

Looking At Food Labels

Purpose

To enable students to:

1. Interpret and understand the food and nutrition on food labels
2. Determine their nutrient needs and how understanding food labels can help them to meet those needs.

Overview

Students will analyze and interpret food and nutrition information on food labels.

Time

Two 30-minute class periods and a homework assignment that will involve collecting food labels and completing a worksheet

Key Concepts

Providing our bodies with proper nourishment is not determined by the food choices we make for one day but the food-intake pattern we develop based on the food selections made for all the foods/meals eaten each day over a period of months, even years. These choices are impacted by various factors including tradition, culture, availability, religion, economics, and nutritional value. Even though nutritional value may not always be the primary motivating factor that determines what is selected, ultimately it is the most important because there is much truth to the old adage "we are what we eat." We need to eat food to supply the nutrients that the body needs to sustain life and maintain health.

- The U.S. government sets standards to ensure that the information on food labels is accurate and reliable. The Food and Drug Administration (FDA) defines the words that can be used on a label to describe the nutrient content of a product.
- Food labels provide nutrition information to help consumers choose foods to meet their nutrient needs.
- These numbers of servings recommended to be consumed each day by the Food Guide Pyramid servings is based on scientific research and expert recommendations.
- The FDA established the serving sizes used on food labels. These serving sizes are based on amounts people normally eat. They are consistent across product lines.
- Consumers should always pay attention to how the actual amount of the food being consumed compares to the serving size of that food as indicated on the food label.

Skills

- Students will understand and interpret the information provided on food nutrition labels.
- Students will explain why the Nutrition Facts label is a valid source of information.

Materials

- A transparency projector or slide or LCD projector for presentation of transparencies, slides or computerized PowerPoint presentation.
- Sample food labels for initial demonstration/discussion.
- Food labels brought in by students
- Calculator

Facilitator Preparation

You will need to divide the students into groups or teams (although this can be done as individuals). Knowledge of and facilitating access to the computerized software with training will optimize this session. Prior knowledge of the Food/Foodborne Illness Primer, as well as other modules, will prepare you for the range of issues addressed in this section.

Background

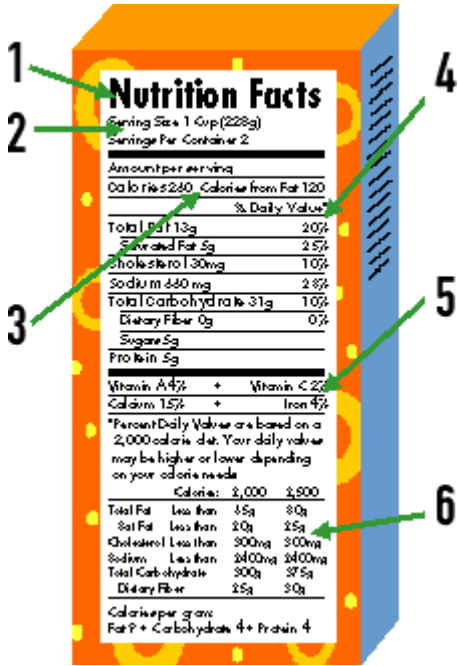
In May of 1994, new food labeling regulations requiring most packaged foods to provide nutrition information went into effect. Prior to these new regulations, food labeling was voluntary and could only be found on about 60 percent of packaged foods. The food labeling regulations were designed to ensure that information of food labels is accurate, reliable and to empower consumers by giving them information to help them choose healthier foods to meet their nutritional needs. The new food label includes a listing of some of the nutrients important to health.

The new nutrition label, called "Nutrition Facts," provides information on a variety of nutrients and nutrition related facts. It lists the serving size, number of servings per container, kcals per serving, and nutrient content information when compared with a standard (e.g., Daily Values) for the nutrients listed on the Nutrition Facts panel. Daily Values (DV) are reference values developed by the FDA specifically to be used on food labels. The new label has bigger type, and the FDA requires the information appear on a white or other neutral contrasting background.

