**OBJECTIVES:**

Introduce the program to the children and explain how the lessons will build off their knowledge from week to week (if applicable). Explain why healthy eating is important, and that you will be teaching basic concepts to help the student make healthy choices. Introduce the USDA MyPlate model to help them understand balanced meals, portion control and food groups. Emphasize the MyPlate principles for healthy eating: make ½ your plate fruits and vegetables; make ½ your grains whole; eat lean protein and dairy (in smaller quantities).

**TIME:**

One hour: 30 minutes instruction, 30 minutes activity

**MATERIALS:**

- paper plates - two per child or one plate and one plate print out per child
- food image cutouts [Appendix B]
- glue sticks
- celery sticks
- light cream cheese
- cran-raisins
- raisins
- almonds
- cream cheese
- plates
- napkins
- knives
- bowls
- MyPlate visuals [Appendix A]

**PREPARATION:**

Print out MyPlate poster visual, cut out food images for food plate activities.

---

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.
**Introduction**

Introduce the teachers. Talk about why we are here: to learn about food and how to make healthful decisions.

Introduce children. Invite the students to create name cards using a folded piece of paper. On one side have them write their name and on the other side their favorite food. Collect the cards after class and bring to all of the following classes.

Lead the children in setting classroom guidelines.

Ask the students to share what they think it means to live a healthy life.

Illustrate a plate, hiding the names of the various food groups (Appendix A). Ask children to name the different food groups and point out their position on the plate.

---

**Background Information**

What is MyPlate? MyPlate was developed by the USDA as a visual representation of what a healthy diet may include. The image is meant to encourage people to be thoughtful about what they include in their daily meals, taking into consideration variety and portion control. Although the image depicts a plate and glass with all five food groups, it is not necessary for every meal to include food from each food group. For instance, if fruit is not a typical part of someone's breakfast, eating fruit as a snack between meals is a great way to meet daily guidelines. The overall message of MyPlate is to include a variety of fruits and vegetables as half of your plate or diet. The other half should include lean sources of protein and grains, with at least half of your grains being whole grains. The MyPlate image also includes a glass of milk to encourage dairy consumption, but considering that about a quarter of the calories in a typical child’s diet come from beverages, it is important to discuss other healthy beverage options as well.

Current daily nutrition guidelines for children. The following are estimated needs that vary depending on age, sex, activity level, height and weight.

<table>
<thead>
<tr>
<th></th>
<th>4-8 years of age</th>
<th>9-13 years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>1200-2000</td>
<td>1400-2600</td>
</tr>
<tr>
<td>Protein</td>
<td>4 oz</td>
<td>5 oz</td>
</tr>
<tr>
<td>Fruits</td>
<td>1-2 cups</td>
<td>1.5-2 cups</td>
</tr>
<tr>
<td>Vegetables</td>
<td>1.5-2.5 cups</td>
<td>2-3.5 cups</td>
</tr>
<tr>
<td>Grains</td>
<td>4-6 oz</td>
<td>5-9 oz</td>
</tr>
<tr>
<td>Dairy</td>
<td>2.5-3 cups</td>
<td>2.5-3 cups</td>
</tr>
</tbody>
</table>

Visualizing portion sizes. It can be challenging to look at a plate of food and determine whether the portion sizes are appropriate. To help visualize portion sizes of food, use familiar objects that are about the same size as a specific portion.

- Deck of cards: 3 oz of meat
- Four dice: 1 oz of cheese
- Ping-pong ball: 2 tbsp peanut butter
- Tennis ball: 1 cup grains, fruit, vegetables, or 1 medium piece of fruit
### INTRODUCTION CONTINUED

Introduce MyPlate using the poster visual. Describe the different food groups: fruits, vegetables, protein, grains and dairy. Have students give examples of foods that make up each group. Discuss the group proportions on the plate (Appendix A). Inform students of appropriate portion sizes for each: 1-1½ c fruit, 1½-2 c vegetables, 3 oz grains and 4-5 oz protein. Help students visualize sizes of portions.

**Discussion starters:**
- What’s your favorite food group?
- How many different food groups have you eaten today?
- Have you seen the MyPlate image before?
- Does your plate look like this at dinner?
- What does your favorite meal look like compared to MyPlate?
- Why do you think it’s important to follow MyPlate?

