

LESSON 3

Think Outside the Box

Topic

Content Area

Food labels

Content Statement/Concept Statement

Understand the information contained in food labels

Content Outline

1. Food companies use many design techniques to attract customers to their products.
2. Food labels contain information to help consumers make healthy food choices.
 - **Serving size**
 - **Percent daily value**
 - Total fat, saturated fats, and unsaturated fats
 - **Cholesterol**
 - **Sodium**
3. Percent daily values can help people know whether they are meeting their **recommended dietary allowances (RDAs)** and **reference daily intakes (RDIs)**.

Standards of Education

Related National Health Education Standards

Students will comprehend concepts related to health promotion and disease prevention (NHES 1.0).

Students will demonstrate the ability to access valid health information and health-promoting products and services (NHES 2.0).

Students will demonstrate the ability to practice health-enhancing behaviors and reduce health risks (NHES 3.0).

Related State Standards

Refer to attached state standards.

Objectives/Expected Learner Outcomes

Explain the relationship between positive health behaviors and the prevention of injury, illness, disease, and premature death (NHES 1.1).

Describe ways to reduce risks related to adolescent health problems (NHES 1.6).

Analyze the validity of health information, products, and services (NHES 2.1).

Demonstrate the ability to utilize resources from home, school, and community that provide valid health information (NHES 2.2).

Demonstrate strategies to improve or maintain personal and family health (NHES 3.4).

Lesson and Strategies

Student Group Targeted

7th Grade

Time Required

Teacher Preparation: 10 minutes

Activity: 35 minutes

Assessment: 10 minutes

Optional Challenge Skill: 5 minutes

Materials and Resources

Cereal Boxes™ (25)

Reading Food Labels Transparencies T5–T6

Episode Three Doggie Bag Challenge Handout

What's in the Box? Handout

Doggie Bag Challenge Envelopes (6)—not provided

Key Terms/Vocabulary

A **serving size** is the recommended amount of a food for a person to consume in one sitting.

The **percent daily value** is a percentage that tells how much of a particular nutrient a person consumes in one serving.

Recommended dietary allowances (RDAs) are a set of nutrient amounts that meet the nutritional requirements of nearly all healthy people.

Reference daily intakes (RDIs) are a set of dietary values based on the RDA that provide guidelines for proper amounts of nutrient consumption.

Cholesterol is a waxy substance produced by the liver and also found in some foods.

Sodium is a part of salt.

Motivation and Explanations

Students need to recognize the importance of understanding food labels. This information will help students make healthy eating choices by knowing how to identify and avoid foods with low nutritional value.

Questioning Strategies/Discussion

The theme of this lesson is the third episode of Real Food Challenge. In this episode, students complete tasks to earn points in an attempt to win the overall competition. Earning points will motivate students to pay attention to the information presented so that they can defeat the other teams in competition. One strategy to facilitate discussion is to explore how students view product labels by asking them these types of discussion questions: Why would it be easy to ignore the labels on food products? What factors do you consider when choosing a food product? Do you buy a cereal because of the box design, the prize inside, the taste, or the nutritional value?

Teacher Preparation

Before class, make a copy of the What's in the Box? handout for each student. Make six copies of the Episode Three Doggie Bag Challenge handout. Place one Episode Three Doggie Bag Challenge handout into each Doggie Bag Challenge Envelope.

Activity: What's for Breakfast?

For this episode of Real Food Challenge, contestants will be learning a skill that few people even attempt to master—reading food labels. Contestants who wish to be the Next Nutrition Gurus will have to be able to give a detailed account of what is in any food by merely glancing at its label.

You've probably heard the old saying "You can't judge a book by its cover." The same saying is often true for many packaged foods—including breakfast cereals. Food companies use design techniques to attract customers to their products. The packages may have bright colors and fun pictures on them, but any diet guru knows that eye-catching packaging doesn't mean that the cereal inside is a healthy food choice!

Why would a nutrition guru care about food labels? Food labels are an important resource that can provide valuable nutrition information about the food inside. By reading a food label and knowing how to use its information, you can help yourself make healthier food choices and eat proper serving sizes.

Give each team a Doggie Bag Challenge Envelope, and allow them to review the contents.

Use the Reading Food Labels transparencies T5–T6 to explain to contestants how to read a food label.

Give each contestant in the class one of the Cereal Boxes™. Ask each team to determine which team member's cereal is the most nutritious choice. Each team should write down and explain why their choice is the healthiest. After all teams have made their decisions, have them share their findings with the class. How did they draw their conclusions? Did they consider overall amounts of nutrients and sugar?

Each team will receive one Pyramid Point for explaining their choice. The team with the most thorough explanation will receive three Pyramid Points.

Technology Extension

Have students visit <http://www.HealthEdcoCurriculum.com/students.html>, enter the username and password you created for them, and follow the directions to find the technology extension for this lesson.

Assessment

Have each contestant use one of the Cereal Boxes™ to complete the What's in the Box? handout.

