LESSON 3

Combating Malnutrition

In this lesson, students examine what the world is doing to address malnutrition. Through a variation on the game “Hot Potato,” students experience the increasing effectiveness of foods that, over time, have made important nutritional improvements in people’s lives. Students learn more about the ready-to-use therapeutic food (RUTF) at the heart of UNICEF Kid Power. Finally, they explore other UNICEF strategies for combating malnutrition and recognize their own contributions through participating in Kid Power.

About this Lesson

TIME
40–50 minutes, depending on options taken

GRADE LEVEL
Grades 3–5

VOCABULARY
Advocate
First 1,000 days
IR8 Rice

Micronutrients
Ready-to-use therapeutic food (RUTF)

Stunting
Therapeutic
LESSON 3

Objectives

**Students will:**

- Engage in a physical activity demonstrating the relative effectiveness in reducing malnutrition of three significant foods.
- Examine the nutritional content of RUTF and analyze and discuss its benefits in the fight against malnutrition.
- Read closely a text on non-emergency malnutrition strategies and answer questions involving main ideas and details and drawing inferences.

Materials Needed

- Computer and Internet access
- Screen and LCD projector or interactive whiteboard
- Chalkboard (if no whiteboard)
- Chart paper and markers
- Items to pass during Hot Potato and More (ideally a potato, a small container of rice and a bottle of paste; see Step 4)
- Music to be played through computer or stereo

Preparation and Setup

- Prepare space for the Learn and Earn activity (see Step 4).
- Prepare copies of the handouts RUTF (Peanut Paste) and Many Ways to Provide Nutrition, one per student.
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Directions

(Optional) If you assigned the Malnutrition Activity Sheet for homework after Lesson 2 and have not reviewed it yet, you may do so here. (Note: This is not built into the time for the lesson.)

Part 1: Mystery Meal (10–20 min, depending on options taken)

1. Tell students that you are now going to describe one of the most nutritious meals there is, and challenge them to guess what it is. Read the following clues one at a time, and prompt students periodically for their reactions.

- It contributes to healthy bones and teeth, with the calcium content equivalent to 3 cups of milk.
- It has as much immune-system-boosting vitamin C as 1 small orange.
- It helps the body deliver oxygen to its cells due to having the same iron content as 1 bunch of spinach.
- Its vitamin E content, equivalent to ½ cup olive oil, helps the body protect certain cells from damage.
- It helps keep eyes healthy with the vitamin A equivalent of 1½ medium carrots.
- It contains the same muscle-building protein as ½ chicken breast.
- It has the energy content of 2 McDonald’s hamburger patties.
- It’s high in fat. Though there are many downsides of fat, it is great for when the body needs lots of energy quickly. This meal has the same fat content as ½ stick of butter.

Guard against the exercise losing its effectiveness by instituting a rule against revealing the mystery meal too early, such as forbidding guesses until after the last clue.
Reveal that the mystery meal is actually the same peanut paste RUTF they are sending to children in need through participation in Kid Power. Distribute the handout **RUTF (Peanut Paste)** and review with the class. Share the following additional facts about this ready-to-use therapeutic food:

- Made from peanuts, oil, sugar, milk powder and vitamin and mineral supplements, it is energy dense and contains all the nutrients required for recovery from malnutrition.
- It has saved hundreds of thousands of children’s lives in recent years.
- It is cost effective, about $100 per child for a full course of treatment (about 10-15 kilograms over a 6–8 week period).
- It does not easily spoil, even without refrigeration.
- Children like the way it tastes.
- Since administering it does not require close medical supervision, it can be given to a severely malnourished child by family or community members. Otherwise, such children would have to be treated in special health facilities, which can be very far away and expensive.

Note, though, that RUTF is not a long-term solution to malnutrition; it is just an intervention that can help highly vulnerable children. Ask for students’ thoughts about the strengths and shortcomings of RUTF.

(Optional) Through guided questioning, lead students toward understanding why RUTF is not a solution to malnutrition on its own. Reasons may include some or all of the following:

- It doesn’t help all children, like those too sick to eat.
- The $100 cost per child is prohibitively expensive for developing countries.
- It is a processed food, requiring special facilities for production.
- It is not a substitute for best nutritional practices or normal household food.
- In a world that produces enough food for all, we should work to get that food to people who need it, not create substitute food for people in poverty.

Discuss what else can be done to address malnutrition.
Part 2: Learn and Earn (10 min)

4. Lead the class in the kinesthetic learning activity Hot Potato and More (see page 8) to set the stage for understanding the relative power of various foods to help people suffering from malnutrition.

5. Transition back to regular classroom seating. Give formal definitions for the vocabulary that came out of the Learn and Earn activity; post on a sheet of chart paper.

