

UNDERSTANDING NUTRITION LABELS

Nutrient Labels Explored

The Food and Drug Administration (FDA) is charged with the responsibility of “promoting and protecting the public’s health by ensuring that the nation’s food supply is safe, sanitary, wholesome, and honestly labeled”. As consumers, we should really want to know what we are buying and ingesting. The nutrient panel on each packaged food at the grocery store can tell you a lot about its content. To investigate a food beyond the colorful wrapping, begin with the nutrient panel, and then scan the ingredients listed.

What do you look for on the label?

Calories: The weight-conscious individual who is either trying to limit calorie intake or is trying to gain weight and requires calorie-dense foods may focus here.

Cholesterol: Pertinent data for those who are at risk of or being treated for heart disease.

Fats: For anyone trying to limit total fats consumed or for the individual wanting to avoid the intake of saturated and *trans* fats, both of which should be limited in a healthy diet plan.

Sodium: Health care professionals instruct patients to reduce salt and sodium intake if they have high blood pressure or have been diagnosed with congestive heart failure. Packaged foods typically contain excessive amounts of sodium.

Carbohydrates: This section contains valuable information: Total carbohydrates per serving guide the diabetic or weight-conscious consumer on portion size allowed and simplify comparison between similar products. Fiber content tells a quick story to the majority of people who need to increase total fiber intake. Types of fiber may be specified. Simple sugars are also identified to help consumers make an informed decision.

Protein: The “body builder” or individual who is told to include protein with meals may review this part of the nutrient panel first.

Dissecting the Nutrient Label

Serving Size: Begin here. All of the information listed on the label applies to the serving size. Serving sizes vary between foods and even comparable products. The serving size is to be listed as a familiar household measure, such as ½ c. rice or 2 cookies. A weight or volume in metric units will also be noted in parentheses. For further clarification, and to aid in menu planning, the number of servings per container is noted. Manufacturers have some discretion regarding the portion size for which all nutrient information is given; so, don’t assume that the listed serving size is the portion you consume!

Total Calories: The calorie content of each serving is noted.

Total Calories from Fat: It is now easier to check the fat content relative to the entire product. Some foods, such as margarine, butter, oil, nuts and cheeses, are going to be 80-100% fat and you should

expect that. Other foods which are not normally classified as a source of fat (desserts, chips, and meats, for example) can sure look like one, depending upon added ingredients or cut of meat. Since you may want your total fat intake for the day to average the recommended 25-35% of calories, this may eliminate some foods that would be impulse purchases.

Total Fat: This section actually gives you the total grams of fat per serving, with the % DV, or Daily Value recommended for a 2000 calorie diet plan. For comparison purposes, a teaspoon of oil or pure fat provides an average of 5 grams of fat and 45 calories.

Saturated Fat and Trans Fat: As research continues to identify these two forms of fat in the fight against heart disease, stroke, and some cancers, manufacturers are held more accountable to produce good tasting products with better health value. Current recommendations are for the general population to limit *trans* fats to about 1% of total daily calories and to keep total saturated fat intake to less than 7% of our total daily calorie intake. For the 2000 calorie model diet used to calculate % Daily Values, that translates to 2 grams total of *trans* fats and 15.5 grams or less of saturated fats per day. Take that to heart!

Cholesterol: Cholesterol, in milligrams (mg) per serving, is noted here. Cholesterol is contained only in animal sources of food, including milk fat and egg yolk. The American Heart Association (AHA) recommends consumption of less than 300 milligrams daily of cholesterol for the general population.

Sodium: Our bodies need sodium. It is essential to the body's normal fluid balance and plays a key role in healthy nerve and muscle function. Sodium comprises roughly 60% of table salt, which is sodium chloride. Sodium is available in abundance through the many processed foods we eat. It is used as a preservative in foods as well as for flavor and is a common ion used in food additive compounds and over-the-counter drugs. Therefore, it is now a required element of the nutrient label, listed in milligrams (mg) per serving. The average individual is advised to consume a total of 2400 milligrams sodium (Na+) daily.

Total Carbohydrates: The combination of fiber, sugars, and complex carbohydrates, in grams, is presented as a total per "serving".

Dietary Fiber: This includes both soluble and insoluble dietary fibers in grams. The total recommended fiber intake for most of us is 25-38 grams daily.

Sugars: These sugars can originate from both natural and added sources. Fructose from fruits and juices, as will lactose sugar from milk, will be noted as a sugar, as will added sucrose (table sugar) or high fructose corn syrup. Most of us have good reason to limit our total intake of sugar each meal. [Note: As you may have discovered, grams of dietary fiber + grams of sugar rarely equals the "total carbohydrates" per serving. The remaining grams come from a more complex form of carbohydrate, such as the starch found in grains and plants].

