Lesson Five  
Calorie Intake

Objectives

After participating in this lesson students will
• Know how many calories per day are appropriate for them to eat based on their activity level, age and gender.
• Have developed a menu for the day based on their calorie per day recommendation.

Time

50 minutes 
Prep Time: 20 minutes

Activities

5.1 Review and Plan for the Day 3 minutes 
5.2 Nutrition Facts for YO! 10 minutes 
5.3 Calories in a Day 32 minutes 
5.4 Closure 5 minutes

Key Terms

• Activity Level

Materials

- What Do We Know? poster
- Nutrition Facts for YO! (Activity Sheet 5.2)
- My Pyramid Food Intake Pattern (Information Sheet 5.3)
- Highlighters
- Food Model cards
- Masking tape
- Calculators
- Me and My Calories (Activity Sheet 5.4)

Teacher Preparation

• Write Plan for the Day and Objectives on chart paper or board.
• Make copies of Nutrition Facts for YO! (Activity Sheet 5.2), 1 for each student, and place in portfolios.
• Make copies of My Pyramid Food Intake Pattern (Information Sheet 5.3), 1 for each student, and place in portfolios.
• Create Calories in a Day chart. (See Activity 5.3.)
• Separate Food Model cards by Food Groups.
• Make copies of Me and My Calories (Activity Sheet 5.4), 1 for each student, and place in portfolios.

5.1 Review and Plan for the Day 3 minutes

Materials: Plan for the Day and Objectives, What Do We Know? poster

Write the Plan for the Day and Objectives on the board before class, listing all of the activities students will be doing.

Plan for the Day:
• Nutrition Facts for YO!
• Calories in a Day
• Closure

Review the previous class by looking over the What Do We Know? poster. Reiterate the words variety, balance and moderation by writing those words next to the definition of that word, as follows:

• Eat foods from all food groups. (BALANCE)
• Eat a variety of foods from each food group to get all the nutrients. (VARIETY)
• Monitor the size of a portion of food. (MODERATION)

Explain that today students will find out how many calories a day they should consume individually and, based on that information, come up with a menu for a day with the appropriate number of calories.

Review the Objectives with students.

5.2 Nutrition Facts for YO! 10 minutes

Materials: Nutrition Facts for YO! (Activity Sheet 5.2), My Pyramid Food Intake Pattern (Information Sheet 5.3), highlighters, student portfolios

• Explain that we find the amount of calories we need according to our activity level (amount of physical activity you do in a day), age and gender.

• Show students the Nutrition Facts for YO! activity sheet in their portfolios. Read through the steps as a class before they fill it out. Then, have the students fill in the “How do you make your moves?” section based on what they think their activity level is overall. Walk around and help students if they are unsure of their activity level.

• Once students have completed that section, move down to the section titled, “Calories—How many for you?” and have them use the table to determine their
calorie level based on gender and age. Explain that the calorie level given is for people whose activity level is “On-the-Move.” If their activity level is “S-l-o-w Mo” they need to subtract 200 calories, and if they are a “Real Mover” they need to add 200 calories. (Note: To help students who need a visual aid, make a transparency of the Nutrition Facts for YO! activity sheet to read from.)

- Once all students have found their calorie level, have them look at the My Pyramid Food Intake Pattern information sheet. Direct students’ attention to the section labeled “Suggested Daily Amount of Food From Each Group.” It has several calorie levels with how much food from each group should be consumed in a day. Have them highlight their calorie amount and the amount of servings they should eat from each food group.

- Explain that knowing their calorie level and how much from each food group to consume, will allow them to come up with a menu for a day based on this personalized information.

5.3 Calories in a Day 32 minutes

Materials: Food Model cards, My Pyramid Food Intake Pattern (Information Sheet 5.3), chart paper, masking tape, markers, Calories in a Day chart written out for demonstration

Based on the information they find out on the My Pyramid Food Intake Pattern information sheet, explain to students that they are going to design a menu for themselves for a day based on their calorie expenditure and cups or ounces for each food group.

- Ask students to find another person in the room who has the same calorie level. They will be working with that person to create a menu for the day. Give students an opportunity to find a partner to work with. If students can’t find someone with the exact same calorie level they can work with someone who is within a 200 calorie difference.

