National Dairy Council® presents 200 life-size food images. These are an ideal tool for teaching nutrition and complement the 2015 Dietary Guidelines and the ChooseMyPlate.gov food guidance system.
National Dairy Council® Food Models make teaching about nutrition easy and fun. These versatile Food Models can help you teach the nutrition recommendations in the 2015 Dietary Guidelines and MyPlate. The Guidelines recommend that all Americans, ages 2 years and older make smart nutrition choices every day. A healthy eating plan is one that includes low-fat or fat free milk and milk products, fruits (especially whole fruits), a variety of vegetables from all of the subgroups, grains (at least half of which are whole grains), a variety of protein foods, and oils. A healthy eating plan is one that limits saturated fats and trans fats, added sugars, and sodium.

The Food Models are full-color images of foods in their common serving size. Nutrient information is provided on the back of the images in a format similar to the updated 2018 Nutrition Facts labels* and is helpful for teaching and comparing nutrient values. They are a perfect way for teaching “Balance, Variety and Moderation” — eating from all five food groups, eating a variety of foods within each food group and eating the recommended amounts from each food group every day. And, they are an ideal way for teaching portion size, a concept that's critical for helping children and adults balance their food intake to help achieve and maintain healthy weight.

These Food Models were designed by registered dietitian nutritionists to make it easy to teach nutrition as a stand-alone topic or as part of core curriculum subjects such as math or science. We have also included suggested lesson plans in this Leader Guide for using the Food Models as teaching tools. Other ideas for teaching with Food Models includes:

- Make food group mobiles or murals for an art project.
- Use Food Models to teach languages, shapes, and colors. For example, have students create a list of foods that are red, or learn how to say banana in French or Spanish.

Thank you for using Food Models. The Food Models depict their suggested serving size; follow the blue line when cutting out images.

*Added sugar was not included in all food model nutrition information due to unavailable reliable data at time of printing.
<table>
<thead>
<tr>
<th>Food Group</th>
<th>Age Group</th>
<th>Servings per Day</th>
<th>Examples of Common Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dairy Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium and vitamin D help builds strong bones and teeth</td>
<td>4-8 years old</td>
<td>2 1/2 cups</td>
<td>Milk – 1 cup (8 oz)</td>
</tr>
<tr>
<td></td>
<td>9-13 years old</td>
<td>3 cups</td>
<td>Yogurt – 8 oz</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Cheese – 1 1/2 - 2 oz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pudding – 1/2 cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Frozen yogurt – 1/2 cup</td>
</tr>
<tr>
<td><strong>Key Nutrients contributed to the diet:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vitamin D</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Potassium</td>
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<td></td>
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<tr>
<td>Protein</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein helps maintain healthy muscles</td>
<td>4-8 years old</td>
<td>4 oz equivalents*</td>
<td>Cooked lean meat, poultry, fish – 2-3 oz</td>
</tr>
<tr>
<td></td>
<td>9-13 years old</td>
<td>5 oz equivalents*</td>
<td>Egg – 1 (1 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Peanut butter – 2 Tbsp (2 oz)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Peas and beans – 1/2 cup cooked (2 oz)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Nuts, seeds – 1/3 cup (1.5 oz)</td>
</tr>
<tr>
<td><strong>Key Nutrients contributed to the diet:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B vitamins (niacin, thiamin, riboflavin, vitamin B₆)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vitamin E</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Zinc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td></td>
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</tr>
<tr>
<td><strong>Vegetable Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A helps keep eyes and skin healthy</td>
<td>4-8 years old</td>
<td>1 1/2 cups</td>
<td>Cooked vegetables – 1/2 cup</td>
</tr>
<tr>
<td></td>
<td>9-13 years old</td>
<td>2 – 2 1/2 cups</td>
<td>Chopped vegetables – 1/2 cup</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Raw, leafy greens – 1 cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vegetable juice – 3/4 cup</td>
</tr>
<tr>
<td><strong>Key Nutrients contributed to the diet:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fruit Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin C helps heal cuts and bruises</td>
<td>4-8 years old</td>
<td>1 – 1 1/2 cups</td>
<td>Apple, banana, orange, pear – 1 medium</td>
</tr>
<tr>
<td></td>
<td>9-13 years old</td>
<td>1 1/2 cups</td>
<td>Grapefruit – 1/2 fruit</td>
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<td></td>
<td></td>
<td></td>
<td>Cantaloupe – 1/4 fruit</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Dried fruit, raisins – 1/4 cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100% fruit juice – 3/4 cup</td>
</tr>
<tr>
<td><strong>Key Nutrients contributed to the diet:</strong></td>
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</tr>
<tr>
<td>Vitamin C</td>
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<td>Potassium</td>
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<td>Fiber</td>
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</tr>
<tr>
<td>Folate</td>
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<td></td>
</tr>
<tr>
<td><strong>Grain Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides energy and fiber to support digestion</td>
<td>4-8 years old</td>
<td>5 oz equivalents**</td>
<td>Bread – 1 slice</td>
</tr>
<tr>
<td></td>
<td>9-13 years old</td>
<td>5-6 oz equivalents**</td>
<td>Tortilla, roll, muffin – 1 small</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bagel, hamburger bun – 1/2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rice, pasta – 1/2 cup</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Ready to eat cereal – 1 cup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pancake, waffle – 1 (4 in diameter)</td>
</tr>
<tr>
<td><strong>Key Nutrients contributed to the diet:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbohydrates</td>
<td></td>
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<td></td>
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<tr>
<td>Fiber</td>
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<td></td>
<td></td>
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<tr>
<td>B vitamins (thiamin, riboflavin, niacin, and folate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minerals (iron, magnesium, and selenium)</td>
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</tbody>
</table>

