Build a Healthy Plate
Featuring MyPlate and 2010 Dietary Guidelines
Grade: 9-12

I. Nutrition Education Goal & Objective:
   Goal 1: Students will comprehend concepts consistent with USDA guidance related to eating and physical activity for good health
   Objective: As a result of Pennsylvania’s SNAP-Ed plan, students will know, understand, analyze, and apply concepts, as developmentally appropriate, that are consistent with USDA guidance about the benefits of:
   1. Eating from each food group each day
   Goal 2: Students will apply skills consistent with USDA guidance related to eating and physical activity for good health
   Objective: As a result of Pennsylvania’s SNAP-Ed plan, students will be able to:
   1. Assess personal health practices

II. Pennsylvania Educational Standards:
   A. 10.1 Concepts of Health
   B. 10.2 Healthful Living
   C. 10.4 Physical Activity
   D. 11.3 Food Science and Nutrition

III. Outcomes:
   A. Students will select a healthy diet based on 2010 Dietary Guidelines and MyPlate.
   B. Students will identify nutrient-dense foods and foods high in empty calories from solid fats and added sugars.
   C. Students will explain the health risks associated with consuming a diet high in calories, SOFAS, and sodium
   D. Students will describe the importance of daily physical activity.
   E. Students will assess their current dietary and physical activity habits using MyPlate.

IV. Materials:
   A. Visuals: MyPlate Poster
   B. Laptop/Projector with PowerPoint presentation
   C. Handout: "Get to Know MyPlate Food Groups"
   D. Handout: "MyPlate" double-sided info sheet
   E. Alternate Activity: "MyPlate Worksheet"
   F. Supplies: Pencils, Handwipes
   G. Food Tasting
   H. Reinforcement that conveys the appropriate nutrition message.
I. Caregiver Newsletter: *MyPlate*

J. Extension Lessons for teacher

V. Procedure:

A. *Introductory*
   1. Introduction of educator and lesson topic
   2. Review last lesson, if applicable

B. *Developmental*
   1. Slide 1: Build a Healthy Plate Featuring MyPlate and the 2010 Dietary Guidelines
      a) Today we will discuss how to build a healthy plate using MyPlate and the 2010 Dietary Guidelines for Americans. MyPlate is the new icon that has replaced MyPyramid. The information about what and how much to eat has not changed—both MyPyramid and MyPlate are illustrations that are based on the same food groups and recommendations about what and how much to eat.

   2. Slide 2: Project Sponsors

   3. Slide 3: ACTIVITY: Sort the foods into the correct food groups
      a) *Distribute copies of "Get to Know MyPlate Food Groups" to each student*
      b) *Explain that it might not be as easy as it looks. There is a list of foods at the bottom of the worksheet. Each student has to put them into the correct food group*
      c) *After they are finished, go over the answers with the class*

   4. Slide 4: Why is a healthy diet important?
      a) *Ask students why they think it is important to have a healthy diet (discuss all reasonable answers)*
      b) A healthy diet can help to manage weight and reduce the risk of overweight and obesity. *Ask students what they know about the health risks associated with being overweight or obese.* Overweight and obesity can cause an increased risk for chronic diseases such as Type 2 diabetes, heart disease, high blood pressure.
      c) A healthy eating pattern is important to establish as a daily habit now because the earlier in life you begin to make healthier food choices, the lower your risk for being overweight and obese and having adult chronic diseases such as diabetes, heart disease and cancer.

   5. Slide 5: What is MyPlate?
      a) MyPlate is a tool designed to remind Americans to eat healthfully. It illustrates the five food groups using a familiar mealtime visual, a plate. MyPlate can help you visualize what foods and how much to eat at each meal.

