

# Nutrition Fun

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## **Standards of Learning**

Science 3.1, 3.9, 4.1, 5.1

Health 4.1

## **Objective**

Students will:

- Become aware of the vitamins and minerals contained in food and the need for good health

## **Materials**

- *Good Enough to Eat: A Kid's Guide to Food and Nutrition* by Lizzy Rockwell
- Nutrition label example (make into an overhead sheet) (handout provided)
- Nine different food containers with nutrition labels attached (suggested foods: yogurt carton, milk carton, candy bar wrapper, box of cereal, wheat bread, can of tuna fish, can of fruit, can of vegetables, peanut butter)
- *Labeling your Nutrition* worksheet (handout provided)
- Vitamin/Mineral/Nutrient chart (make into an overhead sheet) (handout provided)
- Food Guide Pyramid poster

## **Background Knowledge**

Vitamins and minerals are substances found in the foods that we eat. Your body needs them to work properly so you grow just like you should. Vitamin D found in milk helps your bones to grow strong. Vitamin A in carrots helps you to see at night. Vitamin C in oranges helps you to heal when you get cut. B Vitamins in leafy vegetables helps your body to make proteins and energy. Vitamin E helps to maintain a lot of your body's tissues and protects your lungs from polluted air. Minerals also serve to help you stay healthy and grow. There are two kinds of minerals called trace minerals and macrominerals. The trace minerals you only need a little of each day and they include iron, manganese, copper, iodine, zinc, cobalt, and fluoride. Macrominerals are the minerals you need large amounts of and they include calcium, phosphorus, magnesium, sodium, potassium, and sulfur. Calcium is what helps to grow strong bones and can be found in a lot of dairy products. Iron helps your body to transport oxygen from your lungs to the rest of your body. Potassium keeps your muscles and nerve systems working properly. Lastly, zinc helps your body's immune system which allows you to fight off infection. It is important for your students to realize that the nutrients they need come from many different foods so it is important to eat a variety for breakfast, lunch, and dinner. Schools need to play a key role in helping students learn the importance of getting proper nutrition. Written for older elementary students, this activity uses a picture book to explain the vitamins, minerals, and other nutrients their bodies need to function properly.

## **Procedure**

1. Ask the students to name the different food groups on the food pyramid and examples of foods that are in these groups.
2. Ask the students why it is important to get the proper vitamins and nutrients in the foods they eat.
3. Read the book, *Good Enough to Eat: A Kid's Guide to Food and Nutrition*, aloud to the



- class.
4. After reading the book, ask the students what are some things they learned from the book.
  5. Ask them if they can name any nutrients (p. 7-8), vitamins (p. 19-20), or minerals (p. 21-22) mentioned in the book.
  6. Write the names of these nutrients, vitamins, and minerals on the overhead and tell the students that they will be using these and more for their next activity.
    - i. Nutrients: carbohydrates, protein, fat, and water
    - ii. Vitamins: vitamin C, vitamin A, and B complex vitamins
    - iii. Minerals: calcium, iron, sodium, and potassium
  7. Put the nutrition label example on the overhead.
  8. Discuss the different parts included on the label with the students and how to read the label.
  9. After discussing, split the students up into small groups.
  10. Give each group a different food container and each student a "Labeling your Nutrition" worksheet.
  11. Tell the students to work in their groups to answer questions 1-10 on the worksheet.
  12. After all the groups have completed step, put the Vitamin/Mineral/Nutrient chart on the overhead. Have the students use this chart to answer question 11.
  13. After all the groups have completed their worksheets, ask them to come forward and share with the rest of their class what they learned about their food.
  14. Discuss the differences between the foods, such as the number of vitamins in a candy bar in comparison to the number of vitamins in a carton of milk.
  15. After all the students have shared, ask them the following questions:

**What three types of materials are important to have in your food?**

Vitamins, minerals, and nutrients

**Why are they important?**

Proper vitamins, minerals, and nutrients help us to stay healthy and strong.

**What are some things you can do to make sure you get proper nutrition?**

**Extension**

Visit [www.MyPyramid.gov](http://www.MyPyramid.gov) for online games and activities.

**References**

Fresh Starts

[http://www.freshstarts.com/teachers\\_lessons.cfm](http://www.freshstarts.com/teachers_lessons.cfm) (Web site is no longer accessible)

Nutrition and Your Health: Dietary Guidelines for Americans.

