

## 4. FOOD & MALNUTRITION

### Preparation:

While watching the movie clip in the activate section students will receive a ration of food aid similar to those in a refugee camp. These should be made ahead of time. (*Be aware of allergies, dietary restrictions and other medical concerns in your classroom*)

\*An alternative to preparing the food rations for the entire class is to bring in samples of the rations for students to observe\*

For a class size of 25 students:

#### **Cornmeal: ½ cup serving per student**

12 ½ cups cornmeal  
37 ½ cups water  
12 tablespoons oil  
15 teaspoons salt

In a pan, bring water, oil and salt to a boil over medium heat. Gradually add cornmeal, stirring continuously with a wire whisk. When mixture starts to thicken, reduce heat to low. Continue to stir until mush is quite thick and creamy, about 5-10 minutes.

#### **Lentils: ¼ cup serving per student**

6 ¼ cups lentils

Cover lentils with water and boil for 2 to 3 minutes. Reduce heat and simmer until tender. Drain and serve.

#### **Food Rations per person: 2100 calories**

50 g (3/4c) lentils  
400 g (6c) cornmeal  
5 g (1 tsp) salt  
50 g (3/4c) oil

#### **Materials Needed:**

- Cornmeal
- Oil
- Salt
- Water
- Lentils
- Computer with internet access to show movie clip
- Computer with internet access for student research

### Activate:

Have food rations visible for students to see as you begin the lesson. Explain that this is what one person would ideally receive for one day.

Hand out students food ration for one meal (lentils and cornmeal).

While students eat their rations have them watch the following video clip, where a woman in a Sudanese refugee camp receives food rations for her family of five for one month: <http://www.youtube.com/watch?v=ltBnHCf6-WU> (5 minutes in length).

Watch the same video a second time (if the students were eating during the first clip) and have students take notes and calculate how much food/ person/day each of the 5 family members would receive.

Students will write a journal entry after watching the video clip. Some questions for them to begin their journal writing are:

- How would you feel in a similar situation?
- Have you had the types of food you were given as food rations before today?
- Do you like the food rations?
- Would you be able to live on these rations for a long period of time?
- What is missing from the food rations? (e.g. spice, vegetables, meat, etc.)

### Acquire:

Students will research the nutritional content of their food rations at a refugee camp, as compared to a Canadian meal. From the information obtained from their research students will further research what problems can occur from lack of specific nutrients. **(Handout provided)**

### Apply:

As a closing activity, have students watch the video clip located at: [www.doctorswithoutborders.org/news/issue.cfm?id=2396](http://www.doctorswithoutborders.org/news/issue.cfm?id=2396) (12 minutes in length)

Students will write a journal entry after watching the video clip. Some beginning questions are:

- How did you feel after watching this video clip? Was it different than the first video clip?
- Would you like these food rations better?
- Do you think there is a difference in how the parents feel from the first video clip to the second?

# NUTRITION COMPARISON

Using internet resources compare the nutritional content in your food rations in a refugee camp to that of a Canadian meal you would eat on a regular basis.

Here are some sites that can help you find nutritional information:

- [www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php)
- [www.dietitians.ca/index.asp](http://www.dietitians.ca/index.asp)
- [www.eattracker.ca](http://www.eattracker.ca)
- [www.nutritiondata.com](http://www.nutritiondata.com)
- [www.thecaloriecounter.com](http://www.thecaloriecounter.com)

Meal in a Refugee Camp				
Food	Cornmeal (whole-grain yellow)	Lentils	Oil	Salt
Serving Size	1 cup			
Calories	442			
Total Fat	7%			
Carbohydrates	31%			
Sugar	0%			
Protein	19%			
Vitamin A	5%			
Vitamin C	0%			
Calcium	1%			
Iron	23%			

What is the total amount of calories in this meal?

What is missing or are very low in this meal?

Regular Canadian Meal				
Food				
Serving Size				
Calories				
Total Fat				
Carbohydrates				
Sugar				
Protein				
Vitamin A				
Vitamin C				
Calcium				
Iron				

What is the total amount of calories in this meal?

What nutrients does this meal have that the refugee meal lacked?

Pick **one** of the nutrients that is lacking from the refugee meal. Research the following:

- What foods is this nutrient found in?
- What complications or problems can result when you lack this nutrient in your diet?
- What are the symptoms that will occur when this nutrient is missing in your diet?
- What is the treatment or cure for the problems associated with the lacking nutrient?