

Food Label Requirements

MOST FOOD LABELS are required to provide the product name, the manufacturer's name and address, the product amount, and the ingredients in descending order based on weight. This nutrition information helps consumers evaluate the food items and helps the producers market their products. Yet some foods are exempt from the food label requirements.



Objective:



Summarize the requirements and benefits of food labels.

Key Term:



nutritional labeling

Understanding Food Label Requirements and Benefits

Can you imagine food cans and boxes without food labels? Most foods are required to have labels that identify the nutritional information and an ingredient list by weight. Some foods, however, are exempt from this rule.

| Nutrition Facts | |
|--|------------|
| Serving Size 1/4 Cup (30g) | |
| Servings Per Container About 38 | |
| Amount Per Serving | |
| Calories 200 Calories from Fat 150 | |
| % Daily Value* | |
| Total Fat 17g | 26% |
| Saturated Fat 2.5g | 13% |
| Trans Fat 0g | |
| Cholesterol 0mg | 0% |
| Sodium 120mg | 5% |
| Total Carbohydrate 7g | 2% |
| Dietary Fiber 2g | 8% |
| Sugars 1g | |
| Protein 5g | |
| Vitamin A 0% • Vitamin C 0% | |
| Calcium 4% • Iron 8% | |
| *Percent Daily Values are based on a 2,000 calorie diet. | |

| Nutrition Facts | |
|--|-----------|
| Serving Size 8 fl oz (240 mL) | |
| Servings Per Container About 4 | |
| Amount Per Serving | |
| Calories 0 | |
| % Daily Value* | |
| Total Fat 0g | 0% |
| Sodium 0mg | 0% |
| Total Carbohydrate 0g | 0% |
| Sugars 0g | |
| Protein 0g | |
| Not a significant source of other nutrients. | |
| *Percent Daily Values are based on a 2,000 calorie diet. | |

FIGURE 1. “Nutrition Facts” are the way nutritional information is labeled on a food item. Compare these two labels. What does the “Nutrition Facts” information tell you? What food do you think is represented by each label?

BENEFITS OF FOOD LABELS

Food labels are important to the consumers and the producers. Without food labels, consumers may not know exactly what they are purchasing. And without the labels, producers may not be able to successfully market their products. Food labels provide the consumers with nutrition information about products. **Nutritional labeling** is a set of guidelines for labeling the nutrient and calorie content of foods. In 1990, due to consumer demand, the federal gov-



FIGURE 2. Notice the bilingual packaging plus the nutritional information label on this package of lean ground beef. Meat product nutritional labeling was initiated on Jan. 1, 2012.



DIGGING DEEPER...

UNCOVERING ADDITIONAL FACTS: “The Food Label and You”

“The Food Label and You” video starts out as a spoof on the boring scientist discussing food labels, but it continues into several entertaining segments. The 29-minute YouTube video can be watched as a total program or in sections at <http://www.youtube.com/watch?v=MYIAdd2Z9Mc>. The sections include “CSI—Calorie Scene Investigation,” “Party Food” (a spoof on sports programs), the “5-20 Rule” (identification of low- and high-nutrient foods), “Road Food” (finding nutrition information at the fast food drive-thru), and the game show “Are You Smarter Than a Food Label?” At the same site, you can find “Food Labeling and Nutrition” and “Make Your Calories Count: Use the Nutrition Facts Label for Healthy Weight Management.” You can research the video and other information through the USDA website at <http://fnic.nal.usda.gov/food-labeling>.



FURTHER EXPLORATION...

ONLINE CONNECTION: Interactive Nutrition Facts from Mayo Clinic

Use “Nutrition Facts: An Interactive Guide to Food Labels” to become familiar with nutrition labels. As you move the mouse over each section of Nutrition Facts, a pop-up description shows what the numbers mean. You will find the interactive Nutrition Facts activity from Mayo Clinic at <http://www.mayoclinic.com/health/nutrition-facts/NU00293>.



DIGGING DEEPER...

UNCOVERING ADDITIONAL FACTS: Are You Able to Read the Label?

