

## 2.4 Sphere, Food Security and Nutrition

Trainer's Note

### Session at a Glance:

Content	Activity	Time
1 Introduction	Brief Oral Presentation	5 minutes
2 Review of Sphere standards & indicators	PPT presentation with facilitated plenary discussion and ration design exercise	30 minutes
3 Ration calculation exercise	Practical activity in visualizing the basic foods and amounts needed for an adequate diet	30 minutes
4 Standards continued	PPT presentation	20 minutes
5 Conclusions	Brief Oral summary of main points	5 minutes
<b>Total Session Time: 90 minutes</b>		

- **Required Materials:** 2.4 PPT set, well-marked 2011 Sphere book (Food Security and Nutrition chapter), flipcharts, calculators for quick exercises, example foods for “standard ration”, dry rice (or corn), oil, beans or other pulses, sugar, canned fish (sardines) and a Gram scale to pre-measure the required amounts of each of these. You will also need several clean water glasses or other clear containers, and the prepared nutritional values chart (attached to this trainers note)

Review the nutritional value charts at the end of this note and make enough copies of the **APPROXIMATE NUTRITIONAL VALUES OF VARIOUS FOOD COMMODITIES PER 100 GRAMS** sheet for distribution to each participant.

Samples of dry food supplies for ration basket exercise to include:

- 60g Dried beans (or lentils)
- 420g Uncooked rice
- 30g Cooking oil
- 20g Sugar
- 5g Salt
- 30g Tinned Fish or Sardines

The following items are also useful to explain some of the concepts and terms in the chapter if available.

- Wall sized height/weight chart (if possible)
- MUAC tape(s)
- Examples of high energy biscuits, Plumpy-Nut or other emergency foods
- Iodine test solution for determining presence of Iodine in salt

### Trainer's Notes:

#### 1. Introduction – 5 minutes

This session, like the other “Sphere and...” sessions, is intended to make participants open, read, understand, and work with the Sphere Standards, Actions, Indicators and Guidance Notes for this chapter. It is useful at this point to remind the participants that although this is a very useful tool, it is still far from perfect. One way to encourage closer reading of the text and better understanding

of its uses and limitations is to challenge the readers to find errors, and or points that they find confusing or difficult to understand. Take a few moments to point out that the chapter is very wide-ranging, as it covers the very different, but inherently related fields of nutrition, logistics, distribution, and food security.

## ***2. Review of Sphere Standards, Actions & Indicators – 20 minutes***

This part of the session is designed to “walk the participants through” each of the standards in this chapter. It is sometimes useful to have different participants read them out and then recompose them in their own words to ensure that they are clear and that the whole group understands the main points of each standard. In every case, challenge the group to “test” the standard to see whether or not they agree that they are in fact, universal in nature and globally applicable. In many cases there is explanatory material provided to better explain some of the reasoning behind the indicators used. **Remember that this session is designed to provide a basic understanding of food security, food programmes, and nutritional issues to non-specialists, not a professional training for nutritionists or logisticians.** As such, providing a general understanding of the core concepts is good enough.

This presentation is very dense. There is a lot of information to cover, particularly if the group does not already have a basic understanding of food transfer programmes, distribution systems, nutrition, nutrition surveys, and the basic indices used to measure malnutrition in large populations. It is important to prepare very carefully for this session, and whenever possible to present the material with a professional nutritionist. It will be very useful to have several pocket calculators on hand for participants to work out the calculations involved in designing a basic food basket.

## ***3. Ration Calculation Exercise***

Divide the participants into 6 small groups. Take the participants through this exercise step by step using slides # 22 -26. Start the exercise by distributing glass or clear plastic containers (drinking glasses work fine) and distribute the name of one of the commodities listed (on slide # 24) written out on an index card to each group. Ask each team to visualize how much of their assigned commodity would be the right amount as a component of a full day’s requirement for the average person. Ask them to mark on the side of the glass how full the glass should be of their commodity to reach the minimum amount needed. After they have made their estimates, have each team bring their glasses forward and then pour in the pre-measured amount of each item. Once all of the teams are done, show the full ration (of all of the components) from the front of the room. Explain that this is the practical visualization of the nutritional indicators and figures provided in the Guidance notes concerning the need for 2100 kcal.

## ***4. More Standards – 30 minutes***

Use slides # 27 – 34 to review the remaining standards on the chapter. Use the results from the exercise in the previous session as a reference point as you reflect on each standard. In each one refer to the decisions made in the “Food Aid Problem” in session 2.3 and test each one per the remaining standards. Use the questions in the presentation to get active participation from the group.

## ***5. Conclusions – 5 minutes***

Review any questions or problems participants may have found in the chapter. Remind the group that the intent of the session is primarily to familiarize non-nutritionists with the basics (and basic terminology) of this field.

