

name _____

Time Frame

2-3 class periods, time outside of class to track foods and beverages consumed for one day

Overview

Students will create and categorize an alphabetical list of foods into the groups that are recommended as part of a balanced diet. They then will learn how many servings of each food group kids their age need and measure and weigh recommended daily servings for sample foods. Finally, they will be introduced to MyPlate and track their own diet compared to MyPlate recommendations for one day.

Objectives

- Students will categorize a list of foods into food groups.
- Students will measure and/or weigh daily recommended servings of several foods.
- Students will track their diet for one day and organize foods and beverages consumed into a MyPlate graphic.
- Students will identify one strategy for improving their diet.

Materials

- Five paper plates
- Markers
- Chart paper
- Measuring cups (one per small group)
- Small scales (one per small group)
- One item from each food group that would be easy for students to measure, such as sliced bananas or apples (fruit); baby carrots or canned corn (vegetables); milk or yogurt (dairy); peanut butter or scrambled eggs (protein); and dried cereal or whole-grain pretzels (grain).
- Access to the Internet
- “My Plate is Great Log” student handout (one per student)



Lesson Background

It's important to eat a variety of foods from each of the five major food groups to stay healthy. Fats, oils and sweets should be eaten in moderation.

Eggs can help provide us with good nutrition. Eggs contain high-quality protein and, as egg carton labels show, a lot of needed vitamins and minerals. Eggs are included in the protein group. After mother's milk, they provide the most complete protein available. Along with meat, poultry, fish, seafood, milk and soybeans, eggs contain complete protein because they provide the essential amino acids (protein building blocks) our bodies can't make. Most grains, legumes (like dried beans), nuts and vegetables contain incomplete protein and must be carefully combined with each other or with complete protein foods for a balanced diet.

Some fat in our diet is needed, but too much can cause our bodies to make too much cholesterol. Having a lot of cholesterol in the blood isn't good for our hearts. To help keep blood cholesterol low, follow recommendations from the United States Department of Agriculture (USDA) that can be found at www.choosemyplate.gov and eat fats sparingly.

MyPlate (www.choosemyplate.gov) illustrates the five food groups that are the building blocks for a healthy diet using a familiar image—a place setting for a meal. Before students eat, they should think about what goes on their plate or in their cup or bowl. To build a healthy plate, young children need to eat a balanced diet from the following food groups:

Fruits - Any fruit or 100% fruit juice counts as part of the fruit group. Fruits may be fresh, canned, frozen or dried and may be whole, cut-up or pureed. Most fruits are naturally low in fat, sodium and calories. None have cholesterol. Fruits are sources of many essential nutrients that are underconsumed, including potassium, dietary fiber, vitamin C and folate (folic acid). The USDA recommends that we make half of our plate fruits and vegetables. It is recommended that children, ages four to eight, should have one to one and a half cups of fruit each day.

Vegetables - Any vegetable or 100% vegetable juice counts as a member of the vegetable group. Vegetables may be raw or cooked; fresh, frozen, canned or dried/dehydrated; and may be whole, cut-up or mashed. Vegetables are important sources of many nutrients, including potassium, dietary fiber, folate (folic acid), vitamin A and vitamin C. The USDA recommends that we make half of our plates fruits and vegetables. It is recommended that children, ages four to eight, should have one and a half cups of vegetables each day.

Grains - Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product. Bread, pasta, oatmeal, breakfast cereals, tortillas and grits are examples of grain products. The USDA recommends that we make half our grains whole grains. Grains are important sources of many nutrients, including dietary fiber, several B vitamins (thiamin, riboflavin, niacin and folate) and minerals (iron, magnesium and selenium). It is recommended that children, ages four to eight, should have five ounces of grains each day.

Protein - All foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts and seeds are considered part of the protein group. Meat, poultry, fish, dry beans and peas, eggs, nuts and seeds supply many nutrients. These include protein, B vitamins (niacin, thiamin, riboflavin and B6), vitamin E, iron, zinc and magnesium. It is recommended that children, ages four to eight, should have four ounces of protein each day.

Dairy - All fluid milk products and many foods made from milk are considered part of this food group. Most Dairy Group choices should be fat-free or low-fat. Calcium is used for building bones and teeth and in maintaining bone mass. Dairy products are the primary source of calcium in American diets. Diets that provide 3 cups or the equivalent of dairy products per day can improve bone mass. It is recommended that children, ages four to eight, should have two and a half cups of dairy each day.

Engage (20-30 minutes)

Note: Before class starts, hang five pieces of chart paper around the room with markers beside them. Next to each sheet of paper, hang a paper plate with one of the food groups (fruits, vegetables, grains, dairy or protein) written on it.

1. Divide students into five groups and ask each group to write the ABC's vertically on a sheet of paper.
2. Challenge each group to identify and write the name of one food or beverage that starts with each letter of the alphabet. You may need to help them with certain letters such as Q (quesadilla, quiche); Y (yams, yogurt, yellow peppers); and Z (zucchini). They may need to skip the letter X! The activity could be modified for younger students by developing the list as a class rather than in small groups.
3. Ask students to share what they know about each food group. You may want to add information from the "lesson background."