† https://www.choosemyplate.gov/ was used as a reference for all information above

* In general, 1 ounce of meat, poultry or fish, 1/4 cup cooked beans, 1 egg, 1 tablespoon of peanut butter, or 1/2 ounce of nuts or seeds can be considered as 1 ounce-equivalent from the Protein Foods Group.

** In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, cooked pasta, or cooked cereal can be considered as 1 ounce-equivalent from the Grains Group.
Lesson Plan (Grade 1+)

Food Model Concentration

Source:
National Dairy Council

Objective:
This activity will familiarize students with the Food Models while testing their memory skills.

Activity Outcome:
Students will be able to identify Food Models and their associated Food Groups.

Materials and Advance Preparation:
- 42 food model cards – select 6 from each of the food groups as well as 6 Combination and 6 “Others”
- Bulletin board
- 5” squares of paper

What to Do:
1. Randomly mount the 42 food models on a bulletin board or flannel board. Cover each food with a 5” square of paper.
2. Number the squares from 1 through 42.

How to Play:
1. Divide participants into two teams.
2. The first participant calls out 2 numbers. The foods under those numbers are uncovered.
   - If the foods are both from the same food group (ex. Cheese and yogurt are both from the Dairy Group) the team receives the two food models.
   - If the foods do not come from the same food group, the foods are covered again.
3. A player from the other team then selects two numbers. Play continues until all the foods are matched. The team with the most food models wins.
Lesson Plan (Grade 1+)

Fishing for Food Models

Source:
National Dairy Council

Objective:
This activity will familiarize students with the Food Models while working on their motor skills.

Activity Outcome:
Students will be able to identify Food Models and their associated Food Groups.

Materials and Advance Preparation:
- Set of Food Models
- Paper clips (one per food model card)
- Ruler
- String
- Magnet

What to Do:
1. Put a paper clip on each food model card and spread them out on the floor or table.
2. Create a fishing pole by attaching a string to a ruler and tying a magnet to the string.

How to Play:
1. Each participant has a chance to fish until a food model is “caught”.
2. If the participant can correctly name the food and its food group, the model can be kept. If not, it goes back into the “water”.
3. Continue rotating through students until all food models have been “caught”.
4. The participant with the most models at the end of the game wins.

