Food labels *simplified*

Cut through the hype on packaging to focus on the food facts that matter most in managing your diabetes.

BY **Hope S. Warshaw, R.D., CDE**
PHOTOS BY **Blaine Moats**

What to look for on the label

Food-labeling regulations, reflected in the nutrition facts panel (sample *below*) on packaged items, are legal requirements that guide which nutrients are listed and how. Here's a guide to the facts:

Serving size

Food label serving sizes are sometimes different from diabetes exchanges and the government's food pyramid. For example, the food label serving size for fruit juice is 8 ounces, or 1 cup. A diabetes exchange of fruit juice is about ½ cup for most types of juice.

There are standard serving sizes for nearly 140 categories of foods, so manufacturers can't use unrealistic servings to make their products seem more nutritious. Sizes are intended to be reasonable but on the slight side. Serving sizes must be noted in household measures, such as 1 cup, or the number of items, such as 8 crackers.

Nutrition Facts

Serving Size 1 cup
Servings Per Container 6

Amount Per Serving	
Calories 110	Calories from Fat 10
	% Daily Value*
Total Fat 1g	**2%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Polyunsaturated Fat 0g	
Monounsaturated Fat 0g	
Cholesterol 0mg	**0%**
Sodium 210mg	**9%**
Total Carbohydrate 20g	**7%**
Dietary Fiber 3g	**12%**
Insoluble Fiber 2g	
Soluble Fiber 2g	
Sugars 4g	
Sugar Alcohols 0g	
Protein 5g	

Vitamin A 0%	•	Vitamin C 0%
Calcium 8%	•	Iron 6%
Thiamin 4%	•	Riboflavin 2%
Niacin 6%	•	Folic Acid 2%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Servings per container

The information noted on the nutrition facts label is for one serving. Some snack and drink packages (even those that appear to be a single serving) contain more than one serving in the package. Check this space on the label before eating the entire thing.

Total fat and total carbohydrate

Although all the nutrients listed on the label are important, the following pages explore these two areas, which are top-of-mind (or should be) for most people living with diabetes.

Are the facts exact?

Nutrient numbers may be rounded, although how the rounding is calculated is regulated. This makes nutrient counts a bit less precise, especially when you eat multiple servings.

photo: (left) EMMANUEL FAURE/STONE

A trip to the grocery store can easily turn into a headache, and not just because of rising food prices. Competing claims on food packages—Made with whole wheat! Reduced sugar! A good source of fiber!—vie for your time, attention, and money.

What matters most on a food label depends on what type of diabetes you have and your weight-management concerns. People with type 1 diabetes and those who take insulin before meals may be most interested in the total carbohydrate count, but that information may be less important for others. "Having diabetes doesn't mean your highest priority is to count total grams of carb," says Madelyn Wheeler, R.D., CDE, co-owner of Nutritional Computing Concepts in Zionsville, Indiana. "A person newly diagnosed with type 2 diabetes might choose to zero in on fat grams and total calories to trim pounds."

Carol Doyle, a 60-something with type 2 diabetes from Washington, D.C., is a carb counter who appreciates the total carbohydrates listed on the nutrition facts panel. "Those counts are reliable, accessible, and keep me within my carb confines," she says. "But I'm baffled by the listings under 'Total Carbohydrate'—sugars, insoluble fiber, and others—as well as the meaning of 'sugar-free' and 'high-fiber' plastered on labels." Carol, who takes diabetes pills, says she eyes "serving size, total carbs, and calories to eat 40–50 grams of carb per meal without going overboard on calories, especially from fat, to control my blood glucose levels."

Labeling rules

The current food-labeling regulations, established in 1994 by the U.S. Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA), are legal requirements. The regulations detail how manufacturers must analyze food products, what nutrients to list and how to calculate them, and even the size of the words on the label.

Manufacturers are responsible for analyzing their food products, but the federal agencies can analyze foods and take actions if the nutrition facts are false. Food-labeling regulations undergo periodic changes as the FDA and USDA notice consumer confusion, manufacturers change their practices, and manufacturers and public-interest groups lobby for changes.

The only recent substantive change in the nutrition facts label was in 2006 with the addition of trans fats. A major revision is under way, and plenty of food manufacturers and advocacy organizations have weighed in. When can you expect a new label? "It's a question for the Ouija board," says Julie Miller Jones, Ph.D., professor of nutrition and foods at the College of St. Catherine in St. Paul, Minnesota. "Could be soon, could be years."

Before you grocery shop, take our tour of nutrition facts and packaging lingo to make sense of the food label.

Package claims: Help or hype?