### ACTIVITY

- **Make paper plate collages.** Hand out blank paper plates to students, and scatter the food group icons in the center of each table. Ask students to assemble a plate that meets the MyPlate requirements. While students assemble their plates, the teacher should assemble one too. Review the teacher’s example; then have students share what’s on their plate.  
  **Discussion starters:**
  1. Did anyone end up with a food that isn’t their favorite? What would you replace that food with from the same food group?
  2. What could a vegetarian put on their plate to replace meat?
  3. What’s missing from this meal? What kind of beverage should we have with it?  
  **Optional:** While the students are assembling their plates, the teacher can also put together some plates that are not correctly assembled.
  1. What’s wrong with this plate? What food group is missing? What food group is represented twice?
  2. Have students find the missing piece. Which one should I replace?  
  **Optional:** Some food icons that we have included represent dishes that have ingredients from multiple food groups!
  1. Are there any foods left in the center of the table? What food groups are they?
  2. How do you place foods that have ingredients from two groups? Would you eat twice as much of them?
  3. What are some other foods you eat that don’t fall into just one food group?

- **Make ants on a log:** Have children guess what each of the toppings are before starting and determine what food groups each ingredient belongs to. Let them make their own ants on a log by filling celery with cream cheese and topping with raisins.

### WRAP UP

**Review the lesson.** Sample questions:
- Who can name all of the food groups on MyPlate?
- Which is the biggest food group on MyPlate?
- Which group is the hardest for you to fill?

**Take home:** Give each student a copy of the newsletter and take home recipe: tuna noodle casserole.
TUNA NOODLE CASSEROLE

INGREDIENTS

serves four
1 6 ounce can, drained tuna
1 cup raw whole grain or egg macaroni
1 chopped onion
1 14 ounce can of drained peas (or vegetable of choice)
1 10.5 ounce can of 98% fat free cream of mushroom soup
1 cup skim milk
6 tablespoons low-fat cheddar cheese

DIRECTIONS

1. Preheat oven to 350 degrees.

2. Spray 8 x 8 pan with non stick spray.

3. In a bowl, mix tuna, noodles, onions, peas, soup and milk.

4. Pour into pan and make sure noodles are covered with sauce. Sprinkle with cheese.

6. Cover and bake for 1 hour.

Tuna Noodle Casserole is an easy favorite! This recipe incorporates all of the items that are needed for a meal to meet the MyPlate standards. Tuna is an excellent and convenient source of protein, whole grain or egg macaroni noodles are just what you need to fulfill your grain portion on your plate, and the peas (or carrots) make a great vegetable component.
Before you eat, think about what and how much food goes on your plate or in your cup or bowl. Over the day, include foods from all food groups: vegetables, fruits, whole grains, low-fat dairy products, and lean protein foods.

- Make half your plate fruits and vegetables.
- Make at least half your grains whole.
- Vary your protein food choices.
- Switch to skim or 1% milk.
<table>
<thead>
<tr>
<th>Vegetables</th>
<th>Fruits</th>
<th>Grains</th>
<th>Dairy</th>
<th>Protein Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat more red, orange, and dark-green veggies like tomatoes, sweet potatoes, and broccoli in main dishes. Add beans or peas to salads (kidney or chickpeas), soups (split peas or lentils), and side dishes (pinto or baked beans), or serve as a main dish. Fresh, frozen, and canned vegetables all count. Choose &quot;reduced sodium&quot; or &quot;no-salt-added&quot; canned veggies.</td>
<td>Use fruits as snacks, salads, and desserts. At breakfast, top your cereal with bananas or strawberries; add blueberries to pancakes. Buy fruits that are dried, frozen, and canned (in water or 100% juice), as well as fresh fruits. Select 100% fruit juice when choosing juices.</td>
<td>Substitute whole-grain choices for refined-grain breads, bagels, rolls, breakfast cereals, crackers, rice, and pasta. Check the ingredients list on product labels for the words &quot;whole&quot; or &quot;whole grain&quot; before the grain ingredient name. Choose products that name a whole grain first on the ingredients list.</td>
<td>Choose skim (fat-free) or 1% (low-fat) milk. They have the same amount of calcium and other essential nutrients as whole milk, but less fat and calories. Top fruit salads and baked potatoes with low-fat yogurt. If you are lactose intolerant, try lactose-free milk or fortified soymilk (soy beverage).</td>
<td>Eat a variety of foods from the protein food group each week, such as seafood, beans and peas, and nuts as well as lean meats, poultry, and eggs. Twice a week, make seafood the protein on your plate. Choose lean meats and ground beef that are at least 90% lean. Trim or drain fat from meat and remove skin from poultry to cut fat and calories.</td>
</tr>
</tbody>
</table>

For a 2,000-calorie daily food plan, you need the amounts below from each food group. To find amounts personalized for you, go to ChooseMyPlate.gov.

