

# Food and Nutrition Operational considerations for Refugee and Migrant settings in Greece

May 2016

## Annexes

### A. RECOMMENDED MICRONUTRIENT INTAKES

The 5 types of rations in the table 1 illustrate differences due to factors such as: food habits of the population (e.g. type 4: rice-eating countries), the acceptability and availability of the commodities in the region

Table 1: Example of Adequate Full Rations for the affected population entirely reliant on food assistance

ITEMS	RATIONS (quantity in g)				
	Type 1*	Type 2*	Type 3*	Type 4**	Type 5*
Cereal flour/rice/bulgur	400	420	350	420	450
Pulses	60	50	100	60	50
Oil (vitamin A fortified)	25	25	25	30	25
Canned fish/meat	-	20	-	30	-
Fortified blended foods	50	40	50	-	-
Sugar	15	-	20	20	20
Iodized salt	5	5	5	5	5
Fresh vegetables/fruits	-	-	-	-	100
Spices	-	-	-	-	5
Energy: kilocalories	2113	2 106	2 087	2 092	2 116
Protein (in g and in % kcal)	58g; 11%	60g; 11%	72g; 14%	45g; 9%	51g; 10%
Fat (in g and in % 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

### B. ADJUSTMENT OF INITIAL REFERENCE VALUE

Table 2: Factors impacting energy requirements

Temperature	<ul style="list-style-type: none"> <li>The average temperature is 20°C as a base temperature and to add an allowance of 100 kilocalories for every 5 degrees below 20°C</li> <li>15°C: +100 kcal</li> <li>10°C: +200 kcal</li> <li>5°C: +300 kcal</li> <li>0°C: +400 kcal</li> </ul>
Health or nutritional status of the population	<ul style="list-style-type: none"> <li>The population of refugees and migrants in Greece may have suffered considerable nutritional stress and severe prolonged food shortage before assistance was provided</li> <li>When there is widespread illness, supplementary feeding programmes may be implemented. However these programmes will be effective only if an adequate general ration is also being distributed</li> </ul>
Demographic distribution of the population (age and gender composition)	<ul style="list-style-type: none"> <li>The composition of the beneficiary population will affect the nutritional requirements. For example, if the population is composed exclusively of women and children, it will require 6% less energy than a standard population when macro planning for food assistance. This is not expected to be a major consideration in this population</li> </ul>
Activity levels	<ul style="list-style-type: none"> <li>If the population is engaging in medium to heavy activities, there may be a need to adjust the energy requirements higher. This is not expected to be a need in this population</li> </ul>
Household food security	<ul style="list-style-type: none"> <li>Requirement for external food assistance is determined by the degree of access to local food. This in turn is influenced by the availability of</li> </ul>

local food on the one hand (moreover the access for people in detention centre), and the purchasing power and opportunities allowed to the affected population on the other hand (highly fluctuating from one household to the other)

*The initial planning figure or energy requirement is 2,100 kcal/person/day*

## C. COMPLEMENTARY FOOD FOR CHILDREN ABOVE 6 MONTHS

**Table 3: Options for addressing nutritional needs of older infants and young children**

Source of food	Examples of foods	Remarks
1. Basic food-aid commodities from general ration with supplements of inexpensive locally available foods	Cereals, pulses, oil and sugar, combined together with a variety of vegetables and fruit (cereals and pulses must be prepared using ground or milled forms)	Recipes can be developed using local foods with input from nutrition and/or health expertise  Traditional complementary feeding practices must be observed and understood
2. Blended foods (as part of general ration/blanket or supplementary)	Varieties of locally produced blended foods	Blended foods processed by roasting or extrusion to improve digestibility  For growth and development, blended foods are usually fortified with zinc and iron and other micronutrients
3. Additional foods in supplementary feeding programmes	Fruit, vegetables, fish, eggs or other suitable locally available foods	Valuable source of vitamins and minerals

## D. RELIGIOUS CELEBRATIONS: THE EXAMPLE OF RAMADAN

Ramadan is the month of prayer and repentance observed globally by one billion Muslims. It means a period of mental and physical purification during which they do not consume any food or drinks between sunrise and sunset. However once the sun has gone down, Muslims traditionally enjoy a series of meals. This year, Ramadan will start around the 6<sup>th</sup> of June 2016 and will last for 29-30 days. All refugees and migrants are not Muslims, but it is important for food providers and catering services to respect the nutritional changes of this religious celebration, at the same time as respecting people who will not fast.