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Lesson Plan (Grade 2-8)

Sort Out MyPlate

Source:
Washington State Dairy Council

Objective:
This activity will familiarize participants with MyPlate while helping them identify specific foods, and the food groups in which they belong.

Activity Outcome:
Students will be able to name and categorize foods into the correct Five Food Groups (Dairy, Fruit, Vegetable, Grain, and Protein Foods).

Materials and Advance Preparation:
- Remove the “Combination” and “Others” category food models from the set
- One roll of painters or masking tape
- One piece of colored paper in purple, blue, red, green and orange
- Four hula hoops or baskets

What to Do:
1. Using the tape, make a large MyPlate on the floor.
2. Tape the pieces of colored paper in their correct places on the MyPlate outline.
3. Place approximately twenty food models in each of the four baskets or hula hoops randomly.
4. Divide students into four teams.

How to Play:
1. Explain that MyPlate has Five Food Groups and that each food group has a color. Talk about each food group and the types of foods that belong in each.
2. Explain that each team will be assigned a basket or hula hoop which will contain twenty food models.
3. The object of the game is for each team to place all the food models from their basket in the correct MyPlate food group.
4. Ask student teams to line up behind each basket or hula hoop.
5. The first person in line will pick out a food, run to the MyPlate outline and place it in the correct food group. The instructor will stand by the MyPlate to make sure each food model is placed correctly. If the food is placed incorrectly, her/she will need to take it back to their hula hoop or basket, tag the next team member, and go to the end of the line.
6. If a food is placed correctly he/she will run back to their team and tag the next person in line.
7. The first team to place all their food models on the MyPlate correctly wins!
Lesson Plan (Grade 2-8)

Food Group Memory Relay

Source:
Washington State Dairy Council

Objective:
Memory relay gives students the chance to work on concentration, memory and team building skills, while learning to categorize foods according to food groups.

Activity Outcome:
Students will be able to name and categorize foods into the correct Five Food Groups (Dairy, Fruit, Vegetable, Grain, and Protein Foods).

Materials and Advance Preparation:
- 25 food model cards (5 Dairy, 5 Protein, 5 Grain, 5 Fruit, and 5 Vegetable)
- 25 cones
- Determine a line the teams will use as a starting point
- From the starting line, measure 20 meters and scatter cones
- Randomly place all 25 food models under the 25 cones with the food label facing up (1 food model per cone)

What to Do:
1. Divide your class into 5 teams as evenly as possible.
2. Ask teams to line up in single file lines spaced evenly along the starting line.
3. Assign each of the 5 teams a different food group identity (Dairy, Fruit, Vegetable, Grain, and Protein Foods).

How to Play:
1. Explain to the teams that there is a food model under every cone, but only five of them are from their assigned food group.
2. The object of the game is for each team to collect all five of the food models from their food group as quickly as possible.
3. When the whistle is blown one member from each team will run to a cone and look to see if the food model is from his or her assigned food group.
4. If the food model is from their food group, the runner will pick it up and return to his/her team. When a high five is given to the next team member, it is that member’s turn to try and find a food model from their assigned food group. The team member who has just completed his/her turn, goes to the end of the line.
5. If the food model under the cone is NOT in their team’s food group, then that player must return to the team empty handed, give a high five to the next team member and go to the back of the line.
6. Each team needs to work together to remember which cones have been visited and which cones have not.
7. A team will sit down to signal they have all their five foods.
8. Ask each team to identify their food group and name the five food models to confirm there is a match.
Lesson Plan (Grade 4+)

Slow Food Movement

Source:
Washington State Dairy Council

Objective:
Participants will learn to categorize foods according to their food group and identify nutrients in the foods while moving.

Activity Outcome:
Students will be able to categorize foods into the correct Five Food Groups (Dairy, Fruit, Vegetable, Grain and Protein Foods).

Materials and Advance Preparation:
- Remove the “Combination” and “Others” category food models from the set
- Attach a string or lanyard to each food model to create a necklace. To do this you can punch holes in the food models or use painters tape

What to Do:
1. Divide your food models equally between the Five Food Groups and give each participant a necklace.
2. Designate the area in which the game will be played. A large area, cafeteria or gym works best.