Food packages are allowed to display only a handful of nutrition claims (such as "no sugar added"). The manufacturer must support any nutrition claim on the package by listing the related nutrients on the nutrition facts label. There are no regulations on the placement, size, or color of the claim, which makes comparing products difficult—until you look at the nutrition facts panels side-by-side.

"No"
Foods that contain no amount or trivial amounts of a nutrient. ***Other terms used:*** free, without, zero

"Low"
Foods for which you cannot easily exceed the dietary guideline. ***Other terms used:*** low source of, few, little, contains a small amount of

Total fat

Under total fat, food labels must list saturated and trans fat. These fats are closely associated with raising bad cholesterol and an increased risk of heart and blood vessel diseases.

Paying attention to the total fat in a food pays off because fat is the most concentrated source of calories (9 calorie per gram). Eating too much fat can lead to unwanted weight gain or make it tougher for you to lose weight.

Saturated fat
Saturated fats are mainly fats from animal-base sources. Red meat, cheese, whole milk, and coconut oil are some sources of saturated fat. The ADA currently recommends you eat no more than 7 percent of your calories as saturated fat.

Trans fat
Most of the trans fat in foods is from partially hydrogenated oils and shortenings created by converting liquid oil into a solid fat during food processing. It's found in some fried restaurant foods, fried snack foods, and other packaged foods. Experts recommend you eat as close to zero grams of trans fats per day as possible. Trans fats raise bad cholesterol and lower good cholesterol.

Polyunsaturated and monounsaturated fats
Manufacturers may voluntarily list these more healthful fats. They must, however, list them if a nutrition claim is made about them on the package. These fats are from plant sources and are usually liquid at room temperature.

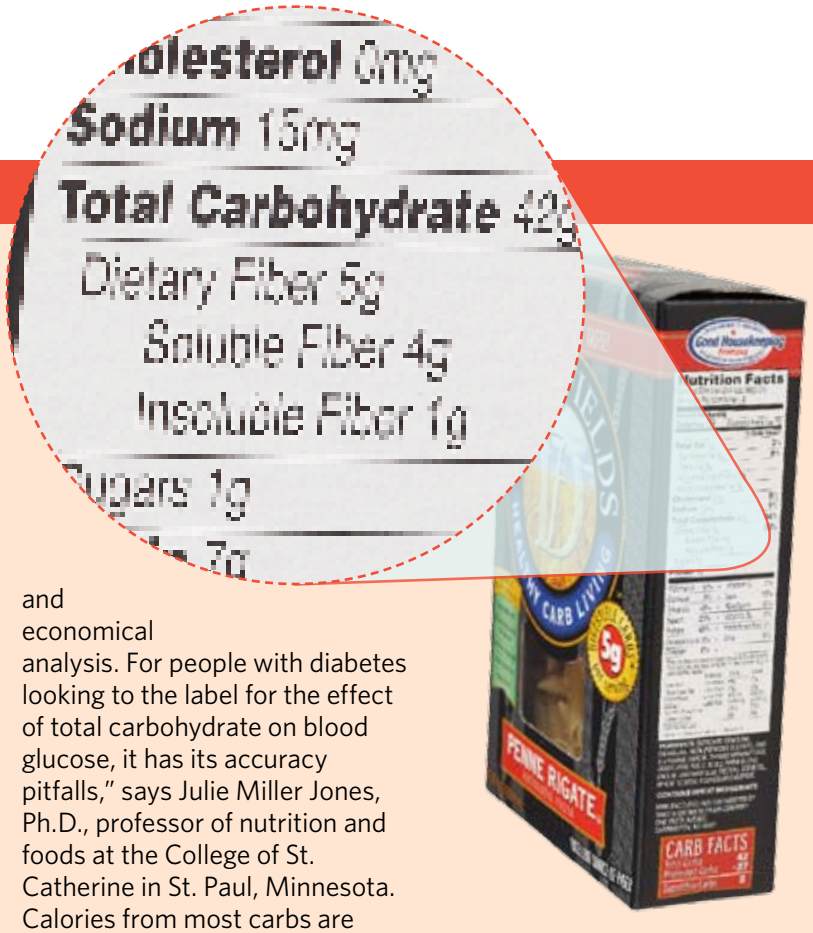
"Reduced"
The product is different from the regular food and contains at least 25 percent less of a nutrient or of calories.

"Lower"
The food contains 25 percent less of a nutrient or of calories than the regular food. ***Other terms:*** less, fewer

"Excellent source of"
One serving provides 20 percent or more of the daily value for that nutrient, such as dietary fiber. ***Other terms:*** high in, rich in

"Good source of"
One serving of the food provides 10–19 percent of the daily value for that nutrient.