- **IR8 Rice:** The variety of fast-growing rice developed in the 1960s that led to much increased nutrition in Asia.

- **Ready-to-use therapeutic food (RUTF):** Special ready-to-eat, portable products, available as pastes, spreads or biscuits, that are used to treat children with severe acute malnutrition.¹

Review with students, and have them copy the definitions into their notebooks/journals.

Part 3: Additional Malnutrition Solutions (15–20 min)

6. Tell students that, in addition to RUTF, UNICEF helps to deliver other solutions to global malnutrition. Distribute the handout Many Ways to Provide Nutrition. Read it aloud together or have students read it independently.

7. After reading, have students work in small groups to determine the main idea and supporting details. Have them write the main idea in their own words in their notebooks and underline the supporting details on the handout. Review student responses and check for understanding.

8 Engage the class in other close reading questioning, such as the following:

- Name two ways that the health of mothers influences the nutrition of their children.
- Why are a child’s first 1,000 days so important?
- What other type of work that UNICEF does has the added benefit of reducing the threat of malnutrition?

Ask for evidence from the text to support all answers. After this questioning, briefly discuss student reactions to the story.

9 Remind students that it’s not just big organizations like UNICEF that are tackling global malnutrition; it’s individuals, too. Reinforce how students are doing their part through Kid Power and note the progress they’ve made.
GAME OF THE WEEK

Catch the Dragon’s Tail

Encourage students to continue to Learn and Earn by playing games during recess from different countries and cultures. This week’s game, from China, is Catch the Dragon’s Tail. Watch children playing the game at bit.ly/1CPXZLF.

To play, students form a human dragon by lining up with their hands on the shoulders of the person in front of them. The first person is the head of the dragon, the last person is the tail, and the rest of the people comprise the dragon’s body. The object of the game is for the head to try and catch or tag the tail. The head tries to maneuver the body in order to catch the tail, and the body tries to stop the head from capturing the tail while keeping the line unbroken. When the head catches the tail, the head becomes the tail and all players move up one position. Play until all students have had a chance to be the head or until time is up.

Variation for large groups: Create two or more dragons, with each dragon’s head trying to catch the tail of another dragon.

Extension Activities

● Have students compare the nutritional information in RUTF (peanut paste) with that of a food they commonly eat. With students working individually or in pairs, direct them to divide a sheet of paper into two columns and record their comparisons. Have them write a short paragraph on why they think peanut paste RUTF is higher in nutritional value than typical foods and how they think it helps malnourished children.

● Research the World Food Programme’s Food Basket for nutrition emergencies. Find out exactly what it contains, how much it costs, where it is used, where it is made, and in which other countries it is used. Report findings to the class.
LEARN AND EARN ACTIVITY

Hot Potato and More

Deepen students understanding of nutrition by playing this variation on the traditional Hot Potato game. Students form a circle and pass an object around while music plays. When the music stops, whoever is left holding the “hot potato” is out.

1. Tell students that many experts believe that the introduction of potatoes from the New World to northern Europe after 1492 ended famines in that part of the world.

2. Explain that to celebrate the potato, they’ll play a game of Hot Potato. Explain the rules and provide students with an actual potato or something to represent one. As they are playing, tell them that the potato has combated hunger throughout history and supported a larger global population.
   
   Say that the students who are called out when the music stops represent hungry people still malnourished despite the potato.

   Make sure the music stops fairly regularly to generate a fair number of students called out (perhaps half the class). Note that while the potato contains much nutrition, it does not represent a nutritious diet on its own.

3. Choose a new object (perhaps a small container of rice) to represent IR8 Rice, and replay the game. Tell students that IR8 is the type of rice that was developed through crossbreeding in the 1960s to grow much faster and produce much more food than ordinary types. It increased the average energy intake by people in Asia by one-third, allowing the population to grow by 60 percent.
   
   Say that the students who are called out when the music stops represent hungry people still malnourished despite the rice.

   Stop the music less frequently than when playing with the potato. Note that IR8 Rice is an important staple food, but without other nutritious food, it still leaves people vulnerable to malnutrition. Check for understanding.
Finally choose a new object (a bottle of paste, if available) to represent the RUTF (peanut paste) students know from UNICEF Kid Power, and replay the game. Tell students that when children suffer from severe malnutrition, RUTF makes a big difference.

Say that the students who are called out when the music stops represent hungry people still malnourished despite the RUTF.

Stop the music even less frequently than when playing with the rice, maybe only once or twice.

Discuss what the students discovered through playing the game (RUTF is more effective than the potato or IR8 Rice because it contains all the nutrients needed to save people from malnutrition).