How to Play:
1. Ask the players to look around at the food models they are wearing around their necks. Ask them which food group they belong to.
2. Next show them the area defined for the game. Encourage them to give themselves space from other players. You as the leader, will be calling out, “Step”. At this time, each player can move one of their feet in any direction.
3. The objective is to tag other players who are wearing food model necklaces with foods from ANOTHER food group. If a player is tagged, he/she will sit down right where they are – and become an “ankle biter”.
4. Every time the leader says, “Step” each player can take ONE step. If anyone moves both feet during a step, they sit down and become an ankle biter.

The ankle biters, sitting at all times, can tag the players still standing if they get close enough. However, ankle biters can only tag below the knee.

Play until there are only two players remaining and announce they are the “Co-Slow-Mo champs” for round one.

Have everyone stand up and play again after switching their food model necklace with another player.
Lesson Plan (Grade 3+)

A Day In the Life

Source:
Washington State Dairy Council

Objective:
Encourage children to think about the life of a fruit or vegetable starting from its “birth” on a farm.

Activity Outcome:
Students will be able to use creative skills to describe how foods grow, where they come from, and how they get to the stores we buy them at. They will also identify why this food is nutritious.

Materials and Advance Preparation:
- Set of Food Models
- Sheet of paper for each student with template opposite

What to Do:
1. Assign each child a fruit or vegetable food model. Pass out worksheet template as shown opposite.

A Day In the Life Worksheet

Name:_________________________________________
Date:__________________________________________

What’s your favorite fruit or vegetable?
_______________________________________________

Imagine what it would be like to live a day in the life of your fruit or veggie. Write a short story, poem, or song about it.

Questions to think about and get you started:
1. Where does it live?

Where does it grow?

What it would do each day?

2. What it would see, hear, and feel?

Where would it want to go?

3. What would it want to be when it grows up?

4. Look at back of the food model for nutrition facts. This food has a purpose for you as well. How does this food help you grow?

What nutrient does it give you that’s good for you?

Make copies of worksheet and cut out for each student

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Lesson Plan (Grade 4+)
Food Fight Tag

Source:
Washington State Dairy Council

Objective:
This highly energized game of tag requires participants to work together as a team and quickly identify food models and the food group in which they belong.

Activity Outcome:
Students will be able to categorize foods into the Five Food Groups (Dairy, Fruit, Vegetable, Grain and Protein Foods).

Materials and Advance Preparation:
- Remove the “Combination” and “Others” category food models from the set
- Attach a string or lanyard to each food model to create a necklace. To do this you can punch holes in the food models or use painters tape
- One or two identifying shirts or vests for the cleanup crew (taggers)
- Use 4 marker cones to define a 10 x 10 ft. “kitchen” area

How to Play:
1. Ask the teams to look at the food models they are wearing around their necks. Ask them to name which food group they belong to.
2. Next, show them the area defined for the game, the house. Then show the kitchen area. Explain to the teams that they are foods that have escaped from the kitchen in a food fight.
3. The goal of each food is to stay away from the cleanup crew. The cleanup crew goes around freezing the food by tapping them lightly on the arm or back. When a food is frozen it must stop where it is. If a food steps out of bounds (house) they are frozen.
4. For a food to “defrost”, a free or untagged food from its food group must link arms with the frozen food and escort them back to the kitchen where the cleanup crew cannot go. When a food is being escorted back to the kitchen, both foods are safe and cannot be tagged. The frozen food will then do five jumping jacks to defrost before they can go back in the game. A defrosted food can only stay in the kitchen for 5 seconds. No other foods should be in the kitchen area. The game ends when all the foods from a food group are frozen or when it is time to switch out the cleanup crew (taggers) with new participants.

What to Do:
1. Divide your class into 5 equal teams.
2. Pass out to each team food model necklaces from a single food group, (so each team represents one food group).
3. Designate the area in which the game will be played. This is the “house”. Note the boundaries. Within this area, create a ten by ten square, with cones or tape, which is the “kitchen”.
4. Select one or two individuals to be “it” the tagger/s. The individuals playing this role are the cleanup crew. Have them wear the identifying shirts or vests.

