



# HEALTH

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## Understanding the Food Label

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### Quick Facts...

The food label provides:

- Nutrition labeling for most foods.
- Standardized serving sizes.
- Information on saturated fat, trans fat, cholesterol, dietary fiber and other nutrients of major concern.
- Nutrient reference values to help us understand how that food fits into a daily diet.
- Uniform definitions for nutrient claims, such as “light,” “low-fat,” and “high-fiber.”
- Health claims about the relationship between a nutrient and a disease.

### Benefits of the Food Label

Health professionals agree that the relationship between diet and health is important. Our eating habits can help or hurt our overall health and well-being. Good eating habits include being a smart shopper and selecting foods that reflect the Dietary Guidelines for Americans.

The food label was designed by the United States Food and Drug Administration (FDA) to help people choose foods for a healthful diet. By using the food label, we can compare the nutrient content of similar foods and understand how individual foods fit into our overall diets as well as the relationship between certain nutrients and diseases.

### The Dietary Guidelines for Americans

The Dietary Guidelines for Americans were developed by the United States Department of Agriculture (USDA) and are updated every five years. The guidelines reflect the most recent scientific research about nutrition and health. The next release will be in early 2010 to provide key recommendations for the general population as well as recommendations for specific population groups. Information found on both the front and back of food packages can aid consumers in choosing foods that follow these recommendations. For more information about the Dietary Guidelines for Americans visit [www.healthierus.gov/dietaryguidelines](http://www.healthierus.gov/dietaryguidelines) for the USDA’s complete *Dietary Guidelines for Americans* report. Also, see fact sheet 9.353, *Dietary Guidelines for Americans*.

### The Front of the Package

#### Nutrient Descriptors and Claims

The front of the package is designed to get your attention. Manufacturers use different packaging techniques to get us to buy their products. For many years, specific nutrient descriptors and claims appeared on packages with a loosely defined form of standardization. Today, descriptors such as “high fiber,” “light,” or “low fat,” as well as specific nutrient claims, have standard definitions and requirements that consumers can use as a quick guide for making smart selections. By understanding what the nutrient descriptors and claims mean, you can more effectively and efficiently select foods and choose between products. Table 1 provides a glossary of nutrient descriptors and claims.

#### Health Claims

Health claims describe the relationship between a nutrient or a food and the risk of a disease. Products that make a health claim must contain a defined amount of the nutrient that is directly linked to the health-related condition.

For example, to make a claim about the relationship between sodium and hypertension, the product must contain 140 milligrams or less of sodium

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per serving. If the package states that the product “may reduce the risk of hypertension,” we know that it is a low-sodium product, because low sodium also is defined as 140 milligrams or less sodium per serving.

Additionally, the claims must make it clear that other factors, such as exercise or heredity, may also influence the development of certain diseases. Health claims cannot state the degree of risk reduction and must use words such as “may” or “might” in discussing the food-disease relationship. Examples of health claims approved for food labels:

- **Calcium and Osteoporosis**

*Claim:* A diet adequate in calcium may help reduce the risk for osteoporosis, a degenerative bone disease.

*Requirements:* At least 200 milligrams calcium, no more phosphorus than calcium per serving, and calcium must be in a form that can be readily absorbed by the body.

- **Fat and Cancer**

*Claim:* A low-fat diet may help reduce the risk for developing some types of cancer.

*Requirements:* 3 grams or less fat per serving or fish and game meats that are “extra-lean” (fewer than 5 grams fat, fewer than 2 grams saturated fat, and fewer than 95 milligrams cholesterol per serving).

- **Fiber-Containing Fruits, Vegetables and Grain Products and Risk of CHD**

*Claim:* Along with eating a diet low in fat, saturated fat, and cholesterol, fiber may help reduce blood cholesterol levels and the risk for developing heart disease.

*Requirements:* Must be or contain a fruit, vegetable or grain product, 3 grams or less fat per serving, fewer than 20 milligrams cholesterol per serving, 1 gram or less saturated fat per serving, 15 percent or fewer calories from saturated fat, and 0.6 grams or more dietary fiber per serving.

- **Folate or Folic Acid and Neural Birth Defects**

*Claim:* Healthful diets with adequate folate may reduce a woman’s risk of having a child with a neural tube defect.