   6. Slide 6: MyPlate Key Messages
      a) There are several key messages that go along with MyPlate based on the 2010 Dietary Guidelines for Americans. The messages are grouped into three areas where you can start making changes to work toward a healthy diet and lifestyle.
      b) Balancing Calories
         a. Enjoy your food, but eat less- Take the time to fully enjoy your food as you eat it. Eating too fast or when your attention is elsewhere may lead to eating too many calories. Pay attention to hunger and fullness cues before,
during, and after meals. Use them to recognize when to eat and when you’ve had enough.

b. Avoid oversized portions- Use a smaller plate, bowl, and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of your meal.

c) Foods to Increase
   a. Make half your plate fruits and vegetables- Choose red, orange, and dark-green vegetables like tomatoes, sweet potatoes, and broccoli, along with other vegetables for your meals. Add fruit to meals as part of main or side dishes or as dessert.
   b. Make at least half your grains whole grains -To eat more whole grains, substitute a whole-grain product for a refined product—such as eating whole-wheat bread instead of white bread or brown rice instead of white rice.
   c. Switch to fat-free or low-fat (1%) milk- They have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.

d) Foods to Reduce
   a. Compare sodium in foods- Use the Nutrition Facts label to choose lower sodium versions of foods like soup, bread, and frozen meals. Select canned foods labeled “low sodium,” “reduced sodium,” or “no salt added.”
   b. Drink water instead of sugary drinks- Cut calories by drinking water or unsweetened beverages. Soda, energy drinks, and sports drinks are a major source of added sugar, and calories, in American diets.

7. Slide 7: Build a Healthy Plate
   a) Foods like fruits, vegetables, lean protein, whole grains and low-fat dairy contain the nutrients our bodies need without a lot of extra calories, making them nutrient dense. Foods like cheeseburgers, French fries, chips, and soda have a lot of calories, but not a lot of nutritional value. We call these “empty calories”.
   b) Fruits and vegetables of different colors have different nutrients. Try to eat a whole rainbow of different colored produce.
   c) Dairy products are a great source of protein (for strong muscles) and calcium & vitamin D (for strong bones). Low-fat or fat-free milk and dairy products have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.
   d) Whole grains contain many nutrients, including fiber, which helps you stay full, maintain a healthy weight, and keep your digestive tract healthy.
   e) Protein is essential for strong and healthy muscles, however many meats are high in saturated fat (bad fat that can lead to heart disease). Choose lean options like grilled chicken, seafood, beans, nuts and tofu instead of high-fat bacon, hamburgers and fried chicken.

8. Slide 8: Cut back on SOFAS!
   a) Foods high in solid fat or added sugar (SOFAS) are high in calories but low in nutrients.
   b) SOLID FAT- Not all fat is bad because we need some fat in our diet to transport important vitamins, protect our vital organs and keep our body insulated. However, too much solid fat (saturated and trans fat), can increase risk for heart
Disease. Foods like red meat, whole milk, cream and butter have a lot of solid fat. The good fat is called unsaturated fat. This fat protects our heart against heart disease. Some good fats include olive and vegetable oils and also nuts, fish, and avocados.

c) Added sugar can increase the amount of empty calories in our diet. Over time, these extra calories may contribute to excess weight gain. One 12-ounce can of soda contains about 10 teaspoons or packets of sugar. Choose water or 100% juice instead and replace sugary desserts with naturally sweet fruit.

d) Salt, or sodium, can raise blood pressure leading to a disease called hypertension. Processed foods (canned), fast food and frozen meals often have large amounts of sodium, so check the label and choose foods that have less. Also, season your food with spices and herbs instead of table salt.

9. Slide 9: Not all foods are created equal
   a) There are some foods that we should try to increase in our diets and some that we should try to reduce. Nutrient-dense foods can be described as “any-time” foods, while high-calorie, low-nutrient foods can be described as “sometimes” foods.
   b) Most of our diet should come from “any-time” foods, and we should treat ourselves with our favorite “sometimes” foods every once in a while.
   c) Have students provide examples of “any-time” and “sometimes” foods, then show pictures.

10. Slide 10: Balancing Calories
    a) Everyone has a personal calorie limit. Staying within yours can help you get to or maintain a healthy weight. People who are successful at managing their weight have found ways to keep track of how much they eat in a day, even if they don’t count every calorie. You can get your personal daily calorie limit at www.ChooseMyPlate.gov and keep that number in mind when deciding what to eat. Think before you eat...is it worth the calories?
    b) The calories you consume from all the foods you eat or drink in day (except for water) are called energy in. The calories your body uses throughout the day and for physical activity are called energy out. To maintain your weight, your energy in must equal your energy out.

