MyPyramid
Simple Steps to Healthy Living
Teacher's Guide

Grade Level: 9–12	**Curriculum Focus:** Health	**Lesson Duration:** Two class periods

Program Description

We're constantly bombarded by mixed messages about what to eat. News stories stress the importance of eating a balanced diet for good health, but advertisements urge us to eat foods that are high in calories and fat. The U.S. Department of Agriculture has developed MyPyramid to help individuals determine what foods and what quantities of different foods are best for them depending on the person's age, gender, and level of physical activity. Learn how you can incorporate the guidelines from MyPyramid into your life.

Lesson Plan

Objectives

- Describe the elements that make up MyPyramid.
- Explain the importance of eating appropriate amounts from all the different food groups and getting enough physical activity.
- Use the MyPyramid.gov Web site to create a personal set of food guidelines.
- Create a food diary to record one week's worth of meals, and analyze the entries in comparison to personalized plan from MyPyramid.

Materials

- *My Pyramid: Simple Steps to Healthy Living*
- Computer with Internet access and printer *(see note at bottom of Procedures if computer access is limited)*

Procedures

1. After watching the video, open a class discussion on eating habits. Do students think about the nutritional value of what they're eating, or do they just grab whatever is handy and tastes good? From which food group do they eat the most? From which food groups should they eat more? How does what their families eat influence what they eat? Have they ever thought about trying to make healthier food choices? Have they ever tried to keep track of what they eat?
2. Discuss how exercise and good nutrition impact overall health. How much exercise do they get every day?

3. Explain that each student will be using the MyPyramid.gov Web site to get personal food recommendations based on age, gender, and level of physical activity. Then they'll track what they eat and how much exercise they get for a one week period.
4. Have each student go to http://www.mypyramid.gov. Fill in the box on the right side of the screen with the student's age, gender, and the amount of moderate to vigorous physical activity he or she gets on most days. Click "submit" to create a personalized MyPyramid Plan page.
5. On the MyPyramid Plan page read the food recommendations based on the information provided by the student. Print a copy of these recommendations by following the link on the right side of the screen that reads, "Click here to view and print PDF version of your results."
6. Return to the MyPyramid Plan page and follow the link on the right side of the screen that reads, "Click here to view and print a PDF of a helpful Meal Tracking Sheet." The sheet will list the amounts of food recommended from each group for that student. Have the student print seven copies. They can use the blank side of the sheet to list what they ate at each meal and then fill in the chart to see how many servings they ate from each food group.
7. If time and the number of computers permits, have students explore the rest of the MyPyramid site, which offers tips and suggestions for putting the guidelines to use.
8. When they've completed the food diary, have students write a 1–2 page report analyzing how their food choices compared to their MyPyramid plan. They should include the following information:
    - How many days did what they ate match their MyPyramid plan?
    - On average, how much did they eat from each food group? Was that more or less than the recommended amount in their plan?
    - Give examples of which of their food choices belong in the widest part of a group's color band on the pyramid? Which would be in the narrow part of the band? (Example: An apple would be in the wide part of the red fruit band because it is high in nutrients; a slice of apple pie would be in the narrow part of the band because, even though it contains fruit, it has a lot of fat and sugar.)
    - How much exercise did they get each day?
    - Did keeping the food diaries cause them to make any changes to their diet?
    - What affect will keeping the diaries have on their eating habits in the future?

Note: If computers are not available during class, these links will provide the same information as above and can be printed ahead of class:

To determine the recommended number of calories for each student, print the document on this page: http://www.mypyramid.gov/downloads/MyPyramid_Calorie_Levels.pdf

To determine food recommendations based on calorie levels, print the document for each calorie level listed on this page (most students ages 15–18 will need between 1800 and 3200 calories per day):
http://www.mypyramid.gov/professionals/results_downld.html

For food tracking worksheet for different calorie levels, print the documents listed on this page: http://www.mypyramid.gov/professionals/food_tracking_wksht.html

Assessment

Use the following three-point rubric to evaluate participants' work during this lesson.

- 3 points: The student described the elements of MyPyramid and explained the importance of balancing proper nutrition with physical activity; used the MyPyramid Web site to create a personal nutrition plan; kept a complete food diary, and wrote a report containing all the requested information.
- 2 points: The student described some elements of MyPyramid and explained one reason why it's important to balance proper nutrition with physical activity; used the MyPyramid Web site to create a personal nutrition plan; kept a partially complete food diary and wrote a report containing most of the requested information.
- 1 point: Student did not describe any elements of MyPyramid or explain the importance of balancing proper nutrition with physical activity; did not use the MyPyramid Web site to create a personal nutrition plan, did not complete a food diary and did not write a report containing the requested information.

Vocabulary

carbohydrate

Definition: An organic compound found in the form of starch, sugar, or fiber; one of the three basic food types and a major source of dietary energy

Context: While scientists have debated how many carbohydrates should be eaten each day, most agree that they are an important part of a healthy diet.

calorie

Definition: A unit of measurement of energy produced by food when it is used in the body.