<http://www.health.gov/dietaryguidelines/dga2000/document/build.htm>



Figure 3

## HOW TO READ A NUTRITION FACTS LABEL

Macaroni & Cheese

Start Here →

| <b>Nutrition Facts</b>        |                       |
|-------------------------------|-----------------------|
| Serving Size 1 cup (228g)     |                       |
| Servings Per Container 2      |                       |
| <b>Amount Per Serving</b>     |                       |
| <b>Calories</b> 250           | Calories from Fat 110 |
| <b>% Daily Value*</b>         |                       |
| <b>Total Fat</b> 12g          | <b>18%</b>            |
| Saturated Fat 3g              | <b>15%</b>            |
| <b>Cholesterol</b> 30mg       | <b>10%</b>            |
| <b>Sodium</b> 470mg           | <b>20%</b>            |
| <b>Total Carbohydrate</b> 31g | <b>10%</b>            |
| Dietary Fiber 0g              | <b>0%</b>             |
| Sugars 5g                     |                       |
| <b>Protein</b> 5g             |                       |
| Vitamin A                     | 4%                    |
| Vitamin C                     | 2%                    |
| Calcium                       | 20%                   |
| Iron                          | 4%                    |

\*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

|                    | Calories: | 2,000   | 2,500   |
|--------------------|-----------|---------|---------|
| Total Fat          | Less than | 65g     | 80g     |
| Sat Fat            | Less than | 20g     | 25g     |
| Cholesterol        | Less than | 300mg   | 300mg   |
| Sodium             | Less than | 2,400mg | 2,400mg |
| Total Carbohydrate |           | 300g    | 375g    |
| Dietary Fiber      |           | 25g     | 30g     |

Limit these Nutrients

Get Enough of these Nutrients

Footnote

### Quick Guide to % Daily Value

5% or less is Low  
20% or more is High



## Labeling Your Nutrition

**Instructions:** Answer the following questions using the nutrition labels on your food container.

1. What is the serving size for your food?

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2. How many servings are in one container of your food?

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3. How many calories are in one serving of your food?

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4. How many grams of total fat are in one serving of your food?

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5. Is fat a nutrient, vitamin, or mineral?

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6. How many grams of total carbohydrates are in one serving of your food?

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7. Are carbohydrates a nutrient, vitamin, or mineral?

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8. How many grams of protein are in one serving of your food?

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9. Is protein a nutrient, vitamin, or mineral?

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10. Which food group or groups would you classify your food into?

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11. Place a check mark next to the vitamins, minerals, and nutrients that are included in your food:

|                                    |                                  |  |                              |
|------------------------------------|----------------------------------|--|------------------------------|
| <input type="checkbox"/> Vitamin C | <input type="checkbox"/> Calcium | <input type="checkbox"/> Potassium     | <input type="checkbox"/> Fat |
| <input type="checkbox"/> Vitamin B | <input type="checkbox"/> Iron    | <input type="checkbox"/> Carbohydrates |                              |
| <input type="checkbox"/> Vitamin A | <input type="checkbox"/> Sodium  | <input type="checkbox"/> Protein       |                              |



**Parts of the Body Benefited by Vitamins, Minerals, and Nutrients**

| Vitamin, Mineral, or Nutrient   | Part(s) of the Body Benefited   |
|---------------------------------|---|
| Vitamin A<br>(Vitamin)          | Bones<br>Body tissues<br>Eyes<br>Immune system<br>Skin  |
| Vitamin C<br>(Vitamin)          | Eyes<br>Heart<br>Immune system<br>Teeth and gums  |
| B Complex Vitamins<br>(Vitamin) | Body cells<br>Muscles<br>Nerves<br>Eyes<br>Skin<br>Digestive system<br>Nervous system<br>Immune system<br>Blood |
| Calcium<br>(Mineral)            | Bones<br>Teeth  |
| Iron<br>(Mineral)               | Blood<br>Brain<br>Heart<br>Muscles  |
| Sodium<br>(Mineral)             | Water balance   |
| Potassium<br>(Mineral)          | Water balance   |
| Carbohydrates<br>(Nutrient)     | Main energy source  |
| Protein<br>(Nutrient)           | Supplies energy<br>Muscles<br>Skin<br>Internal organs   |
| Fat<br>(Nutrient)               | Supplies energy<br>Adds flavor to food  |