The PowerPoint “Are You Able to Read the Label?” was produced by New Jersey’s Department of Health. The presentation is based on the FDA’s food labeling guide. It provides food-labeling information and examples of daily values, serving sizes, and allergen notices. It also discusses how to separate the information for Total Fat from Good Fats from Bad Fats. The information follows the Nutritional Labeling and Education Act (NLEA) standards. The food label components are discussed. The “principle display panel” must list the common name or a description of the item and the net quantity. The principle display panel is the side of a package that is always displayed at the grocery store. For more information, see “Are You Able to Read the Label” PowerPoint presentation at http://www.state.nj.us/health/foodanddrugsafety/documents/are_you_able_to_read_the_label.pdf

ernment passed the Nutritional Labeling and Education Act (NLEA). This act provided for uniform nutritional labels on food products. Food labels now include information that is easy to read and understand.

Most food items require some type of labeling. Yet a few food items do not require food labels. In some cases, the producers may decide to add food labels anyway.



FIGURE 3. A single orange does not have a Nutrition Facts label, but the bag probably includes nutrition information. What other foods do not have food labels?



BROADENING AWARENESS...

AMAZING ASPECTS: FDA Answers Ingredient List Label Questions

An FDA website answers common questions on food label ingredient lists. One question is: “What is meant by the requirement to list ingredients in descending order of predominance by weight?” The FDA explains that listing ingredients in descending order of predominance by weight means that the ingredient that weighs the most is listed first, and the ingredient that weighs the least is listed last. The answers to other common questions about food labels can be found at Guidance for Industry: A Food Labeling Guide (6. Ingredient Lists) at <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm064880.htm#descend>.



UNDER INVESTIGATION...

LAB CONNECTION: Calculating the Ingredient List

Try this quick food label experiment. Start with a package of trail mix. NOTE: Do not look at the ingredient list on the package before you begin the experiment. Wash your hands (so you can eat the trail mix after the experiment). Use a clean tray, and separate the ingredients into different piles: raisins, peanuts, sunflower seeds, etc. Use weight paper and a metric scale to measure the weight of each pile. Design a data table with the ingredient name and mass. Rank-order the ingredients from most to least in terms of mass. Now, check the food label. How close is your ingredient list to the one on the label? Did you find that the ingredients for chocolate-coated candy and/or chocolate chips were listed separately in parenthesis? Were there ingredients on the list that you could not separate, such as sugar, salt, or preservatives? Also, most trail mix includes allergy information about peanuts or other allergens. Was that information available?

Try this same experiment with canned fruit cocktail or vegetable soup. First, strain the liquid from the solid bits. However, reserve the liquid. Second, separate the ingredients as for the trail mix experiment. Third, weigh a lightweight bowl to hold the ingredients from the can. Now, weigh each ingredient separately in the lightweight bowl. Subtract the weight of the bowl from the total weight of the bowl plus the ingredients (or select Tare on your scale to negate the weight of the bowl), and enter the mass amount on your data table. Finally, weigh the liquid. When you check your results with the ingredient list, you may find additional ingredients you did not mass. What, if any, ingredients may have dissolved in the liquid? What, if any, surprises did you note about the order of ingredients?

Products and Required Labels

Products that require labeling must display specific information, such as the product name, the manufacturer's name and address, the amount of product in the package, and the product ingredients. The ingredients are listed in descending order based on weight.

Voluntary Guidelines

Voluntary guidelines exist for the 20 most popular fruits, vegetables, and fish as well as the 45 most popular cuts of meat. Game meats (e.g., rabbit, deer, and bison) may include food labels. However, you may find these statistics on information cards available at the point of purchase or on signs posted near the display case.



FIGURE 4. Venison (deer) products, such as these rib steaks, and packaged fruits and vegetables do not require label information. They may carry a voluntary food label, or the vendor may post a nutrition information card at the display case.



EXPLORING OUR WORLD...