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Lesson Plan (Middle School+)

Food Model Continuum

Source: National Dairy Council

Objective:
This activity will familiarize students with the Food Models while helping them get to know each other better.

Activity Outcome:
Students will be able to identify Food Models and their relationships with different foods.

Materials and Advance Preparation:
- Set of Food Models
- Bulletin board
- 5 large sheets of paper

What to Do:
1. Prepare the following signs and display them on the walls of the room:
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

How to Play:
1. Prepare and hang signs as instructed before participants enter the room.
2. As participants enter the room, have them select a food model for a food they like.
3. Once everyone has arrived, read the following statements, one at a time. Have participants move under the sign that expresses how they feel about their food.
   - I always have this food around the house
   - I often eat this for a snack
   - This food is easy to prepare
   - This food is expensive
   - This food is nutritious
   - This food is high in calories
   - This food is high in fat
4. These questions can be modified to lead into the topic being discussed.
Lesson Plan (Middle School+)
Let’s Make a Meal

Source:
National Dairy Council

Objective:
Small groups work together to “make a meal” from the mystery lunch bag of food items.

Activity Outcome:
Students will be able to demonstrate their knowledge of the Five Food Groups by designing a complete meal through the identification of the missing food group.

Materials and Advance Preparation:
- Remove the “Combination” category food models from the set
- Lunch bag for each group of 2-3 participants
- List of Food Models located at back of leader guide

What to Do:
1. Break out students in small groups of 2-3 per team.
2. Place 5-7 food model cards in each lunch bag. Each bag should contain foods from only 4 of the 5 main food groups (Fruit, Vegetable, Dairy, Protein, and Grains), plus an additional food or two from any of those same 4 food groups. For example, one bag might contain milk (dairy), celery sticks (vegetable), a slice of cheese (dairy), and apple (fruit), of whole wheat bread (grain), and a candy bar. (A Protein Group food is missing).

How to Play:
1. Explain that the first step in eating a nutritious diet is to select foods from all of the Five Food Groups. Review the foods included in each food group. (Utilize the List of Food Models).
2. Distribute a lunch bag to each group. Let them know that each bag is missing an important food group item.
3. Groups determine “this missing item” and then exchange foods with other groups to “make a meal” that includes a food from all Five Food Groups.
4. The first group that designs a meal with all five food groups yells “Let’s Make a Meal.”

Advanced:
In each lunch bag, place 5-7 foods which make up a typical meal. Have other food models available for substitutions. Depending on the interests of the group, one of the following challenges could be given:
- To increase the amount of calcium in the meal
- To increase the amount of iron in the meal
- To increase the protein in the meal

Participants examine their foods and the nutrient values on the back and suggest ways to modify the meal.

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Lesson Plan (Middle School+)

Label It Nutrition

Source:
Western Dairy Association

Objective:
Volunteers practice reading food labels and food models by ranking foods for a particular nutrient. In small groups, students then look through labels and food models to generate a list of foods that meet a particular criterion.

Activity Outcome:
Students will be able to read a food model/Nutrition Facts label and use the information to compare the caloric or nutrient values of food.

Materials and Advance Preparation:
- Select food models to use
- Collect an assortment of food packages with Nutrition Facts labels

Teaching Plan:
1. Explain that with so much nutrition information available, it’s often difficult to know how to make good choices. Point out that one reliable, easy-to-find source of nutrition information is in the refrigerator or cupboard – on the Nutrition Facts label.

2. Explain that the backs of the Food Models are similar to the Nutrition Facts panel on food labels. If necessary, provide instructions on how to read the Nutrition Facts on a food label or the Food Models.

3. Ask a volunteer to come to the front of the room. Display four or five food model cards and have the volunteer rank the foods from highest to lowest in calories or by a particular nutrient – without using the information on the back. (For example, he/she might be asked to rank the following models by calories: frozen yogurt, brownie, and apple pie).

