

Grade Level: 4

Title: What's in the Strawberry for Me? (Nov. - Dec.)

Purpose:

The purpose of this lesson is to learn how foods provide energy and materials, such as vitamins and minerals, for the survival, growth, and repair of the body.

Subject Area(s) Addressed:

Science, ELA

Common Core/Essential Standards:

Science

4.L.2.1 Classify substances as food or non-food items based on their ability to provide energy and materials for survival, growth, and repair of the body.

4.L.2.2 Explain the role of vitamins and minerals, and exercise in maintaining a healthy body.

ELA

4.RIT.7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

Vocabulary:

antioxidants
healthy
nutrients
nutritional value
minerals
vitamins

Materials Needed:

Strawberry Product Food Labels

Teaching Strategy:

Part 1:

On the board, write the names of the five food groups. Give students a paper plate and have them divide the plate into five sections based on how much of each food group they think they should eat. Next, use the interactive resources (lesson plans, activity sheets, online games) from Choose My Plate.gov, <http://www.choosemyplate.gov/kids/downloads/ServingUpMyPlate-level2-TeachersGuide.pdf> to teach students about the food groups, how much of each should be included on their plate, and the benefits of choosing foods from each of the food groups.

Next, introduce strawberries as an excellent fruit choice for a healthy snack as well as use in meals. Have students research the specific health benefits of strawberries. What vitamins and minerals are found in strawberries? What are antioxidants and how are they beneficial to a healthy body? (See web resources listed below.) Have students record their findings in their journals.

Part 2:

Present students with a variety of strawberry or strawberry flavored products (candy, juices, fruit chews, smoothies, yogurt, milk, etc.) or product labels. Have students classify the products as healthy or not healthy and have them record their thoughts in their journal. Then, have students examine the food labels of the strawberry products for nutrients. What is the nutritional value of these items? Do they actually contain strawberries? Have students create a chart comparing the calories, sugars, fats, sodium, and vitamin C in each of the strawberry products. How do they compare with fresh strawberries? Is there a difference between fresh and frozen strawberries? Have students draw a conclusion as to why the nutritional values vary greatly. They should respond with obvious observations from the food label (added sugars, no strawberries actually in product, etc.)

Extension Activity:

Have students research the differences and similarities in strawberry jam, strawberry jelly, and strawberry preserves. Which item contains the most actual fruit? Does one product have more healthful benefits than the others? How does artificial sweetener affect the nutritional value of these items?

Background Information:

Nutritional information can be found at the following websites.

<http://nutritiondata.self.com/facts/fruits-and-fruit-juices/2064/2>

<http://www.ncstrawberry.com/NCSAtree.cfm?topic=Consumers>

<http://www.nutrition-and-you.com/strawberries.html>

<http://kidshealth.org/kid/nutrition/food/vitamin.html#>

<http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf>

Health benefits information:

<http://whfoods.org/genpage.php?tname=foodspice&dbid=32>

www.calstrawberry.com/health/default.asp2

Assessment:

Journal entries

North Carolina Strawberry Association – www.ncstrawberry.com

This project was supported by the North Carolina Department of Agriculture and Consumer Services Specialty Crop Block Grant Program.