- Show the students the Calories in a Day chart and explain the information that is to be written on the chart:

  Calories in a Day (title)
  ▪ Total Calorie Level
  ▪ Breakfast, Snack, Lunch, Snack, Dinner
  ▪ Calorie Consumption for each meal.

- Show students the Food Model cards to use. Show the back of the card so students see where to get total calorie amounts for that food item. Explain that if they cannot find a food card or someone else is using a card they want to use, then they can write the name of the food and its calorie level on their chart.
• Give each pair a piece of chart paper, tape and markers. Have them chart their menu for the day to equal the appropriate number of calories and to provide balance/variety of nutrients/food groups.

• Once students have completed their chart, have them hang it up. Ask what are some things they learned from doing this activity. Ask specifically if they were surprised by the amount of food they put on their chart to meet their calorie requirement. Emphasize the different amount of foods needed for different calorie levels. Finally, reiterate balance, variety and moderation using different students’ charts and showing how they addressed those concepts.

5.4 Closure 5 minutes

Materials: Me and My Calories (Activity Sheet 5.4)

Have students turn to the Me and My Calories activity sheet in their portfolios.

• Review the 2 questions with students: Why is it important to eat all the daily calories you are supposed to? and Why would a girl who exercises 3 times a week consume a different amount of calories than a boy who exercises 3 times a week?

(Answers: It is important to get all of your calories so that you are getting all of your nutrients and energy. The difference between calorie intake for a boy and a girl could be due to the person’s age and the body composition difference between males and females.)

• Give students 3 minutes to write down their answers and then take 2 minutes to go over the correct responses. Have students adjust their answers as needed.

Resources

www.mypyramid.gov/downloads/MyPyramid_Food_Intake_Patterns.pdf

Activity 5.3 Calories in a Day: from All 4 You 2! curriculum, Lesson 5, Activity 3

Worksheet for Activity 5.2: http://ific.org/publications/other/tnfl.cfm
Nutrition Facts—FOR YOU!

How many calories do you need each day? How much fat? Carbohydrate? Fiber? Protein? The %Daily Values are based on 2,000 calories a day. But even if you eat more, or less, you can use the %Daily Values as your guide to healthy eating. Here’s how you do it!

1. HOW DO YOU MAKE YOUR MOVES?

Check the box that best describes you.

- S-l-o-w “Mo.” You take a lot of life in the slow lane—watching television, talking on the phone, and sitting or standing around. Your physical activity adds up to a weekend game of pickup basketball, or occasionally cycling, swimming, or doing some other sport.

- On-the-Move. You keep your body moving with 30 to 60 minutes of physical activity at least three times a week—such as brisk walking, cycling or running.

- Real Mover! With either individual or team sports, your body gets a real workout—about an hour of rigorous exercise at least four times a week.

2. CALORIES—HOW MANY FOR YOU?

That depends on you ... your age ... your sex ... and just how active you are. The chart below shows about how many calories the average “on-the-move” teen needs each day. If you’re a “s-l-o-w mo,” you need somewhat less. And if you’re a “real mover,” you need more.

<table>
<thead>
<tr>
<th>AGE</th>
<th>CALORIES EACH DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMALE 13-19</td>
<td>2,000</td>
</tr>
<tr>
<td>MALE 13-19</td>
<td>2,600</td>
</tr>
</tbody>
</table>

(Source: National Academy of Sciences, Recommended Dietary Allowances, 1989)

Reprinted from the International Food Information Council Foundation, Department of Health & Human Services and U.S. Food & Drug Administration (July 1994).
My Pyramid Food Intake Pattern

The suggested amounts of food to consume from the basic food groups, subgroups, and oils to meet recommended nutrient intakes at 12 different calorie levels.