*Requirements:* The food must meet or exceed the criteria for a good source: 40 micrograms folic acid per serving (10 percent of Daily Value). A serving cannot contain more than 100 percent of the Daily Value for vitamins A or D because of potential risk to fetuses.

- **Omega 3 - Fatty Acids**

*Claim:* Supportive but not conclusive research shows that consumption of EPA and DHA omega-3 fatty acids may reduce the risk of coronary heart disease.

*Requirements:* With the exception of fish and dietary supplements, foods must be low in cholesterol and low in saturated fat.

*A complete listing of health claims approved for food labels is available from the Center for Food Safety and Applied Nutrition at [www.cfsan.fda.gov/label.html](http://www.cfsan.fda.gov/label.html).*

## Point of Purchase Labeling

Point of purchase labeling is a voluntary front-of-box labeling system designed to help shoppers identify nutritious foods. The criteria for the symbols, logos, and graphic schemes are decided by manufacturers, industry committees, and grocery stores. Examples include the controversial “Smart Choices” check mark and the General Mills’ “Nutrition Highlights.” At this time the FDA does not regulate these labels. However, the FDA has announced that they are investigating the point of purchase labels for misleading claims and have begun drafting regulations based on scientific data.

# Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

Amount Per Serving

Calories 250      Calories from Fat 110

% Daily Value\*

Total Fat 12g      18%

Saturated Fat 3g      15%

Trans Fat 1.5g

Cholesterol 30mg      10%

Sodium 470mg      20%

Total Carbohydrate 31g      10%

Dietary Fiber 0g      0%

Sugars 5g

Protein 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

Figure 1: A sample nutrition facts panel.

## Organic Labeling

The Organic Foods Production Act and the USDA's National Organic Program (NOP) ensure that organic foods purchased in the United States are produced, processed, and certified to be consistent with national organic standards. National standards mandate that organic farmers and ranchers cannot use most synthetic pesticides, petroleum-based fertilizers, and genetically modified genes for crops, nor can they use non-organic feed, antibiotics or growth hormones for livestock, among other criteria. On food labels, products that use the term "organic" must meet the following guidelines.

- All organic ingredients must be identified in the ingredients list under the Nutrition Facts label.

- Products labeled as "100 percent organic" must contain (excluding water and salt) only organically produced ingredients. These products can use the USDA organic seal.

- Products labeled "organic" must consist of at least 95 percent organically produced ingredients (excluding water and salt). Any remaining product ingredients must consist of nonagricultural substances on the National List of Approved Substance or non-organically produced agricultural products that are not commercially available in organic form. These products can use the USDA organic seal. These products cannot use the USDA organic seal.

- Processed products that contain at least 70 percent organic ingredients can use the phrase "made with organic ingredients" and list up to three of the organic ingredients or food groups on the principal display panel. For example, soup made with at least 70 percent organic ingredients and only organic vegetables may be labeled either "soup made with organic peas, potatoes, and carrots," or "soup made with organic vegetables."

- Only meat and poultry labeled with "all-natural", "free-range", or "cage-free" are regulated by the FDA, other foods can use these claims with no regulations. Natural meats and poultry must be free of artificial colors, flavors, sweeteners, preservatives and ingredients, and minimally processed. It is important to recognize that "natural" does not refer to how the products were made.

## Labeling of Genetically Engineered Foods

Currently, genetically engineered foods do not require a special label unless the food has significantly different nutritional properties than its non-genetically modified counterpart, it includes a common food allergen that would not be expected in that food, or if it contains a toxin in concentrations beyond acceptable limits. The FDA has developed voluntary guidelines for labeling foods that do not contain genetically engineered ingredients. For more information on labeling of genetically engineered foods see facts sheet, 9.371, *Labeling of Genetically Engineered Foods*.

## The Back of the Package

The "Nutrition Facts" section on the back of the food label allows you to make comparisons between the nutrient contents of similar foods and to see how the foods fit into your overall diet. The nutrition facts panel provides information on saturated fat, cholesterol, dietary fiber and other nutrients that are of major health concern. As of 2006, the Food and Drug Administration (FDA) also requires that all manufacturers list trans fats on the nutrition facts panel. Scientific research shows that consumption of trans fat raises LDL ("bad") cholesterol levels and increases risk for developing heart disease.