SCIENCE CONNECTION: Researching the FDA Food Label Information

Additional foods exempt from nutrition food labels are infant formula, dietary supplements, fresh produce and seafood, certain egg cartons, and packaged foods labeled, “This unit not for resale.” You can see the summary of exemptions and the regulation number at the “Nutrition Declaration” section at <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm064894.htm>. The site also gives the regulation on label placement of the nutrition facts, ingredients, manufacturing company information, and common name.

Calories are rounded on food labels. According to the site, for 50 calories or less, you round to the nearest five-calorie increment. Therefore, 47 calories would be rounded to 45 calories. Above 50 calories, you round to the nearest 10-calorie increment. So you would round 96 calories to 100 calories.

Any food with dietary fiber has additional considerations on the nutrition food label. The dietary fiber must be listed in the total carbohydrate category. You may remember the 4-4-9 calorie rule: 4 calories per gram of carbohydrate, 4 calories per gram of protein, and 9 calories per gram of fat. If you look at a high-fiber cereal label and multiply the grams of carbohydrates and protein by 4 and the number of fat grams by 9, the total will not equal the total calories on the food label. There are two reasons. Remember the total number of calories is rounded up or down, and dietary fiber must be listed in the total carbohydrates. The FDA allows dietary fiber to be subtracted when calculating the total calories. Check out examples at <http://www.wellnessletter.com/ucberkeley/ask-the-experts/calculating-calories-on-food-labels/#>. You may want to research why the FDA allows the dietary fiber to be left out of the total calories.

FOODS EXEMPT FROM FOOD LABELING

While most foods are required to carry a food label, some are not. Some producers choose to voluntarily comply with adding a food label to their products according to the labeling guidelines.

Labels Not Required

The following are foods that are not, by law, required to have labels.

- ◆ Food sold for immediate consumption, including food sold in vending machines, by sidewalk vendors, and in restaurants and cafeterias
- ◆ Ready-to-eat foods sold at a bakery, deli, or candy store
- ◆ Food shipped in bulk, including food sent to wholesale markets for retail distribution

- ◆ Medical foods (products used under the supervision of a physician and intended for the dietary management of specific diseases or conditions not well-managed by modifying a regular diet)
- ◆ Foods with no significant amount of nutrients, including plain coffee or tea and many spices
- ◆ Food produced in small businesses as determined by the size of the business and the number of employees

Summary:



Most food labels are required to give the product name, manufacturer's name and address, product amount, and ingredients in descending order based on weight. The required nutrition information helps consumers evaluate food and helps producers market their products. The FDA identifies some types of foods exempt from the food label requirements. Awareness and use of nutrition facts labeling is essential to being an informed consumer.

Checking Your Knowledge:



1. How is a food label important to consumers and producers?
2. What is the NLEA?
3. List four things required on most food packages.
4. In what order are ingredients listed on food packages?
5. List three food products exempt from food labels.

Expanding Your Knowledge:



The earliest recorded food regulation is from the 13th century. An English king enacted the *Assize of Bread Law*. This law prohibited the use of ground peas and beans in bread dough. In 1862, President Lincoln created the Department of Agriculture and the Bureau of Chemistry that would later become the FDA. The first food standard for canned tomato products was developed in 1939. The Fair Packaging and Labeling Act of 1965 required the use of “honest” food labels. In 1990, the Nutrition Labeling Education Act (NLEA) was passed. It requires all packaged foods to have nutrition labeling. The nutrition facts format began in 1991. For a full account of all the laws that affect food production and food labeling, see the Fooducate entry titled “1862 to 2012: A Brief History of Food and Nutrition Labeling” at <http://blog.fooducate.com/2008/10/25/1862-2008-a-brief-history-of-food-and-nutrition-labeling/>.

Web Links:



Eight Healthy Eating Goals

<http://www.fitness.gov/eat-healthy/how-to-eat-healthy/>

Food Allergies

<http://www.mayoclinic.com/health/food-allergies/AA00057>

Manufacturers and Calorie Counts

<http://www.scientificamerican.com/article.cfm?id=how-do-food-manufacturers>

Food Labeling

<http://fnic.nal.usda.gov/food-labeling>

Your Health

http://win.niddk.nih.gov/publications/take_charge.htm