11. Slide 11: Physical Activity
    a) Choose activities you like to do. For example playing basketball, dancing, football, swimming, jump rope, yoga or running. And switch it up so you never get bored
    b) There are many kinds of exercise.
        a. Aerobic activities make you breathe harder and make your heart beat faster.
        b. Muscle-strengthening activities, like push-ups and weight lifting, make muscles stronger.
        c. Bone-strengthening activities involve weight-bearing and jumping moves and help strengthen bones.
        d. Balance and stretching activities like yoga and martial arts improve stability and flexibility, reducing the risk of injury.
    c) For health benefits, physical activity should be of moderate or vigorous intensity. Examples of moderate intensity activity include walking briskly (about 3 ½ miles per hour), bicycling (less than 10 miles per hour), general gardening, dancing, golf, water aerobics. Examples of vigorous intensity activity include running/jogging (5
miles per hour), walking very fast (4 ½ miles per hour), bicycling (more than 10 miles per hour), heavy yard work, such as chopping wood, swimming, aerobics, basketball, tennis.

d) Get at least 60 minutes of moderate to vigorous exercise per day. It’s ok to start with 10-minute increments throughout the day to build up to 60 minutes.

12. Slide 12: Importance of Physical Activity
   a) Physical activity is a great way to help maintain a healthy weight. It helps to balance energy in with energy out. It also may help you live longer, improve your self esteem, decrease your risk of depression, help you sleep better, introduce you to new friends, build stronger muscles and bones and reduce your risk of developing chronic diseases.

   a) Most packaged foods have a Nutrition Facts label and an ingredients list. For a healthier you, use this tool to make smart food choices quickly and easily.
   b) Check for calories. Be sure to look at the serving size and how many servings you are actually consuming. If you double the servings you eat, you double the calories.
   c) Choose foods with lower calories, saturated fat, trans fat, and sodium.
   d) Check for added sugars using the ingredients list. When a sugar is close to first on the ingredients list, the food is high in added sugars. Some names for added sugars include sucrose, glucose, high fructose corn syrup, corn syrup, maple syrup, and fructose.

14. Slide 14: ACTIVITY: How does your diet compare to what you should be eating?
   a) Distribute a copy of the "MyPlate Worksheet" sheet and have each student write down everything they had to eat the day before. Have them compare what they had to what they should have according to MyPlate.
   b) Ask a couple of students to share their information with the class. Did anyone do well? What will you try to work on? Can you identify any foods you ate in excess that have a lot of sugar, fat, or sodium?

15. Slide 15: Questions

VI. Conclusion of Lesson:
   A. Distribute hand wipes.
   B. Provide each student with a food tasting and encourage him or her to make small changes in his or her diet now. Explain why the food is a healthy option.
   C. Distribute the reinforcement, read the message and/or explain the reason why they are getting the reinforcement.
   D. Distribute caregiver newsletter.
   E. Thank the students for their participation and answer any questions that they have.

VII. Extension lessons:
   A. Vegetarian Diets and MyPlate
   B. Combination Foods
   C. What’s Your Goal?
Get to Know MyPlate Food Groups

Name ___________________________________________ Date ________________

Directions: Look at the list of foods below and write them in the correct food group.

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruits</th>
<th>Dairy</th>
<th>Protein Foods</th>
<th>Empty Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomato</td>
<td>Soda</td>
<td>Spinach</td>
<td>Candy Bar</td>
<td>Kool-Aid</td>
<td>Oatmeal</td>
</tr>
<tr>
<td>Peanut Butter</td>
<td>Pudding</td>
<td>Tortilla</td>
<td>Potato Chips</td>
<td>Cereal</td>
<td>Sweet Potato</td>
</tr>
<tr>
<td>Kiwi</td>
<td>Chocolate Milk</td>
<td>Zucchini</td>
<td>Corn</td>
<td>Raisins</td>
<td>Strawberries</td>
</tr>
<tr>
<td>Yogurt</td>
<td>Salmon</td>
<td>Cheddar Cheese</td>
<td>Black Beans</td>
<td>Toast</td>
<td>Mayonnaise</td>
</tr>
<tr>
<td>Rice</td>
<td>Mango</td>
<td>Grilled Chicken</td>
<td>Orange Juice</td>
<td>Eggs</td>
<td>Butter</td>
</tr>
</tbody>
</table>

Tomato, Peanut Butter, Kiwi, Yogurt, and Rice are examples of grains. Soda, Pudding, Chocolate Milk, and Cereal are examples of dairy. Spinach, Tortilla, Zucchini, and Orange Juice are examples of vegetables. Candy Bar, Potato Chips, Corn, and Black Beans are examples of protein foods. Kool-Aid, Cereal, Raisins, and Toast are examples of empty calories.