The components of the nutrition panel include mandatory and voluntary dietary information. The mandatory components are listed on the nutrition facts

**Table 1: Glossary of nutrient claims and descriptors.**

<b>Term</b>	<b>Description</b>
Calorie free	Less than 5 calories per serving.
Cholesterol free	Less than 2 mg cholesterol and 2 g or less saturated fat per serving.
Enriched or fortified	Has been nutritionally altered so that one serving provides at least 10% more of the Daily Value of a nutrient than the comparison food. "Added", "extra", or "plus" can also be used.
Extra lean	Less than 5 g fat, 2 g saturated fat, and 95 mg of cholesterol per serving and per 100 g.
Fat free	Less than 0.5 g of fat per serving.
Free	"Without," "no," "zero" or dietarily insignificant source can all be used in place of "free."
Fresh	Generally used on food in its raw state. It cannot be used on food that has been frozen or cooked, or on food that contains preservatives.
Fresh-frozen	Foods that have been quickly frozen while still fresh.
Good source	One serving provides 10-19% of the Daily Value for a particular nutrient.
Good source of fiber	Contains 10 to 19% of the Daily Value for fiber (2.5-4.75 g) per serving. If a food is not "low fat," it must declare the level of total fat per serving and refer to the nutrition panel when a fiber claim is mentioned.
High	One serving provides at least 20% or more of the Daily Value for a particular nutrient. "Rich in" or "excellent source" can also be used.
High fiber	Contains 20% or more of the Daily Value for fiber (at least 5 g) per serving. If a food is not "low fat," it must declare the level of total fat per serving and refer to the nutrition panel when a fiber claim is made.
Lean	Less than 10 g fat, 4 g saturated fat, and 95 mg cholesterol per serving and per 100 g.
Light	1) At least one-third fewer calories per serving than a comparison food; or 2) contains no more than half the fat per serving of a comparison food. If a food derives 50% or more of its calories from fat, it must meet this definition; or 3) contains at least 50% less sodium per serving than a comparison food; or 4) can refer to texture and/or color, if clearly explained, for example, "light brown sugar."
Low	"Little," "few," or "low source of" may be used in place of "low."
Low calorie	40 calories or less per serving.
Low cholesterol	20 mg or less cholesterol and 2 g or less saturated fat per serving for snacks and sides or 120 calories or less per 100g for a main dish.
Low fat	3 g or less per serving.
Low saturated fat	1 g or less saturated fat per serving and 15% or less calories from fat.
Low sodium	140 mg or less per serving.
More	One serving contains at least 10% more of the Daily Value of a nutrient than the comparison food.
Percent fat free	A claim made on a "low fat" or "fat free" product which accurately reflects the amount of fat present in 100 g of food; a food with 3 g of fat per 100 g would be "97% fat free."
Reduced	A nutritionally altered product which must contain 25% less of a nutrient or of calories than the regular or reference product. "Less," "fewer," or "modified" can also be used.
Salt or sodium free	Less than 5 mg per serving.
Sugar free	Less than 0.5 g of sugars per serving.
Unsalted	Has no salt added during processing. To use this term, the product it resembles must normally be processed with salt and the label must note that the food is not a sodium-free food if it does not meet the requirements for "sodium free."

panel in the order shown in Figure 1. Immediately to the right of each nutrient, the absolute amount of that nutrient (in grams or milligrams) is listed per serving.

Additionally, a column labeled "% Daily Value" helps us determine how each nutrient fits into an average daily diet. "Daily Value" is used to refer to two separate sets of reference values for recommended intakes of nutrients. The Reference Daily Intakes (RDIs) are reference values for 19 vitamins and minerals. The Daily Reference Values (DRVs) provide recommended amounts of total fat, saturated fat, cholesterol, total carbohydrate, dietary fiber, sodium, potassium, and protein. The RDI and DRV form the basis for the % DV.