Context: Calories that the body does not burn for energy are stored as muscle or fat.

diet

Definition: The types and amount of food eaten each day

Context: Eating a balanced diet means selecting the recommended number of servings of foods from each of the three main food groups-proteins, carbohydrates, and fats-each day.

fat

Definition: High-energy nutrients that contain twice as much energy as an equal amount of carbohydrates; one of the three basic food types

Context: While foods high in fat taste good and can fill you up, they also contain a lot of calories and can lead to significant weight gain.

nutrients

Definition: Substances, including proteins, carbohydrates, vitamins, and minerals, found in foods that people need to stay healthy

Context: Teenagers need to consume a great deal of calcium, the nutrient that helps build strong bones and teeth.

protein

Definition: A naturally occurring substance made of amino acids and found in animal products and some plant products; one of the three basic food types

Context: Our bones and teeth need protein, which is found in meats, fish, egg whites, nuts, and grains.

vitamin

Definition: An organic substance necessary for health and growth

Context: The human body can't make most of the vitamins it needs so it's important to get them from the foods we eat.

Standards

National Academy of Sciences

The National Academy of Sciences provides guidelines for teaching science in grades K–12 to promote scientific literacy. To view the standards, visit this Web site: http://books.nap.edu/html/nses/html/overview.html#content.

This lesson plan addresses the following national standards:

- Science in Personal and Social Perspectives: Personal and community health

Mid-continent Research for Education and Learning (McREL)

McREL's Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education addresses 14 content areas. To view the standards and benchmarks, visit http://www.mcrel.org/compendium/browse.asp

This lesson plan addresses the following national standards:

- Health: Knows how to maintain and promote personal health
- Health: Knows essential concepts about prevention and control of disease
- Health: Understands the fundamental concepts of growth and development

Support Materials

Develop custom worksheets, educational puzzles, online quizzes, and more with the free teaching tools offered on the Discoveryschool.com Web site. Create and print support materials, or save them to a Custom Classroom account for future use. To learn more, visit

- http://school.discovery.com/teachingtools/teachingtools.html

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DVD Content

This program is available in an interactive DVD format. The following information and activities are specific to the DVD version.

How To Use the DVD

The DVD starting screen has the following options:

Play Video—This plays the video from start to finish. There are no programmed stops, except by using a remote control. With a computer, depending on the particular software player, a pause button is included with the other video controls.

Video Index—Here the video is divided into sections. Watching all parts in sequence is similar to watching the video from start to finish. Brief descriptions and total running times are noted for each part. To play a particular segment, press Enter on the remote for TV playback; on a computer, click once to highlight a thumbnail and read the accompanying text description and click again to start the video.

Standards Link—Selecting this option displays a single screen that lists the national academic standards the video addresses.

Teacher Resources—This screen gives the technical support number and Web site address.

Video Index

1. MyPyramid (2 min.)

Description: Everyone has questions about how to make the healthiest food choices. The MyPyramid food guidelines offers answers tailored to each person's age, gender, and level of physical activity.

Pre-viewing question
Q: Where do you get information on diet and nutrition?
A: Answers will vary.

Post-viewing question
Q: What is the importance of the different colors and widths of the bands on MyPyramid?
A: The different colors are to remind us that we need to eat a rainbow of different colored foods from the five food groups. The color bands are wider at the bottom and narrow at the top to show

that not all foods in the same group have the same nutritional value. For example low-fat milk would be in the wide part of the blue milk band, while ice cream—even though it's made from milk—would be in the narrow part because it also contains a lot of fat and sugar.

2. Grains (2 min.)

Description: Foods from the grains group should make up the biggest part of your diet. Learn why eating more whole grains is especially important.

Pre-viewing question
Q: What are grains?
A: Scientifically they're the seed heads of various grass plants, but we know them better as wheat, corn, barley, rice, oats, and rye. They're used to make flour, bread, tortillas, bagels, and thousands of other foods.

Post-viewing question
Q: Why is it important to "make half your grains whole?"
A: Whole grains are a better choice nutritionally than refined grains. Whole grains have all the parts of the seed, so they keep all their nutrients, especially fiber.

3. Fruits and Vegetables (3 min.)

Description: Fruits and vegetables are a key source of vitamins and minerals, but many people don't eat enough of them. Learn how you can "vary your veggies" and "focus on fruit."

Pre-viewing question
Q: How many fruits and vegetables did you eat yesterday?
A: Answers will vary.

Post-viewing question
Q: What are some ways to get more fruits and vegetables into your diet?
A: Add sliced fruit to your cereal, pack a fruit or veggie snack such as an apple, banana, or pre-cut celery or carrot sticks, add lettuce and tomato to your sandwich.

4. Oils, Dairy, Meat and Beans (2 min.)

Description: Oils aren't a food group, but they are an important part of MyPyramid. Milk and protein are also necessary for staying healthy, and you have a lot of choices when it comes to eating from these two groups.

Pre-viewing question
Q: What are sources of protein?
A: Meat, fish, poultry, nuts, and beans.

Post-viewing question
Q: How can you get more calcium in your diet if you don't drink 3 cups of milk a day?
A: Try different cheeses and yogurts, and look for juices are other foods that have been fortified with calcium.

5. Exercise and Water (2 min.)

Description: MyPyramid is about more than food. Any health plan should also include getting enough physical activity and remembering to stay hydrated.

Pre-viewing question
Q: How much exercise do you get on average every day?
A: Answers will vary.

Post-viewing question
Q: Why does MyPyramid include recommendations for both food and exercise?
A: Making healthy food choices and getting enough physical activity are both important to staying healthy. You need a nutritionally balanced diet to give you the energy to do physical activities and you need the physical activities to burn the calories you consume.