

The Food Pyramid: Teacher's Guide

Grade Level: 3-4

Curriculum Focus: Life Science

Lesson Duration: Two class periods

Program Description

The Food Pyramid (TRT: 6:53) - Learn what an optimal, “balanced” diet is, and why it’s never been more true that “you are what you eat.”

Discussion Questions

- What kinds of foods are good for the human body?
 - Why is eating important?
 - What are nutrients?
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Lesson Plan

Student Objectives

- Understand that a human body needs food to function properly.
- Identify the food categories used in the USDA food pyramid.
- Chart the foods eaten in a day and describe how well they adhere to the food pyramid in one day of eating.

Materials

- *The Food Pyramid* video and VCR, or DVD and DVD player
- Paper and pencils
- Computer with Internet access (optional)

Procedure

1. Talk about food and its importance to the human body with the class. A good way to review this subject is to watch *The Food Pyramid*.
2. Ask students to talk about some of their favorite foods. Which categories do these foods belong to? What kinds of nutrients do they provide? Are they healthy?

3. As a homework assignment, ask students to chart the foods they eat in a day, starting with the foods they have already eaten on the day of the lesson. Have students provide examples of a breakfast, lunch, snack, and dinner they typically eat and demonstrate charting each meal on a piece of paper. (For example, if a student eats cereal for breakfast, write the header "Breakfast" on the board and below it write "cereal," "milk," and anything they might put in the cereal such as "banana"). Talk about serving sizes, if somebody ate bread, how much bread did they eat? Write the amounts of each food eaten on the chart. Give students some time in class to chart the foods they have already eaten that day.
4. Returning to the lesson the following day, ask students to compare the foods they ate in a day with the Food Pyramid. How many servings did they eat from the Milk category? How many servings are recommended? How much bread and cereal did they eat? Does that fit in with the recommended amount? Students may use The Food Pyramid and the following Web sites to compare their food intake with the recommended intake:

<http://schoolmeals.nal.usda.gov/py/pmap.htm>

http://kidshealth.org/kid/stay_healthy/food/pyramid.html

5. Once students have looked at their charts and compared them with the Food Pyramid, ask them pair up with another student and discuss the food they ate and how it fit with the Food Pyramid. Then ask volunteers to share some of the things they learned with the rest of the class. How well did they fit with the guidelines of the Food Pyramid? How much food did they eat from the top of the pyramid? What are some things they could do to make sure they eat healthier?
6. Have the pairs of students work together to create a healthy menu for one day of eating that addresses the guidelines laid out in the Food Pyramid. They can choose to use some of the foods they actually eat as well as some foods they think would be healthy and fun to eat. Give students time to share their menu ideas with the other groups.

Assessment

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

- **3 points:** Students were highly engaged in class and group discussions; charted their food intake for one day with great detail; showed a great understanding of how well or poorly their food intake met the guidelines of the Food Pyramid; and created a menu that identified healthy foods and correctly addressed the guidelines laid out in the Food Pyramid.
- **2 points:** Students were engaged in class and group discussions; adequately charted their food intake for one day; showed an adequate understanding of how well or poorly their food intake met the guidelines of the Food Pyramid; and created a menu that somewhat identified healthy foods and somewhat addressed the guidelines laid out in the Food Pyramid.
- **1 point:** Students participated minimally in class and group discussions; did not chart their food intake for one day or created an incomplete chart; did not show an understanding of how well or poorly their food intake met the guidelines of the Food Pyramid; and created an



incomplete menu that did not identified healthy foods and failed to address the guidelines laid out in the Food Pyramid.

Vocabulary

nutrients

Definition: A substance essential for life and growth

Context: The fuel people need is nutrients.

energy

Definition: The strength and vitality needed to stay active

Context: Energy to grow, to think and study, and to walk and run and play.

diet

Definition: The kinds of foods that a person, animal, or community usually eats

Context: You can choose the right foods in the right amounts and build a healthy diet.

carbohydrates

Definition: Any of a large group of compounds that contain carbon, hydrogen, and oxygen, found in food and used to give energy

Context: Carbohydrates are an important source of energy for your body.

protein

Definition: Any of a group of organic compounds forming part of body tissues and making up and important part of the diet

Context: Foods from the meat group provide protein.

serving

Definition: A quantity of food suitable for one person.

Context: One slice of bread is a serving.

Academic Standards

National Academy of Sciences

The National Science Education Standards provide guidelines for teaching science as well as a coherent vision of what it means to be scientifically literate for students in grades K-12. To view the standards, visit <http://books.nap.edu>.

This lesson plan addresses the following science standards:

- Science as Inquiry: Abilities necessary to do scientific inquiry
- Science in Personal and Social Perspectives: Personal 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:

- Science—Nature of Science: Understands the nature of scientific inquiry
- Health—Understands essential concepts about nutrition and diet
- Language Arts—Viewing: Uses viewing skills and strategies to understand and interpret visual media; Writing: Uses the general skills and strategies of the writing process, Gathers and uses information for research purposes; Reading: Uses reading skills and strategies to understand and interpret a variety of informational texts

The National Council for the Social Studies (NCSS)

NCSS has developed national guidelines for teaching social studies. To become a member of NCSS, or to view the standards online, go to <http://www.socialstudies.org>

This lesson plan addresses the following thematic standards:

- Individual Development and Identity
 - Individuals, Groups, and Institutions
 - Culture
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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 four parts (see below), indicated by video thumbnail icons. 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.

Curriculum Units – These are specially edited video segments pulled from different sections of the video (see below). These nonlinear segments align with key ideas in the unit of instruction. They include onscreen pre- and post-viewing questions, reproduced below in this Teacher's Guide. Total running times for these segments are noted. To play a particular segment, press Enter on the TV remote or click once on the Curriculum Unit title on a computer.

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.