Suggested Daily Amount of Food from Each Group

<table>
<thead>
<tr>
<th>1. Calorie Level</th>
<th>1,000</th>
<th>1,200</th>
<th>1,400</th>
<th>1,600</th>
<th>1,800</th>
<th>2,000</th>
<th>2,200</th>
<th>2,400</th>
<th>2,600</th>
<th>2,800</th>
<th>3,000</th>
<th>3,200</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Fruits</td>
<td>1 cup</td>
<td>1 cup</td>
<td>1.5 cups</td>
<td>1.5 cups</td>
<td>1.5 cups</td>
<td>2 cups</td>
<td>2 cups</td>
<td>2 cups</td>
<td>2 cups</td>
<td>2.5 cups</td>
<td>2.5 cups</td>
<td>2.5 cups</td>
</tr>
<tr>
<td>3. Vegetables</td>
<td>1 cup</td>
<td>1.5 cups</td>
<td>1.5 cups</td>
<td>2 cups</td>
<td>2.5 cups</td>
<td>2.5 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3.5 cups</td>
<td>3.5 cups</td>
<td>4 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>4. Grains</td>
<td>3 oz</td>
<td>4 oz</td>
<td>5 oz</td>
<td>5 oz</td>
<td>6 oz</td>
<td>6 oz</td>
<td>7 oz</td>
<td>8 oz</td>
<td>9 oz</td>
<td>10 oz</td>
<td>10 oz</td>
<td>10 oz</td>
</tr>
<tr>
<td>5. Meat and Beans</td>
<td>2 oz</td>
<td>3 oz</td>
<td>4 oz</td>
<td>5 oz</td>
<td>5 oz</td>
<td>5.5 oz</td>
<td>6 oz</td>
<td>6.5 oz</td>
<td>6.5 oz</td>
<td>7 oz</td>
<td>7 oz</td>
<td>7 oz</td>
</tr>
<tr>
<td>6. Milk</td>
<td>2 cups</td>
<td>2 cups</td>
<td>2 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
</tr>
<tr>
<td>7. Oils</td>
<td>3 tsp</td>
<td>4 tsp</td>
<td>4 tsp</td>
<td>5 tsp</td>
<td>5 tsp</td>
<td>6 tsp</td>
<td>6 tsp</td>
<td>7 tsp</td>
<td>8 tsp</td>
<td>8 tsp</td>
<td>10 tsp</td>
<td>11 tsp</td>
</tr>
<tr>
<td>8. Discretionary calorie allowance</td>
<td>165</td>
<td>171</td>
<td>171</td>
<td>132</td>
<td>195</td>
<td>267</td>
<td>290</td>
<td>362</td>
<td>410</td>
<td>426</td>
<td>512</td>
<td>648</td>
</tr>
</tbody>
</table>

1. **Calorie Levels** are set across a wide range to accommodate the needs of different individuals.

2. **Fruits Group** includes all fresh, frozen, canned and dried fruits and fruit juices. In general, 1 cup of fruit or 100% fruit juice, or 1/2 cup of dried fruit can be considered as 1 cup from the fruit group.

3. **Vegetables Group** includes all fresh, frozen, canned and dried vegetables and vegetable juices. In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.

4. **Grains Group** includes all foods made from wheat, rice, oats, cornmeal and barley, such as bread, pasta, oatmeal, breakfast cereals, tortillas and grits. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, pasta or cooked cereal can be considered as 1 ounce equivalent from the grains group. **At least half of all grains consumed should be whole grains.**

5. **Meat and Beans Group.** In general, 1 ounce of lean meat, poultry or fish, 1 egg, 1 Tbsp. peanut butter, 1/4 cup cooked dry beans, or 1/2 ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group.

6. **Milk Group** includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese. Foods made from milk that have little to no calcium, such as cream cheese, cream and butter, are not part of the group. Most milk group choices should be fat-free or low-fat. In general, 1 cup of milk or yogurt, 1-1/2 ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the milk group.

7. **Oils** include fats from many different plants and from fish that are liquid at room temperature, such as canola, corn, olive, soybean and sunflower oil. Some foods are naturally high in oils, such as nuts, olives, some fish and avocados. Foods that are mainly oil include mayonnaise, certain salad dressings and soft margarine.

8. **Discretionary Calorie Allowance** is the remaining amount of calories in a food intake pattern after accounting for the calories needed for all food groups—using forms of foods that are fat-free or low-fat and with no added sugars.
Me and My Calories

1. Why is it important to eat all the daily calories you are supposed to?

2. Why would a girl who exercises 3 times a week consume a different amount of calories than a boy who exercises 3 times a week?