Optional Challenge Skill: Best Breakfasts on a Budget

Ask students to compare the cost and nutritional value of a healthy breakfast cereal to the cost and nutritional value of common breakfast choices among teens. For example: Teens often choose toaster pastries, Danish pastries, or vending machine doughnuts for a quick breakfast. Also, ask students which breakfast choice gives them more energy until lunchtime.

Assessment Strategies

In the activity, students will understand the information contained in food labels. You will know that students have achieved the lesson objectives when they have successfully completed the What's in the Box? handout. An alternative assessment option is to have students select one healthy and one unhealthy cereal choice, make informational handouts that compare the nutritional values of both cereals, and explain the reasons that students should choose a healthy breakfast and make other healthy eating choices. Encourage students to be creative in their presentation of the information. Students will have successfully completed the optional challenge skill when they have compared the cost and nutritional value of a healthy breakfast cereal to the cost and nutritional value of common breakfast choices among teens.

Supplemental Resources

<http://www.HealthEdcoCurriculum.com>
<http://www.HealthEdco.com>

Additional products available through HEALTH EDCO® that complement this lesson:
Reading Food Labels Is a Healthy Habit Chart
Reading Food Labels Is a Healthy Habit Tear Pad
Vat of Fat
Contemplate Your Breakfast Plate Chart

Episode Three

Doggie Bag Challenge



Do you have what it takes to read food labels for Mega Moo?

The massive amount of information on most food labels is enough to make any dog roll over and play dead. But no challenge is too big for Real Food Challenge. Here are the facts:

- Knowing the number of servings in a package can help you keep track of how much food you are wolfing down.
- You need calories to get enough energy for the day. However, consuming too many calories may cause you to gain weight, which can be unhealthy. The number of calories you need each day depends on a lot of different factors—such as your age, height, weight, whether you're male or female, and your amount of physical activity.
- Calories come from carbohydrates, proteins, and fats. Everyone needs to eat some fat for energy, growth, and development. Fat also insulates and cushions the body, but you shouldn't eat too much of it. Food labels can help you keep track of how much fat you eat each day.
- Everyone needs to get 100% of the essential nutrients each day. A food is considered to be a good source of a nutrient if it has between 10–19% of that nutrient. If it has 20% or more of a nutrient, it's considered to be high in that nutrient.
- Analyzing the percent daily values on food labels can help you know whether you're getting enough nutrients according to recommended dietary allowances and reference daily intakes. **Recommended dietary allowances (RDAs)** are a set of nutrient amounts that meet the nutritional requirements of nearly all healthy people. **Reference daily intakes (RDIs)** are a set of dietary values based on the RDA that provide guidelines for proper amounts of nutrient consumption.
- Saturated fats are fats found primarily in products that come from animals, such as meat and dairy products. They're solid at room temperature, like butter or shortening. Eating too many saturated fats can increase your risk for developing heart disease. Unsaturated fats are fats found in nuts, fish, and vegetable oil. They're liquid at room temperature. Unsaturated fats don't raise a person's risk for heart disease the way saturated fats do.
- Your liver produces all the cholesterol that your body needs to function properly. Eating too many saturated fats can raise your cholesterol level. Too much extra cholesterol can clog your arteries and lead to serious health problems, such as a heart attack.
- Your body needs a small amount of sodium, but too much of it can lead to high blood pressure.
- Carbohydrates should be the body's main source of calories. Complex carbohydrates—also called starches and found in foods such as pasta, rice, and bread—provide your body with energy. Simple carbohydrates—also called sugars and listed underneath "Total Carbohydrates" on the food label—are less nutritious and can add too many calories.

Which team will dominate this challenge? Which teams will find themselves fighting like cats and dogs to stay in the game? Stay tuned for today's exciting episode of Real Food Challenge!

What's in the Box?

Part One: Using the food label on your cereal box, answer the following questions.



The name of my cereal is _____.

One serving of my cereal has _____ calories.

My cereal has _____ g of total fat, which is _____ percent daily value for a person who needs 2,000 calories a day.

My cereal has _____ mg of cholesterol, which is _____ percent daily value for a person who needs 2,000 calories a day.

My cereal has _____ mg of sodium, which is _____ percent daily value for a person who needs 2,000 calories a day.

My cereal has _____ g of total carbohydrate, which is _____ percent daily value for a person who needs 2,000 calories a day.

My cereal has _____ g of fiber, which is _____ percent daily value for a person who needs 2,000 calories a day.

My cereal has _____ g of sugars. I need to limit how much sugar I eat each day.

My cereal has _____ g of protein, which I need to help form muscles, bones, blood, and skin.

Part Two: Calculate how many calories in your cereal come from carbohydrates, protein, and fat. (One gram of carbohydrate or protein equals four calories. One gram of fat equals nine calories.)

Total carbohydrate calories = _____ (total grams of carbohydrates x 4)

Total protein calories = _____ (total grams of protein x 4)

Total fat calories = _____ (total grams of fat x 9)

Part Three: Explain why you think your cereal is or is not a healthy breakfast choice.