Solicit feedback from the rest of the group on the ranking. Then have the volunteer read the values for the nutrient in question, and determine if the ranking was accurate.

4. Ask for another volunteer. Have this person rank four foods by a particular nutrient, such as fiber, protein, or calcium. Get the rest of the group actively involved in verbally giving feedback. Then have the volunteer read the values for that nutrient and, if necessary, revise the ranking.

5. Once the group seems to understand the ranking process, divide students into groups of two to three. Assign each group a different nutrient. Ask them to look through the food models and food labels and come up with a list of four to five foods high or low in their assigned nutrient. (You may want to give the groups a specific minimum/maximum value for their nutrient.) When students have completed this task, have a representative from each group share their findings.

6. Wrap up the session by emphasizing how easy it is to use labels to compare foods and make informed choices.
Lesson Plan (High School+)

Labels and Math Skills

Source:
National Dairy Council

Objective:
This activity will familiarize students with reading food labels in a math setting.

Activity Outcome:
Students will be able to identify/compare nutrients on the food label and explain why they are important.

Materials and Advance Preparation:
- Set of Food Models
- Worksheet for each group of students
- Food Models to include:
  - **Group 1**: Chocolate Milkshake, 10% Fruit Juice, Iced Tea (Sugar Sweetened), Whole Milk
  - **Group 2**: Vanilla Milkshake, Fat Free Milk, Soft Drink (Regular), 2% Reduced Fat Chocolate Milk
  - **Group 3**: Fruit Smoothie, 2% Reduced Fat Milk, Iced Tea (Unsweetened), 1% Lowfat Chocolate Milk

How to Play:
1. Break students up into groups at tables or groups of desks. Give each group of students a group of food models as listed at left.
2. Have students use the labels to add up the following categories: calories, carbohydrates, and protein.
3. Have students take these numbers and perform an “analysis” of which drinks fit into the following categories: Lowest calories, highest calories, lowest carbohydrates, highest carbohydrates, lowest protein and highest protein. Have them express the analysis of each nutrient in terms of % of total calories.
4. Have students identify how each drink fits into a healthy dietary pattern. For example, “We would choose this drink less often because it has the highest fat” or “We would choose this drink when we are playing sports because it has the highest carbohydrates”.
5. Have students test their own nutrition knowledge by discussing why we prioritize certain nutrients for different functions.

Analysis Worksheet

Group Number ______

**Calories:**

___________________________________________________

___________________________________________________

**Carbohydrates:**

___________________________________________________

**Protein:**

___________________________________________________

Make copies of worksheet and cut out for each group.
Objective:
Participants learn a few key principles of eating well. They then go through a “cafeteria” of Food Model foods and select a meal – putting into practice the principles they just learned.

Activity Outcome:
Participants will be able to plan a meal using a few basic nutrition principles.

Materials and Advance Preparation:
- Food Models
- Paper plates or trays – one for each participant
- Optional calculator

What to Do:
1. Layout the food model cards on a long table, in a cafeteria style arrangement.
2. If using paper plates, cut 4-5 slits in each. The slits should be wide enough to hold the tabs from the food models.

How to Play:
1. Begin by discussing a food preparation/selection topic of interest to your audience, using the food models. Examples include:
   - Increasing your calcium intake
   - How to reduce caloric intake in a meal
   - Ways to add flavor to a low-sodium diet
   - Techniques to get children to try more fruits and vegetables

2. Point out the “cafeteria” of foods to participants. Explain that each of them will have a chance to go through the cafeteria line and select a meal they might eat.
3. Outline any criteria you would like participants to follow when selecting meals. For example, if calcium was discussed, participants might be instructed to choose a lunch that contains foods from all Five Food Groups and that provides at least 30% of the Daily Value for calcium.
4. Give participants a paper plate or tray and have them go through the cafeteria line.
5. When they’re finished, have participants total up the nutrient they are focusing on. For the calcium example, they might total up the calcium in their meals. Or you could act as “cashier” and check out their food selections using a calculator.
6. Have participants share their choices with the person next to them. Have several share their choices with the entire group. If the participant did not meet the criteria outlined, ask the rest of the group for suggestions on how the meal could be modified.