<table>
<thead>
<tr>
<th>Eat 2½ cups every day</th>
<th>Eat 2 cups every day</th>
<th>Eat 6 ounces every day</th>
<th>Get 3 cups every day</th>
<th>Eat 5½ ounces every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>What counts as a cup? 1 cup of raw or cooked vegetable or vegetable juice; 2 cups of leafy salad greens</td>
<td>What counts as a cup? 1 cup of raw or cooked fruit or 100% fruit juice; ½ cup dried fruit</td>
<td>What counts as an ounce? 1 slice of bread; ½ cup of cooked rice, cereal, or pasta; 1 ounce of ready-to-eat cereal</td>
<td>What counts as a cup? 1 cup of milk, yogurt, or fortified soymilk; ½ ounce natural or 2 ounces processed cheese</td>
<td>What counts as an ounce? 1 ounce of lean meat, poultry, or fish; 1 egg; 1 Tbsp peanut butter; ½ ounce nuts or seeds; ½ cup beans or peas</td>
</tr>
</tbody>
</table>

Cut back on sodium and empty calories from solid fats and added sugars

Look out for salt (sodium) in foods you buy. Compare sodium in foods and choose those with a lower number.

Drink water instead of sugary drinks. Eat sugary desserts less often.

Make foods that are high in solid fats—such as cakes, cookies, ice cream, pizza, cheese, sausages, and hot dogs—occasional choices, not every day foods.

Limit empty calories to less than 260 per day, based on a 2,000 calorie diet.

Be physically active your way

Pick activities you like and do each for at least 10 minutes at a time. Every bit adds up, and health benefits increase as you spend more time being active.

Children and adolescents: get 60 minutes or more a day.

Adults: get 2 hours and 30 minutes or more a week of activity that requires moderate effort, such as brisk walking.
MEATBALLS

TURKEY

CABBAGE

CARROTS

CUCUMBERS

EGGPLANT
Organization name:

Program host site (if different from your organization):

Program dates:

Step 1: On the first day of your class you will give students the pre-test. Explain that we want to see what they already know about healthy eating and where food comes from, and that they should fill out the worksheet as well as they can but not to worry if they don’t know all the answers. Make sure that they know they won’t be graded.

Step 2: Take attendance at each class. This way when you are reviewing the post-test you will be able to see if achievement gaps result from not grasping a new concept, or from missing a class.

Step 3: On the last day of class you will give students the post-test.

Step 4: Use the scoring rubric in this document to grade the pre- and post-tests. Score questions 1-11, which are about knowledge, separately from questions 12-15, which are about behavior change.

Step 5: Match each student’s pre-test to his or her post-test and complete the following table:

<table>
<thead>
<tr>
<th>Total number of students who completed both the pre- and post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students who increased their knowledge</td>
</tr>
<tr>
<td>(increase in total score on questions 1-11)</td>
</tr>
<tr>
<td>Number of students who increased the frequency of communicating with family about eating fruits and vegetables</td>
</tr>
<tr>
<td>(increase in score of question 12)</td>
</tr>
<tr>
<td>Number of students who increased their willingness to try new healthy foods</td>
</tr>
<tr>
<td>(increase in score of question 13)</td>
</tr>
<tr>
<td>Number of students who increased the frequency of preparing food with family</td>
</tr>
<tr>
<td>(increase in score of question 14)</td>
</tr>
<tr>
<td>Number of students who prepared any recipes and snacks from the newsletters</td>
</tr>
<tr>
<td>(post-test only: number who responded “Yes” to question 15)</td>
</tr>
</tbody>
</table>

Step 6: What did you learn from your students’ pre- and post-tests? Did class attendance have any effect?