4. Challenge each group to take turns, in round robin fashion, sorting their “A” foods into food groups by listing the name of the food under the appropriate plate. For example, “apple” would go under “fruits,” and “asparagus” would go under vegetables. Continue to the “B” foods and so on.
5. Ask students to look at the lists they have created and share ideas for strategies they could use to help them analyze their data and compare how many foods they listed in each group. Ideas include using colored blocks or tally marks to count the number of foods listed for each group. Together, count the number of foods they named in each food group. Then, have students determine which group has the most, which has the least and which have more and less than the others.

Explore (20-30 minutes)

1. Explain to students that different foods/food groups give us different vitamins and nutrients that we need to help us grow and stay healthy. So it is important to eat a balance of all food groups each day.
2. Show students the five foods you brought to class. (See materials list). Challenge students to name the appropriate group for each food.
3. Give each group a measuring cup and a small scale. Direct students to point to the $\frac{1}{2}$ cup and one cup line on the measuring cup. Explain that we use measuring cups to measure many types of food and ingredients. Then, have students identify the one ounce mark on the scale. Explain that scales are also used to measure certain foods.
4. Ask students if they know how many cups or ounces of each food group kids their age are supposed to have each day. Encourage them to predict answers and then share the correct answers from the background information.
5. Using the measuring cup and scale, demonstrate for students how much of each food they are supposed to eat or drink each day. Older students can measure the foods themselves.

Explain (30 minutes)

Ask each student to think of a food or beverage from their ABC list to represent. Challenge them to come up with five clues about the food they have selected that will help the rest of the class guess what food they have chosen. Their clues must include their food group, the number of servings they should have of the food each day and at least one nutrient their food gives them to help them stay healthy. The other clues could relate to the meal at which they are typically eaten, their color, a brand name, etc. You may want to model the following example:

1. I am yellow and white.
2. I have a shell.
3. Kids my age are supposed to have four oz. of my food group each day.
4. I give you lots of good protein.
5. I can be scrambled, fried or hard-boiled.

Answer: Eggs!

Elaborate (10 minutes for the explanation, time outside of class for tracking)

1. Now, that they have learned about different food groups, direct students online to http://www.choosemyplate.gov/downloads/mini_poster_English_final.pdf where they will find a mini-poster of the USDA's MyPlate visual organizer.
2. Ask students what they think MyPlate represents. Explain that MyPlate is an easy way for them to remember that they should have different food groups on their plate at each meal and how much of them they should try to consume. It is suggested that vegetables and fruits should make up about half of the plate. The other half should be whole grains and low-fat proteins. Adding a side dish of low-fat dairy completes a balanced meal. Students may ask about other foods such as sweets or chips. Those foods are also fine to consume but in small amounts. This is called moderation. Remind students that they may not have all of the food groups at every meal but it's important to have a balance of all of the food groups every day.
3. Distribute the "My Plate is Great Log" handout to each student.
4. Review the directions, which ask students to list or draw pictures of the food and beverages they consume in one day and categorize them into the appropriate food group on MyPlate.
5. Direct students to choose a day to track their diet and complete the worksheet.

Evaluate

1. Once students have completed their logs, direct them to answer and present the answers to the questions at the bottom of the page.
2. Finally, have each student complete the following sentence, "I can make my plate great by

_____."

Standards

CCSS ELA Standards

- **CCSS.ELA-Literacy.W.K-3.8** - Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source and integrate the information while avoiding plagiarism.
- **CCSS.ELA-Literacy.W.3.2** - Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- **CCSS.ELA-Literacy.SL.K-3.1** - Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- **CCSS.ELA-Literacy.SL.K-3.3** - Evaluate a speaker's point of view, reasoning and use of evidence and rhetoric.
- **CCSS.Literacy.SL.K.5** - Add drawings or other visual displays to descriptions as desired to provide additional detail.
- **CCSS.Literacy.SL.1.5** - Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts and feelings.

CCSS Math Standards

- **K.CC.4** - Understand the relationship between numbers and quantities; connect counting to cardinality.
- **K.CC.6** - Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- **K.MD.1** - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

- **1.MD.4** - Organize, represent and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

National Science Education Standards

- **4FSPSPS.2** - Individuals have some responsibility for their own health.
- **4FSPSPS.3** - Nutrition is essential to health.

My Plate is Great Log

Below is a picture of MyPlate. MyPlate can help you remember to include different food groups on your plate at each meal. It also shows how much of each food group you should have. Vegetables and fruits should be about half of your plate. The other half should be whole grains and low-fat proteins. Low-fat dairy is important too. Other foods like sweets and chips are okay too but in small amounts.

Pick a day to keep track of what you eat and drink.

Write or draw a picture of everything you eat or drink in the part of the plate that shows its food group. For example, you would write or draw a picture of an apple in the fruits section. Answer the questions at the bottom of the page.



1. Which food groups did you eat the most?
2. Which food groups did you eat the least?
3. Did you eat foods from every food group? If not, which food groups do you need to eat more?
4. Finish this sentence: I can make my plate great by _____