Variations:
Give participants one of the following challenges before they go through the cafeteria line:
- Plan a portable meal that could be taken on a hike or picnic
- Plan a meal that could be prepared in 30 minutes or less
- Plan a hot weather meal that doesn’t use the oven
- Plan a breakfast that could be prepared in 3 minutes
- Plan a lunch for your child to take to school or for you to take to work
- Plan meal that you could fix for just yourself
- Plan a meal that’s easy to chew
<table>
<thead>
<tr>
<th>Name of Lesson Plan</th>
<th>Age Group</th>
<th>Website Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>True or False Foods</td>
<td>Grade 2-8</td>
<td><a href="http://bit.ly/FMActivity1">http://bit.ly/FMActivity1</a></td>
</tr>
<tr>
<td>Food Fight Tag</td>
<td>Grade 4+</td>
<td><a href="http://bit.ly/FMActivity4">http://bit.ly/FMActivity4</a></td>
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<tr>
<td>The Hungry Snake</td>
<td>Grade 5+</td>
<td><a href="http://bit.ly/FMActivity6">http://bit.ly/FMActivity6</a></td>
</tr>
<tr>
<td>Label it Nutrition</td>
<td>Middle School+</td>
<td><a href="http://bit.ly/FMActivity10">http://bit.ly/FMActivity10</a></td>
</tr>
<tr>
<td>Think Your Drink</td>
<td>Middle School+</td>
<td><a href="http://bit.ly/FMActivity11">http://bit.ly/FMActivity11</a></td>
</tr>
</tbody>
</table>
**List of FOOD MODELS**

**DAIRY** Group

**CHEESE**
- AMERICAN CHEESE
- CHEDDAR CHEESE
- COTTAGE CHEESE
  - Creamed
  - Lowfat, 2% milkfat
- MOZZARELLA CHEESE
- MOUSSEREN CHEESE
- PARMESAN CHEESE
- STRING CHEESE
- SWISS CHEESE

**MILK**
- FAT FREE MILK
- 2% REDUCED FAT MILK
  - (2 models)
- WHOLE MILK
- CHOCOLATE MILK
  - 1% LOWFAT CHOCOLATE MILK
  - 2% REDUCED FAT CHOCOLATE MILK
  - 1% LOWFAT STRAWBERRY MILK

**MILKSHAKES/ Pudding/Ice Cream**
- Ice cream
  - Soft serve
- Ice cream
  - Hardened, 10% fat
  - Hardened, 16% fat
- Milkshake
  - Chocolate
  - Vanilla
- Pudding
  - Ready-to-eat instant

**YOGURT**
- Frozen yogurt
- Lowfat fruit-flavored yogurt
- Lowfat plain yogurt
- Nonfat plain Greek yogurt
- Drinkable yogurt

**SQUEEZEABLE YOGURT**

**PROTEIN** Group

**BEEF**
- Ground beef hamburger
  - Ground sirloin-round
  - Ground chuck
- Roast beef
  - Separable lean
  - Separable lean and fat
- Steak
  - Sirloin
  - T-bone
  - Rib Eye

**EGGS**
- Fried egg
- Hard-cooked egg
- Scrambled egg

**LEGUMES**
- Black-eyed peas
  - Dried, cooked
  - Canned
- Black beans
  - Dried, cooked
  - Canned
- Hummus
- Lentils
- Navy beans
  - Dried, cooked
  - Canned
- Refried beans
  - Pinto, dried, cooked
  - Refried canned
- Tofu
  - With calcium sulfate

**LUNCHMEAT MEATS**
- Bologna
  - Beef
  - Turkey
- Hot dog
  - Beef hot dog

**NUTS/SEEDS**
- Almonds
- Peanut butter
- Peanuts
  - Oil-roasted
  - Sunflower seeds
  - Dry-roast
  - Oil-roast
- Walnuts
- Pork
  - Bacon
    - Canadian bacon
  - Ham
  - 11% fat
  - 5% fat
  - Turkey
- Pork chop
  - Chop broiled
  - Pan-roasted
- Italian sausage