Total carbohydrate



Noted in bold on the nutrition facts label, total carbohydrate is the umbrella under which carbohydrate sources are detailed. Dietary fiber and sugars, the two items required to be listed, are indented under total carbohydrate. Manufacturers may voluntarily list other sources, such as insoluble or soluble fiber, other carbohydrate, or sugar alcohols. When making carb-related nutrition claims, such as "sugar free," on the food package manufacturers must list related sources of carbohydrate on the label (see "Package Claims: Help or Hype?," *page 66*).

One issue for people counting carbohydrates is that total carbohydrate is not measured specifically. It is calculated by difference—after the product is analyzed, the weight of the other food elements is subtracted and what remains is total carbohydrate. "Though not ideal, that's the most feasible and economical analysis. For people with diabetes looking to the label for the effect of total carbohydrate on blood glucose, it has its accuracy pitfalls," says Julie Miller Jones, Ph.D., professor of nutrition and foods at the College of St. Catherine in St. Paul, Minnesota. Calories from most carbs are calculated as 4 calories per gram.

Dietary fiber
Dietary fiber is a carbohydrate, typically from plant foods, that cannot be digested by enzymes in the small intestine. If listed, insoluble and soluble fiber are indented under dietary fiber.

Insoluble fiber—This is dietary fiber that's not digestible. Insoluble fiber is usually found in whole grain cereals and breads. Manufacturers may subtract grams of insoluble fiber from the total carbohydrate count to derive the calories per serving.

Soluble fiber—This is dietary fiber that's digested but remains gummy and thick (and helps you feel full). Soluble fiber is usually found in beans, peas, oats, and barley.

Other carbohydrate
This source of carbohydrate, from several types of starches, is what's left after subtracting sugars, sugar alcohols, and fiber. Other carbohydrate is listed infrequently; you may see it on cereal labels.

How to factor in fiber

total carb grams **–** ½ fiber grams **=** your carb count

If you use mealtime insulin, you can account for the undigested fiber that won't raise blood glucose. For foods with more than 5 grams of fiber, subtract half the grams of dietary fiber from the total carbs to get your carb count.

—American Diabetes Association

Sugars
Included in the sugars grouping are all one-unit sugars (monosaccharides, such as glucose and fructose) and two-unit sugars (disaccharrides, such as sucrose, lactose, and the commonly used sweetener high-fructose corn syrup). The sugars on the label contain all naturally occurring sugars, such as sucrose in fruit and lactose in milk, as well as added sugars—those added to products during manufacturing. "Often people with diabetes who haven't had their knowledge updated focus on 'sugars' because they think these are simply sucrose or added sugars and they need to be avoided like the plague," says Madelyn Wheeler, R.D., CDE. But you need not delete all sugars from your meal plan. Naturally occurring sugars found in fruit and dairy products are part of a well-balanced meal plan.

The current nutrition facts label doesn't decipher between the two types of sugars. "You can infer the sources of sugars by checking the ingredients listed in descending order by weight," Wheeler says. Ingredients such as refined sugar and high-fructose corn syrup are added during the manufacturing process. Some health advocates, including the American Diabetes Association (ADA), are encouraging the FDA to require listing of "added sugars" separately or as the only sugars accounted for under "sugars."

Sugar alcohols (polyols)— Called sugar alcohols because part of their structure chemically resembles sugar and part resembles alcohol, these ingredients are neither sugar nor alcohol. Polyols are in sugar-free foods such as candy, cookies, ice cream, and chewing gum. They're used alone or combined with sugar substitutes to sweeten and provide bulk. Common polyols are sorbitol, erythritol, maltitol, and mannitol. Many end in "ol," but not all. The words "sugar alcohol" or the specific polyol (if only one is used) must be provided when a nutrition claim such as "sugar-free" is made on the food package.

Sugar alcohols cause a lower rise in blood glucose and contain fewer calories (2 calories per gram of carbohydrate instead of 4 calories per gram). The downside? Polyols can cause diarrhea in some people, especially children. Foods with large amounts of polyols must state on the package: "Excess consumption may have a laxative effect." To see how to account for sugar alcohols in your carb count, refer to the formula, *above*.

How to count sugar alcohols

total carb grams **–** ½ sugar alcohol grams **=** your carb count

For foods with more than 5 grams of sugar alcohol, subtract half the grams of sugar alcohol from the carbohydrate grams to get your carb count. If a serving has less than 5 grams of carb or is under 20 calories, count the food as "free." *—American Diabetes Association*

Hope Warshaw is a Diabetic Living *magazine contributing editor and advisory board member. She wrote* Diabetes Meal Planning Made Easy, *third edition (American Diabetes Association, 2006).*