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## Answer Key

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
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<th>Dairy</th>
<th>Protein Foods</th>
<th>Empty Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Tomato</td>
<td>Kiwi</td>
<td>Yogurt</td>
<td>Peanut Butter</td>
<td>Soda</td>
</tr>
<tr>
<td>Tortilla</td>
<td>Spinach</td>
<td>Mango</td>
<td>Pudding</td>
<td>Salmon</td>
<td>Candy Bar</td>
</tr>
<tr>
<td>Cereal</td>
<td>Zucchini</td>
<td>Orange Juice</td>
<td>Chocolate Milk</td>
<td>Grilled Chicken</td>
<td>Potato Bar</td>
</tr>
<tr>
<td>Toast</td>
<td>Corn</td>
<td>Raisins</td>
<td>Cheddar Cheese</td>
<td>Black Beans</td>
<td>Kool-Aid</td>
</tr>
<tr>
<td>Oatmeal</td>
<td>Sweet Potato</td>
<td>Strawberries</td>
<td>Eggs</td>
<td>Eggs</td>
<td>Mayonnaise</td>
</tr>
</tbody>
</table>

### Bonus Questions!

Name a food that could fit in the Grain and Dairy Group. (Macaroni and Cheese)

Name a food that could fit in the Grain, Vegetable, and Dairy Group. (Pizza)

Name a Vegetable that starts with the letter “C”. (Corn)

Name as many red fruits that you can. (Apples, Pomegranates, Cherries, Strawberries, Cranberries, Watermelon, etc)
## MyPlate Worksheet

Check how you did today and set a goal to aim for tomorrow

<table>
<thead>
<tr>
<th>Write in Your Choices for Today</th>
<th>Food Group</th>
<th>Tip</th>
<th>Goal Based on a 2000 calorie pattern.</th>
<th>List each food choice in its food group*</th>
<th>Estimate Your Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>GRAINS</strong></td>
<td></td>
<td><strong>Make at least half your grains whole grains</strong></td>
<td>6 ounce equivalents (1 ounce equivalent is about 1 slice bread, 1 cup dry cereal, or 1/2 cup cooked rice, pasta, or cereal)</td>
<td>ounce equivalents</td>
</tr>
<tr>
<td></td>
<td><strong>VEGETABLES</strong></td>
<td>Try to have vegetables from several subgroups each day</td>
<td>2 1/2 cups Subgroups: Dark Green, Orange, Starchy, Dry Beans and Peas, Other Veggies</td>
<td>cups</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>FRUITS</strong></td>
<td>Make most choices fruit, not juice</td>
<td>2 cups</td>
<td>cups</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DAIRY</strong></td>
<td>Choose fat-free or low fat most often</td>
<td>3 cups (1 1/2 ounces cheese = 1 cup milk)</td>
<td>cups</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>PROTEIN FOODS</strong></td>
<td>Choose lean meat and poultry. Vary your choices—more fish, beans, peas, nuts, and seeds</td>
<td>5 1/2 ounce equivalents (1 ounce equivalent is 1 ounce meat, poultry, or fish, 1 egg, 1 T. peanut butter, 1/2 ounce nuts, or 1/4 cup dry beans)</td>
<td>ounce equivalents</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>PHYSICAL ACTIVITY</strong></td>
<td>Build more physical activity into your daily routine at home and work.</td>
<td>At least 30 minutes of moderate to vigorous activity a day, 10 minutes or more at a time.</td>
<td>minutes</td>
<td></td>
</tr>
</tbody>
</table>

How did you do today?  
☐ Great  ☐ So-So  ☐ Not so Great

My food goal for tomorrow is:  
__________________________

My activity goal for tomorrow is:  
__________________________

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*Some foods don’t fit into any group. These “extras” may be mainly fat or sugar—limit your intake of these.