamin A** | **147/300** | **49.0 (40.2-57.8)** |
| **Proportion of households consuming organ meat/flesh meat, or fish/seafood (food sources of haem iron)** | **41/300** | **13.7 (6.6-20.7)** |

***Households not consuming any vegetables, fruits, meat, eggs, fish/seafood, and milk/milk products***

This is the programme that should be written, however Epi Info finds it too complex to be run at once. Therefore, the following steps (Steps 1-2) need to be followed.

```
DEFINE NODIVERSSUM

ASSIGN NODIVERSSUM= VEG+FRT+MEAT+EGGS+FISHSF+MILK

IF VEG= (.) OR FRT= (.) OR MEAT= (.) OR EGGS= (.) OR FISHSF= (.) OR MILK= (.) THEN
    NODIVERSSUM= (.)
END
```

(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
DEFINE NODIVERS

IF NODIVERSSUM=0 THEN
    NODIVERS="YES"
ELSE
    NODIVERS="NO"
END

IF NODIVERSSUM= (.) THEN
    NODIVERS= (.)
END
```

```
FREQ NODIVERS PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ NODIVERS
```

**The following steps should be followed for analysis:**

**STEP 1**

```
DEFINE NODIVERSSUM

ASSIGN NODIVERSSUM= VEG+FRT+MEAT+EGGS+FISHSF+MILK

IF VEG= (.) OR FRT= (.) OR MEAT= (.) OR EGGS= (.) OR FISHSF= (.) OR MILK= (.) THEN
    NODIVERSSUM= (.)
END
```

(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
DEFINE NODIVERS

IF NODIVERSSUM=0 THEN
    NODIVERS="YES"
ELSE
    NODIVERS="NO"
END

IF NODIVERSSUM= (.) THEN
    NODIVERS= (.)
END
```

**STEP 2**

Right after running the PGM codes from Step 1, write (export) the data table under a new name in Epi Info format in the respective mdb file (e.g. HUN1207NODIVERS1). Then read (import) the results back into Epi info. Continue with the analysis and coding as follows:

```
FREQ NODIVERS PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ NODIVERS
```

| NODIVERS | TOTAL |
|---|---|
| NO | 166 |
| Row % | 100.000 |
| Col % | 55.333 |
| SE % | 4.567 |
| LCL % | 45.993 |
| UCL % | 64.674 |
| YES | 134 |
| Row % | 100.000 |
| Col % | 44.667 |
| SE % | 4.567 |
| LCL % | 35.326 |
| UCL % | 54.007 |
| TOTAL | 300 |
| Design Effect | 2.523 |

***Households consuming either a plant or animal source of vitamin A***

This is the programme that should be written, however Epi Info finds it too complex to be run at once. Therefore, the following steps (Steps 1-2) need to be followed.

```
DEFINE VITAPLT

IF VITAVEG=1 OR GREENVEG=1 OR VITAFRT=1 THEN
    VITAPLT="YES"
ELSE
    VITAPLT="NO"
END

IF VITAVEG= (.) OR GREENVEG= (.) OR VITAFRT= (.) THEN
    VITAPLT= (.)
END
```

(this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
DEFINE VITAANL

IF ORGMT=1 OR EGGS=1 OR MILK=1 THEN
    VITAANL="YES"
ELSE
    VITAANL="NO"
END
```

```
IF ORGMT= (.) OR EGGS= (.) OR MILK= (.) THEN
    VITAANL= (.)
END (this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

DEFINE VITAFOOD

IF VITAPLT= "YES" OR VITAANL= "YES" THEN
    VITAFOOD="YES"
ELSE
    VITAFOOD="NO"
END

IF VITAPLT= (.) OR VITAANL= (.)  THEN
    VITAFOOD= (.)
END (this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

FREQ VITAFOOD PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ VITAFOOD
```

**The following steps should be followed for analysis:**

**STEP 1**

```
DEFINE VITAPLT

IF VITAVEG=1 OR GREENVEG=1 OR VITAFRT=1 THEN
    VITAPLT="YES"
ELSE
    VITAPLT="NO"
END

IF VITAVEG= (.) OR GREENVEG= (.) OR VITAFRT= (.) THEN
    VITAPLT= (.)
END (this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