## APPROXIMATE NUTRITIONAL VALUES OF VARIOUS FOOD COMMODITIES PER 100 GRAMS

COMMODITY	ENERGY (kcal)	PROTEIN (g)	FAT (g)	Price per MT in \$ USD
<b>CEREALS</b>				
Wheat	330	12.3	1.5	165
Rice	360	7.0	0.5	280
Sorghum/Millet	335	11.0	3.0	200
Maize	350	10.0	4.0	170
<b>PROCESSED CEREALS</b>				
Maize meal	360	9.0	3.5	225
Wheat flour	350	11.5	1.5	240
Bulgur wheat	350	11.0	1.5	220
<b>BLENDED FOODS</b>				
Corn soya blend	380	18.0	6.0	320
Wheat soya blend	370	20.0	6.0	390
Soy fortified bulgur wheat	350	17.0	1.5	240
Soy fortified maize meal	390	13.0	1.5	270
Soy fortified wheat flour	360	16.0	1.3	240
Soy fortified sorghum grits	360	16.0	1.0	190
<b>DAIRY PRODUCTS</b>				
Dried skim milk (enriched)	360	36.0	1.0	1,900
Dried skim milk (plain)	360	36.0	1.0	1,800
Dried whole milk	500	25.0	27.0	2,200
Canned cheese	355	22.5	28.0	1,850
<b>MEAT AND FISH</b>				
Canned meat	220	21.0	15.0	1,950
Dried salted fish	270	47.0	7.5	1,500
Canned fish	305	22.0	24.0	2,000
<b>OILS AND FATS</b>				
Vegetable oil	885	0	100	750
Butter oil	860	0	98.0	2,300
Edible fat	900	0	100	950
<b>PULSES</b>				
Beans	335	20.0	1.2	440
Peas	335	22.0	1.4	375
Lentils	340	20.0	0.6	500
<b>MISCELLANEOUS</b>				
Sugar	400	0	0	350
High energy biscuits	450	12.0	15.0	1,250
Black tea	0	0	0	1,235
Iodized salt	0	0	0	150
Dates	245	2.0	0.5	1,900
Dried fruit	270	4.0	0.5	1,200
<i>Note: prices quoted are free-on-board (FOB) and do not include transportation costs. Prices were compared in 1998 and will vary over time. Updated information may be found from WFP.</i>				

Table is from UNHCR Handbook for Emergencies, 2<sup>nd</sup> Edition, page 203.

### Examples of adequate full rations for the affected population entirely reliant on food assistance

(from WFP/UNHCR Guidelines for estimating food and nutritional needs. December 1997)

ITEMS	RATIONS				
	(quantities in grams per person per day)				
	Type 1*	Type 2*	Type 3*	Type 4**	Type 5*
<b>Cereal</b>	400	420	350	420	450
<b>Pulses</b>	60	50	100	60	50
<b>Oil (vitamin A fortified)</b>	25	25	25	30	25
<b>Canned fish/meat</b>	-	20	-	30	-
<b>Fortified blended foods</b>	50	40	50	-	-
<b>Sugar</b>	15	-	20	20	20
<b>Iodized salt</b>	5	5	5	5	5
<b>Fresh veg./fruit</b>	-	-	-	-	100
<b>Spices</b>	-	-	-	-	5
<b>Energy: Kilocalories</b>	<b>2113</b>	<b>2106</b>	<b>2087</b>	<b>2092</b>	<b>2116</b>
<b>Protein</b> (in grams and % of total kcal)	58g, 11%	60g, 11%	72g, 14%	45g, 9%	51g, 10%
<b>Fat</b> (in grams and % of total kcal)	43g, 18%	47g, 20%	43g, 18%	38g, 16%	41g, 17%
* For rations 1,2,3 & 5 the cereal used for the calculation is maize meal					
** This ration has rice as a cereal; the low percentage energy for protein is acceptable due to its high quality; the slightly low fat content is in line with food habits in rice-eating countries.					

Source: UNHCR Handbook for Emergencies, 2<sup>nd</sup> Edition - page 205

### Some Commodity Distribution Guidelines

Item	Distribution Interval	Comments
Cereal	10 days	Always distribute cereal and beans at the same time to maximize their nutritional value.
Beans	10 days	
Oil	Monthly	If adequate storage containers are available.
Sugar	Monthly	
Salt	Monthly	
Vegetables/Fruits	1-10 days	Depending on variety.
Canned meat/fish	Monthly	If containers are small (less than 120g).
Cereal blend	10 days	To avoid loss of nutrient in storage.

From UNHCR EMTP training materials, original citation is missing (sorry!)