- There will be three main meals: Suhour (before the fast and the sunrise), Iftar (after the fast and the sunset) and dinner later at night. There might be a snack or more at night too
  - The tradition is to break the fast at sunset with dried dates (or halva, dried raisins, figs or other sesame-based food) in order to rapidly increase the level of glycaemia after long hours of fasting
  - Before sunrise, people will not take a simple breakfast: protein and fiber must be prioritized, e.g. eggs, cheese, peanut butter, beans meats, oats, wheat bread, apples, etc.
- Hydration is important (especially if the Ramadan occurs during hot days such as this year). First choice will be water but also other beverages such as juice, coffee, tea
- The food distributed needs to be rich in nutrients, healthy carbohydrates, lean sources of protein, vegetables, fruits and healthy fats. Consider adding multivitamin and mineral supplement if needed
- It is important to give freshly cooked warm meals during this period, at the good time of the day
- Elderly and sick people are exempt from the fasting. Also exempt are pregnant women, women during their menstruation, women nursing their newborns and children. Meals need to be distributed as usual for these categories, and discretely in order not to disturb people who are fasting
- Ideally, menus should be designed together with the persons of concern and the catering services to arrange ingredients but also time of delivery
- Cash distributions/vouchers could be appropriate to allow people to purchase their own food.

## E. EXAMPLES OF MENUS

**a) Examples of complementary feeding recipes for children 6-8 months**

**Rice with fish and morning glory borbor**

**Ingredients**



**How to cook**



Rice: 2 tablespoons  
Fish: 1 tablespoon  
Morning Glory: 1 tablespoon  
Oil: 1 teaspoon

**Figure 15**

**Sweet potato with peanuts and pumpkin leaves borbor**

**Ingredients**



**How to cook**



Sweet Potato: Half Bowl  
Peanut: 1 tablespoon  
Pumpkin Leaves: 1 tablespoon

**b) Examples of complementary feeding recipes for children 9-11 months**

**Rice with egg and pumpkin borbor**

**Ingredients**







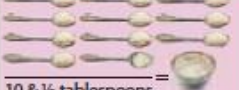














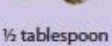

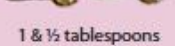


**How to cook**



Rice: 2 & 1/2 tablespoons  
Egg: 1 Egg  
Pumpkin: 1 & 1/2 tablespoons  
Oil: 1/2 tablespoon

**c) Examples of complementary feeding recipes for children 12-23 months**

Ingredients	1 meal		2 meal		3 meal	
	Quantity	Water	Quantity	Water	Quantity	Water
 Rice OR 	 3 & 1/2 tablespoons	 2 Bowls	 7 tablespoons	 4 & 1/2 Bowls	 10 & 1/2 tablespoons = 1/2 tin	 6 & 1/2 Bowls
 Fish or Meat or Peanut OR 	 2 tablespoons	 2 Bowls	 4 tablespoons	 6 tablespoons	 1 Egg	 8 Bowls
 Vegetable	 2 tablespoons		 4 tablespoons		 6 tablespoons	
 Oil	 1/2 tablespoon		 1 tablespoon		 1 & 1/2 tablespoons	

## F. GLOSSARY

**Food assistance:** Refers to a set of interventions designed to provide access to food to vulnerable and food insecure populations. Included in the definition are instruments, such as in-kind foods, vouchers or cash transfers, to assure access to food to a given quantity, quality or value (WFP, 2010).

**Food fortification:** Food fortification refers to the addition of micronutrients to processed foods. In many situations, this strategy can lead to relatively rapid improvements in the micronutrient status of a population, and at a very reasonable cost, especially if advantage can be taken of existing technology and local distribution networks. Since the benefits are potentially large, food fortification can be a very cost-effective public health intervention (WHO, FAO).

**Food safety:** Foodborne diseases take a major toll on health. Millions of people fall ill and many die as a result of eating unsafe food. Deeply concerned by this, WHO Member States adopted a resolution in 2000 to recognize food safety as an essential public health function. Food safety encompasses actions aimed at ensuring that all food is as safe as possible. Food safety policies and actions need to cover the entire food chain, from production to consumption (WHO).

**Micronutrients:** An essential nutrient, as a trace mineral or vitamin, that is required by an organism in minute amounts. Called micronutrients because they are needed only in minuscule amounts, these substances are the “magic wands” that enable the body to produce enzymes, hormones and other substances essential for proper growth and development. As tiny as the amounts are, however, the consequences of their absence are severe. Iodine, vitamin A and iron are most important in global public health terms; their lack represents a major threat to the health and development of populations the world over, particularly children and pregnant women in low-income countries (WHO).

**Nutritional requirement:** The amount of each nutrient needed is called the nutritional requirement. These are different for each nutrient and also vary between individuals and life stages, e.g. women of childbearing age need more iron than men.