DEFINE VITAANL

IF ORGMT=1 OR EGGS=1 OR MILK=1 THEN
```

```
    VITAANL="YES"
ELSE
    VITAANL="NO"
END

IF ORGMT= (.) OR EGGS= (.) OR MILK= (.) THEN
    VITAANL= (.)
END (this command may be used with any analysis; however if you have no missing data for
any of these variables, you may delete this command or if you only have a few variables with
missing data, you may only include these variables in the command)
```

**STEP 2**

Right after running the PGM codes from Step 1, write (export) the data table under a new name in Epi Info format in the respective mdb file (e.g. HUN1207VITAFOOD1). Then read (import) the results back into Epi info. Continue with the analysis and coding as follows:

```
DEFINE VITAFOOD

IF VITAPLT= "YES" OR VITAANL= "YES" THEN
    VITAFOOD="YES"
ELSE
    VITAFOOD="NO"
END

IF VITAPLT= (.) OR VITAANL= (.)  THEN
    VITAFOOD= (.)
END (this command may be used with any analysis; however if you have no missing data for
any of these variables, you may delete this command or if you only have a few variables with
missing data, you may only include these variables in the command)

FREQ VITAFOOD PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ VITAFOOD
```

| VITAFOOD | TOTAL |
|---|---|
| NO | 153 |
| Row % | 100.000 |
| Col % | 51.000 |
| SE % | 4.324 |
| LCL % | 42.155 |
| UCL % | 59.845 |
| YES | 147 |
| Row % | 100.000 |
| Col % | 49.000 |
| SE % | 4.324 |
| LCL % | 40.155 |
| UCL % | 57.845 |
| TOTAL | 300 |
| Design Effect | 2.238 |

***Households consuming organ meat/flesh meat, or fish/seafood***

```
DEFINE HAEMFE

IF MEAT=1 OR FISHSF=1 THEN
    HAEMFE="YES"
ELSE
    HAEMFE="NO"
END

IF MEAT= (.) OR FISHSF= (.) THEN
    HAEMFE= (.)
```

END (this command may be used with any analysis; however if you have no missing data for any of these variables, you may delete this command or if you only have a few variables with missing data, you may only include these variables in the command)

```
FREQ HAEMFE PSUVAR=CLUSTER
```

If you are analysing a simple random survey, the code is as follows:

```
FREQ HAEMFE
```

| HAEMFE | TOTAL |
|---|---|
| NO | 259 |
| Row % | 100.000 |
| Col % | 86.333 |
| SE % | 3.440 |
| LCL % | 79.297 |
| UCL % | 93.369 |
| YES | 41 |
| Row % | 100.000 |
| Col % | 13.667 |
| SE % | 3.440 |
| LCL % | 6.631 |
| UCL % | 20.703 |
| TOTAL | 300 |
| Design Effect | 2.999 |

## ANNEX 5 - PRESENTATION OF COMBINED RESULTS

- Weighting the data will need to be done if you have conducted surveys in a number of different camps or areas, and need to combine the results for reporting or planning purposes.

- It is not required to report the combined results for all indicators or to report the confidence intervals for the combined estimates. The tables below outline the indicators that should be reported during a combined analysis and included in the survey report.

- For a tool that will automatically generate weighed prevalence results, see SENS Pre-Module tool: [**Tool 14**-Weighting Data Tool].

### FOOD ASSISTANCE

#### COMBINED RATION CARD COVERAGE

| | % |
|---|---|
| **Proportion of households with a ration card** | |

#### COMBINED RESULTS FOR REPORTED DURATION OF GENERAL FOOD RATION 2

| | % |
|---|---|
| **Proportion of households reporting that the food ration last the entire duration of the cycle** | |

## NEGATIVE HOUSEHOLD COPING STRATEGIES

### COMBINED RESULTS ON COPING STRATEGIES USED BY THE SURVEYED POPULATION OVER THE PAST MONTH

| | % |
|---|---|
| **Proportion of households reporting using the following coping strategies over the past month:** | |
| Borrowed cash, food or other items with or without interest | |
| Sold any assets that would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.) | |
| Requested increased remittances or gifts as compared to normal | |
| Reduced the quantity and/or frequency of meals and snacks | |
| Begged | |
| Engaged in potentially risky or harmful activities [LIST ACTIVITIES] | |
| **Proportion of households reporting using none of the coping strategies over the past month** | |

## HOUSEHOLD DIETARY DIVERSITY

### COMBINED RESULTS FOR CONSUMPTION OF MICRONUTRIENT RICH FOODS BY HOUSEHOLDS

| | % |
|---|---|
| **Proportion of households *not consuming any* vegetables, fruits, meat, eggs, fish/seafood, and milk/milk products** | |
| **Proportion of households consuming either a plant or animal source of vitamin A** | |
| **Proportion of households consuming organ meat/flesh meat, or fish/seafood** | |