Voluntary dietary components on the label include: calories from saturated fat, polyunsaturated fat, monounsaturated fat, potassium, soluble fiber, insoluble fiber, sugar alcohol, other carbohydrate, and other essential vitamins and minerals. The standard "Nutrition Facts" panel may be presented in different formats depending on the size of the package or the total nutrient content in the food. For

more information on reading a Nutrition Facts label visit <http://www.fda.gov/Food/LabelingNutrition/ConsumerInformation/ucm078889.htm#see1>

**Table 2: Nutrition reference amounts for different calorie levels\*.**

Food component	Calories					
	1,600	2,000	2,200	2,500	2,800	3,200
total fat (g)	53	65	73	80	93	107
saturated fat (g)	18	20	24	25	31	36
total carbohydrate (g)	240	300	330	375	420	480
dietary fiber (g)**	20	25	25	30	32	37
protein (g)***	46	50	55	65	70	80

\* Numbers may be rounded.

\*\*20 g is the minimum recommended by the National Cancer Institute.

\*\*\*46 grams is the minimum recommended.

## List of Ingredients

Ingredients for all foods must be listed on the food label, including spices, flavorings, preservatives, and additives that contribute to the structure of the food item. The label must also list the FDA-certified color additives by name. Ingredients are listed in descending order by weight. Specific ingredient information, such as the source of the protein, also is included. This allows people to avoid substances to which they are allergic or sensitive, or for religious or cultural reasons.

As of January 2006, food manufacturers also must disclose in plain language whether products contain any of the top eight food allergens. While numerous foods have been identified as sources of allergic reactions, 90 percent of the allergic reactions associated with foods are caused by one of eight foods: milk, eggs, fish, crustacean shellfish, peanuts, tree nuts, wheat and soy.

Manufacturers have two options for declaring the presence of these food substances in foods. One option is to provide a “contains” statement next to the ingredient list that identifies the types of allergenic ingredients contained in the product; for example, “contains milk and wheat.” The second option is to place the food source in parentheses next to ingredients derived from one of the eight potential offending foods classes, such as sodium caseinate (milk), albumin (egg).

However, the new law does not specifically address gluten. Gluten describes a group of proteins found in certain grains, such as wheat, barley and rye, that cannot be tolerated by people with celiac disease. The FDA has proposed a law that will allow the voluntary use of the term “gluten-free.” The proposal limits “gluten-free” products to those which contain no wheat, rye, barley, or any hybrid of these and no more than 20 parts per million of gluten.

## Getting the Right Balance of Each Nutrient

The % Daily Value allows us to determine the nutrient contribution of that particular food or beverage relative to a 2,000 calorie per day diet. Not everyone consumes exactly 2,000 calories each day. That number was established as the average reference intake of Americans. Factors that contribute to energy needs include gender, age and activity level. Therefore, it is important to establish your individual energy needs and make adjustments accordingly to fit your personal “% Daily Value.”

Table 2 lists various calorie intake levels and corresponding nutrient recommendations. Remember that the reference amounts listed on the label are based on a 2,000 calorie diet. Some labels also may contain reference values for a 2,500 calorie diet. DVs are listed as the percent of a minimum or a maximum value. For example, DVs for some nutrients (total fat, saturated fat, cholesterol



and sodium) represent the upper limit considered desirable.

By using the “% Daily Value,” you can easily determine what amount of a nutrient a food provides and then choose the other foods you eat during the day according to your specific needs. For example, if you consume 2,000 calories per day, your total fat intake should not exceed 65 grams. If you eat 13 grams of fat at breakfast or 20 percent of your Daily Value (DV), and about 20 grams of fat at lunch (30 percent of your DV), then you should not consume more than about 32 grams of fat (or 50 percent of your daily fat intake) for the remainder of the day (snacks and dinner combined).

The Daily Value is not a rigid number, but rather a reference value to aim for in balancing your intake. Use it to compare different products. Keep in mind variety and moderation—the important fundamentals of good eating habits!

## Making Quick Comparisons Between Similar Products

Regardless of the format, the serving size is the basis for reporting the nutrient content of each food. However, unlike in the past, where the serving size was up to the discretion of the manufacturer, serving sizes now must be consistent between similar products (for example, breakfast cereals) and reflective of typical consumption.

Serving sizes must be expressed in metric measures as well as common household units to make it easier for consumers to make quick comparisons. For example, if you are trying to decide between two breakfast cereals and want to purchase the one higher in dietary fiber, you can make an easier and more educated comparison because the serving sizes are the same.

Be cautious of products that are packaged as single servings but actually contain several serving sizes, like beverages which often contain 2-3 serving sizes in one package.

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