The nutrition information format has been redesigned to help consumers make healthier choices when buying packaged foods. Fresh or raw foods will not have to be labeled as long as retailers voluntarily display nutritional information for the top selling fruits, vegetables and meats at the point of purchase.

1. **The new heading Nutrition Facts** signals that the label contains the newly required information.

- Serving sizes** are no longer determined at the manufacturer's discretion. They are based on surveys of what people actually eat in 139 different product categories. For example, in the past 30 grams of a bag of cookies may have been considered a single serving. Now a serving would be two cookies.
- Calories from fat** are now shown to help consumers meet dietary guidelines that recommend we get no more than 30 percent of our calories from fat each day.
- The % Daily Value** shows how much of each nutrient a food provides compared with how much of that nutrient is needed each day. These calculations are based on a 2,000-calorie diet. People who consume more or less have to figure out the percentages themselves. A serving of this sample product contains 5 percent of the daily value for fat. The FDA suggests you look for 5 percent or less of fat, cholesterol and sodium in any individual food.



- The list of nutrients** covers those most important to the health of today's consumers, who need to be concerned about getting too much of certain nutrients items (like fat) and too little of other nutrients (such as selected vitamins and minerals) that the old labels emphasized. Nevertheless, manufacturers must list vitamins A and C, calcium and iron. They may also include any other nutrients they feel are important.
- Daily Values (DVs)**, replace the old U.S. Recommended Daily Allowances (U.S. RDA's). They also set official recommendations for total fat, saturated fat, cholesterol, sodium, carbohydrate and fiber. DVs are based on a 2,000-calorie daily diet.

Procedure

Ask students to imagine they were stranded on a deserted isle. Students can then, as homework, collect 4 food labels of these foods for analysis and discussion.

Have students collect food labels from their home, cafeteria, or the internet and fill in appropriate sections in the handout.

Food Item 1: _____

Nutritional Food Labeling Analysis:

Input your food label information in each of the proper categories.

Calories: _____	Sodium (mg): _____
Calories from fat: (fat g x 9) _____	Sodium (% Daily Value): _____
Total Fat (g): _____	Total Carbohydrate (g): _____
Total Fat (% Daily Value): _____	Total Carbohydrate (% Daily Value): _____
Saturated Fat (g): _____	Dietary Fiber (g): _____
Saturated Fat (% Daily Value): _____	Dietary Fiber (% Daily Value): _____
Cholesterol (mg): _____	Sugar (g): _____
Cholesterol (% Daily Value): _____	Protein (g): _____

Food Guide Pyramid Snack Analysis:

Input your snack in the proper food group and calculate total number of servings.

Fats, Oils & Sweets: _____

Total Number Of Servings: _____

Milk, Yogurt & Cheese Group: _____

Total Number Of Servings: _____

Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group:

Total Number Of Servings: _____

Vegetable Group: _____

Total Number Of Servings: _____

Fruit Group: _____

Total Number Of Servings: _____

Bread, Cereal, Rice & Pasta Group: _____

Total Number Of Servings: _____

Food Item 2: _____

Nutritional Food Labeling Analysis:

Input your food label information in each of the proper categories.

Calories: _____	Sodium (mg): _____
Calories from fat: _____	Sodium (% Daily Value): _____
Total Fat (g): _____	Total Carbohydrate (g): _____
Total Fat (% Daily Value): _____	Total Carbohydrate (% Daily Value): _____
Saturated Fat (g): _____	Dietary Fiber (g): _____
Saturated Fat (% Daily Value): _____	Dietary Fiber (% Daily Value): _____
Cholesterol (mg): _____	Sugar (g): _____
Cholesterol (% Daily Value): _____	Protein (g): _____

Food Guide Pyramid Snack Analysis:

Input your snack in the proper food group and calculate total number of servings.