**POULTRY**
- Fried chicken
  - Flour coated
  - Batter-dipped
- Chicken nuggets
- Roasted chicken
  - Meat and skin
  - Meat only
- Turkey
  - Dark meat
  - Light meat

**SEAFOOD**
- Fish sticks
  - Frozen, oven-heated
- Halibut
- Salmon
  - Fresh, baked, broiled
  - or microwaved
  - canned, fish and bones
- Shrimp
  - Boiled
  - Breaded and fried
- Tuna
  - In water
  - In oil

**VEGETABLE** Group
- Green beans
  - Fresh, cooked
  - Frozen, cooked
- Broccoli
  - Fresh, cooked
- Cabbage
  - Fresh, cooked
- Baby carrots
  - Fresh, cooked
- Cauliflower
  - Fresh, cooked
- Celery
  - Corn
  - Frozen, cooked
  - Canned, cream style
  - Fresh, cooked
- Lettuce
  - Iceberg
  - Romaine
  - Loose leaf
- Green peas
  - Canned, cooked
  - Frozen, cooked
- Snow peas
  - Frozen, cooked
- Green pepper
  - Baked potato
  - Hashed brown potatoes
  - Mashed potatoes
  - Sweet potato

**SPINACH**
- Fresh
  - Fresh, cooked
- Winter squash
  - Baked
  - Tomato
  - Fresh
  - Canned
  - Tomato juice
  - Toasted salad
  - Zucchini
  - Fresh
  - Fresh, cooked

**FRUIT** Group
- Apple
- Dried apple rings
  - Apple sauce
- Dried apricots
- Avocado
  - Sliced
  - Pureed
- Banana
- Blueberries
- Cantaloupe
- Fruit cocktail
  - In juice
  - In heavy syrup

**GRAIN** Group
- Bagels/
  - Biscuits
- Bagel
  - Biscuit
  - Bread
  - Pita bread
  - Rye bread
  - Kye
  - Pumpernickel
  - White bread
  - Whole wheat bread
  - Whole wheat
cracked wheat

**MUFFINS**
- English muffin
  - Regular
  - Large
  - Chicken caesar wrap
  - Fish sandwich
  - Without cheese
  - With cheese
  - Peanut butter and jelly sandwich
  - Roast beef sandwich
  - Submarine sandwich
  - Turkey sandwich

**SOUP**
- Chicken noodle soup
  - Canned
  - Dehydrated
- Clam chowder
  - With whole milk
  - With water
- Cream of tomato soup
  - With whole milk

**“OTHERS” Category**

**CHIPS AND RELATED PRODUCTS**
- Popcorn
  - Buttered
  - Air-popped
- Potato chips
  - Pretzels
  - Tortilla chips
- Tortilla
- Corn

**CONDIMENTS**
- Ketchup
  - Mustard
  - Pickle
  - Dill
  - Fats and oils
  - BEEF GRAVY
  - Gravy, beef, canned
  - Butter
  - Cream cheese
  - Light ranch dressing
  - Italian dressing
  - Mayonnaise
  - Sour cream

**OTHER BEVERAGES**
- Iced tea
  - Sugar sweetened
  - Unsweetened
- Soft drink
  - Regular
  - Low-calorie

**SWEETS**
- Angel food cake
  - Brownie
  - Chocolate cake
  - Chocolate candy bar
  - Dark chocolate
  - Chocolate chip cookies
  - Homemade
  - Commercial
- Doughnut
  - Cake-type, plain
  - Yeast, glazed
- Gelatin
  - Granola bar
  - Jelly
  - Maple syrup
  - Pie
  - Apple
  - Pecan
  - Sugar
  - Sweet roll
  - Fruit
  - Cinnamon

**10% JUICE DRINK**
- This list includes all the foods contained in a set of Food Models. Foods whose nutrient values appear on the back of the model are listed below the appropriate Food Model.