Protein: It can serve to help stabilize blood glucose and is needed for every building and maintenance function in our bodies. While there is not an all-inclusive recommended daily value given, most adults are advised to consume 0.8+ grams of protein for every kilogram (kg) of body weight (divide your weight in pounds by 2.2 to find your weight in kg).

The Four Vitamins/ Minerals that must be noted on each label as a percent of the Recommended Daily Intake Value (DV):

Vitamin A [1500 International Units (IU)]

Vitamin C [60 milligrams]
Calcium [1000 milligrams]
Iron [18 milligrams]

Non-caloric nutrients can be added by the manufacturer as desired.

Nutrient Content Claims?

Claims listed on package labels must be supportable. There are clear definitions for what constitutes a “fat free” or “high fiber” food.

Free: A product must be essentially free of the nutrient in question, or have “physiologically inconsequential” amounts per serving. A product, for example, can be termed “*trans* fat free” even if the product contains *trans* fats, as long as the serving size contains less than 0.5 grams trans fat.

Reduced: The “reduced” products must contain at least 25% less than the original recipe for a nutrient in question, such as fat or sodium.

Low Calorie: 40 calories or less per serving.

Low Fat: 3 grams or less per serving

Low Saturated Fat: 1 gram or less of saturated fat per serving

Low Sodium: 140 mg sodium or less per serving

Very Low Sodium: 35 mg sodium or less per serving

Low Cholesterol: 20 mg cholesterol or less per serving

High Fiber: 5 grams of fiber or more per serving

Good Source of Fiber: 2.5 to 4.9 grams of fiber per serving.

LIST OF INGREDIENTS: Most of us know that the item listed first is in the largest “amount”. But is it by weight or amount? Actually, ingredients are listed in descending order by weight. Some ingredients are heavier than others, so keep that in mind.

How to Use the Percentages on the Label

Each nutrient is noted as providing a percent of the average Daily Value (DV) advised for a “reference” 2000 calorie daily intake. This may be most useful when looking at supportive vitamins, minerals and fiber since grams, milligrams and micrograms can be confusing or misleading. The % DV shows the consumer the extent to which that serving fulfills one’s daily need.

A nutrient providing 5% or less per serving is considered low
A nutrient providing 20% or more per serving is considered high

Health and Disease Prevention Claims

Claims stated on food and dietary supplement labels must understandably have some rules to play by, and the responsibility for providing the consumer with accurate information belongs to both the manufacturer and the FDA. In the case of advertising, the Federal Trade Commission is also involved. Disease prevention/ health claims create a relationship between a food, food ingredient, or dietary supplement and a reduction in disease risk or health-related condition. Such claims must pertain to specific foods or components and suggest a cause-effect relationship to a health-related condition such as heart disease or cancer. A product making a health claim can be disqualified if it contains fat, cholesterol or sodium that exceeds the maximum level permitted for the nutrient. FDA guidelines also prevent health claims on foods which have marginal overall nutritional value. Foods must contain at least 10% of the daily recommended value (DV) per reference serving of at least one of the following nutrients: Vitamin A, Vitamin C, calcium, iron, protein, or fiber. Fruits and vegetables are exempt from meeting this rule. The wording of a claim is also scrutinized. Stating that a product will “prevent” or “cure” ... or “will” do anything... is not acceptable. Making a claim that something **may reduce** or **may help** is more likely to be approved for use in labeling. To view a summary of the health claims approved for use on food & dietary supplement labels, see <http://www.cfsan.fda.gov/~dms/flg-6c.html>.

Thirteen (13) Health Claims, or nutrient and disease prevention links, are currently authorized by FDA:

- Calcium &.....osteoporosis
- Folate &.....neural tube defects
- Soy protein &.....coronary heart disease
- Soluble fiber from whole oats &.....coronary heart disease
- Soluble fiber from phyllium seed husk &.....coronary heart disease
- Whole grain foods &coronary heart disease
- Food high in potassium &.....high blood pressure
- Dietary lipids &.....cancer
- Dietary saturated fat and cholesterol &.....coronary heart disease
- Fiber-containing grains, fruits, vegetables &.....cancer
- Vitamin A or C content of fruits and vegetables &.....cancer
- Soluble fiber from fruits, vegetables, or grains &.....coronary heart disease
- Sodium &.....hypertension

Additional Reading & Resources

- <http://www.health.gov/dietaryguidelines/>
- http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=1&tax_subject=273
- <http://atvb.ahajournals.org/cgi/content/full/26/10/2186>
- <http://www.diabetes.org/nutrition-and-recipes/nutrition/foodlabel.jsp>
- <http://www.cfsan.fda.gov/label.html>
- <http://www.netwellness.org/healthtopics/diet/faq8.cfm>
- <http://www.cfsan.fda.gov/~dms/hclaims.html>
- <http://www.cfsan.fda.gov/~dms/qhc-sum.html> (qualified health claims)