Fats, Oils & Sweets: _____
Total Number Of Servings: _____

Milk, Yogurt & Cheese Group: _____
Total Number Of Servings: _____

Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group: _____
Total Number Of Servings: _____

Vegetable Group: _____
Total Number Of Servings: _____

Fruit Group: _____
Total Number Of Servings: _____

Bread, Cereal, Rice & Pasta Group: _____
Total Number Of Servings: _____

Food Item 3: _____

Nutritional Food Labeling Analysis:

Input your food label information in each of the proper categories.

Calories: _____	Sodium (mg): _____
Calories from fat: _____	Sodium (% Daily Value): _____
Total Fat (g): _____	Total Carbohydrate (g): _____
Total Fat (% Daily Value): _____	Total Carbohydrate (% Daily Value): _____
Saturated Fat (g): _____	Dietary Fiber (g): _____
Saturated Fat (% Daily Value): _____	Dietary Fiber (% Daily Value): _____
Cholesterol (mg): _____	Sugar (g): _____
Cholesterol (% Daily Value): _____	Protein (g): _____

Food Guide Pyramid Snack Analysis:

Input your snack in the proper food group and calculate total number of servings.

Fats, Oils & Sweets: _____
 Total Number Of Servings: _____

Milk, Yogurt & Cheese Group: _____
 Total Number Of Servings: _____

Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group: _____
 Total Number Of Servings: _____

Vegetable Group: _____
 Total Number Of Servings: _____

Fruit Group: _____
 Total Number Of Servings: _____

Bread, Cereal, Rice & Pasta Group: _____
 Total Number Of Servings: _____

Food Item 4: _____

Nutritional Food Labeling Analysis:

Input your food label information in each of the proper categories.

Calories: _____	Sodium (mg): _____
Calories from fat: _____	Sodium (% Daily Value): _____
Total Fat (g): _____	Total Carbohydrate (g): _____
Total Fat (% Daily Value): _____	Total Carbohydrate (% Daily Value): _____
Saturated Fat (g): _____	Dietary Fiber (g): _____
Saturated Fat (% Daily Value): _____	Dietary Fiber (% Daily Value): _____
Cholesterol (mg): _____	Sugar (g): _____
Cholesterol (% Daily Value): _____	Protein (g): _____

Food Guide Pyramid Snack Analysis:

Input your snack in the proper food group and calculate total number of servings.

Fats, Oils & Sweets: _____
Total Number Of Servings: _____

Milk, Yogurt & Cheese Group: _____
Total Number Of Servings: _____

Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group:

Total Number Of Servings: _____

Vegetable Group: _____
Total Number Of Servings: _____

Fruit Group: _____
Total Number Of Servings: _____

Bread, Cereal, Rice & Pasta Group: _____
Total Number Of Servings: _____

Questions:

Assume that you should eat 2000 Calories per day. The FDA recommends the following percentages for the breakdown of a 2000 Calorie eating plan.

30% - Fat 60% - Carbohydrate 10% - Protein

Based on one serving of each of the four foods you selected, calculate the percentages of kcals from fat, carbohydrate and protein.

What were some of the criteria you used to choose your four foods?

Now that you have completed the worksheet, would you change any of your four foods? Why?

Follow-up questions

What is a health claim?

What other information will appear on the product label?

Will all foods have nutrition labels?

What does the ingredient list tell me?

Why do some labels list only two vitamins and two minerals?

Extension Activities

Write a business letter to a food company found on label requesting more nutrition information.

Have students critically read government regulatory agencies articles such as the FDA and USDA

Have students perform a geographical mapping of location of major food companies

Ask students to discuss packaging design, advertisements and commercials, letters of inquiry, directions for food preparation (serving size).

Student assessment

Give the following writing components to each student as a guide to their food label outputs:

- ❖ Students identify serving sizes of various foods
- ❖ Review the nutrition label on food packages
- ❖ Record as much detail as possible

Assign points for the following components of the food label worksheets and questions:

- ❖ Students completely fill in the food label worksheet
- ❖ Students demonstrate a clear understanding of serving sizes and the food pyramid daily recommendations