Please send completed form and any other feedback to info@campuskitchens.org.
1. What are the 5 food groups on the MyPlate?
   a. __________ b. ____________ c. __________ d. __________ e. ________________

2. At lunch and dinner, fruits and vegetables should take up ________ of your plate.
   a. less than half  b. about half  c. all  d. none

3. Healthy foods come in all the colors of the rainbow. Name a healthy food that is the color......
   RED:______________________  GREEN:__________________________
   ORANGE:__________________  BLUE:____________________________
   YELLOW:___________________  PURPLE:__________________________

4. Circle all the grains below that are whole grains:
   a. popcorn  b. white bread  c. oatmeal
   d. whole wheat pasta  e. white rice

5. Of all the grains you eat every day, how many should be whole grains?
   a. None  b. less than half  c. at least half

6. Meat contains protein, but so do a lot of other foods. Circle all the foods below that have a lot of protein:
   d. Milk  e. Carrots  f. Beans

7. Some proteins are lean proteins, and some are full-fat proteins. For each protein example circle what kind of protein it is:
   White meat chicken (circle one): Lean protein  OR  full fat protein
   Whole milk: (circle one): Lean protein  OR  full fat protein
   Black beans: (circle one): Lean protein  OR  full fat protein
   Bacon: (circle one): Lean protein  OR  full fat protein
   Fish: (circle one): Lean protein  OR  full fat protein
8. Where does food come from originally?
   a. The store  
   b. The refrigerator  
   c. A bag or can  
   d. A farm or garden  
   e. A restaurant  
   f. The kitchen at home

9. Did you know that potatoes are the root of the plant they grow on? All of the fruits and vegetables that we eat are a part of a plant. Match the food on the LEFT with the part of the plant they are on the RIGHT by drawing a line from one side to the other.
   - Lettuce  
   - Tomato  
   - Carrot  
   - Celery  
   - Broccoli  
   - Leaf  
   - Root  
   - Stem  
   - Flower  
   - Fruit

10. How many minutes of active play time or exercise should you have every day?
   a. 10 minutes  
   b. 30 minutes  
   c. 60 minutes or more  
   d. none

11. Circle all of the activities that count as physical activity:
   a. Walking with my family after dinner  
   b. Taking the stairs  
   c. Playing a video game  
   d. Playing basketball at recess  
   e. Taking the bus to school  
   f. Dancing

12. About how often do you talk to your family about eating more fruits and vegetables?
   a. Never  
   b. Rarely  
   c. Once a month  
   d. Once a week  
   e. Every day

13. How often do you try new healthy foods like new fruits, vegetables or whole grains?
   a. Whenever they are offered  
   b. Sometimes if it looks good  
   c. Never, I only like the foods I already eat

14. About how often do you prepare food with your family?
   a. Never  
   b. Rarely  
   c. Once a month  
   d. Once a week  
   e. Every day

15. Did you ever make any of the recipes or snacks from the newsletters with your family? (Circle one) Yes / No
Dear families,

Your student is participating in a nutrition education series through a partnership between [partners] and [partners]. After each lesson, they will bring home a grocery bag with a newsletter and recipe with non-perishable ingredients. We hope you will use the recipe and ingredients to cook with your student and use the newsletters to continue talking about healthy living at home!

Our first lesson was all about MyPlate. MyPlate was created by the USDA to show how the five food groups (fruits, vegetables, grains, protein and dairy) can fit into a healthy diet. MyPlate helps us visualize how much of each food group we should include in our meals throughout the day. We will talk more about each of the food groups in the upcoming classes, but the overall message from MyPlate is to eat a variety of fruits, vegetables, whole grains, lean sources of protein and low-fat dairy.

**Cook Up a Conversation**
- What is your favorite food from each food group?
- What food group do you eat the most? What food group do you eat the least?
- Do your plates look like MyPlate when you eat at home? What about when you eat outside of home?

**Mindful Munching**
Don’t worry if you don’t eat all five food groups with each meal!

Healthy snacks can be a great way to meet your daily nutritional needs. Raw veggies with bean dip, nonfat greek yogurt, a piece of fruit and popcorn are all great options.

**Family Activity: Grocery Store Scavenger Hunt!**
Take your student on a trip to the grocery store and help them find a healthy food from each food group. Use the space below to write the name of the food and where it was located in the store.

<table>
<thead>
<tr>
<th>Name of Food</th>
<th>Fruit</th>
<th>Vegetable</th>
<th>Grain</th>
<th>Protein</th>
<th>Dairy (or other source of calcium)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>