

Must Know Health Info

Health Information from the Experts at Johns Hopkins Medicine



No More Carb Confusion

Choosing carbs (“carbohydrates”) wisely helps you control your blood sugar and weight.

What is low-carb dieting? What can it do for you when you're trying to control your blood sugar and weight? It is true that heavy carb foods have a big impact on your blood sugar. But, watching how much you eat – of all kinds of foods – helps you control blood sugar best. This is true for foods dense in carbs too.

In the diet world, you may hear about “low-carb dieting.” This is not the same as limiting carbs to manage blood sugar. Here is what you need to know about carbs and your diabetes.

Carbs and blood sugar

Things that influence how carbs affect your blood sugar after a meal are:

- How much carbs you ate
- The source of the carbs from foods you ate.

They influence how high and how fast blood sugar goes up after a meal.

To find how much carbs are in a food, check the nutrition label. You will see the amount of carbs measured in grams. Insulin is the key when it comes to carbs. You need insulin in order to break down carbs. It helps your body change carbs into energy you can store and use. Once you know – and count – your carbs, you can plan meals and keep your blood sugars on target.

Do not confuse counting carbs with low-carb diets like Atkins™ or South Beach™. These diets start with very few carbs for a short time. Then, they add more carbs after initial weight loss. But, they still remain low in carbs. For people with diabetes, counting carbs is a plan for your life. It is a long term way to control

blood sugar, not a short term way to lose weight. Count your carbs every day. How much carbs you eat – each time you eat – affects your blood sugar. And, it affects your blood sugar over the next few hours.

Your body needs to get about half of its calories as carbs. This is true whether or not you have diabetes. The trick is knowing how much to eat at one time to keep blood sugar in control.

How many grams of carbs do you need?

The ADA (American Diabetes Association) gives some guidance if you have diabetes:

- Get about half (45 – 65%) of your total calories from carbs. Here is an example. What if your diet has you eat a certain number of calories a day (such as 2,000)? You should eat half (1,000) of the calories as carbs.
- Do not limit carbs to less than 130 grams in a day. This is about eight servings of 15 grams each.

Your body needs carbs for energy. Carbs also have fiber. They have vitamins and minerals that are good for you. And, your brain uses the sugar from carbs for fuel.

Carb-counting benefits

Special members of your health care team (a “nutritionist” or “diabetes educator”) can help you start counting carbs. Most people find counting carbs easy to learn. And, they learn to make changes as needed. A major 10-year study of people with type 1 diabetes found that:

- Counting carbs in your meal plan can keep blood sugars close to normal.
- Counting carbs gives you more options with food choices.

Know your carbs

What foods have carbs? These types of foods count as carbs:

- Sweets (candy, cakes and sugary drinks)
- Starches (breads, pasta, rice, crackers, cereal and starchy vegetables such as potatoes, peas, corn and legumes)
- Fruit and fruit juices

- Milk and yogurt.

One serving of carbs is about *15 grams*. This is not the same as the “serving size” on nutrition labels. Here is an example. A package of oatmeal may say 1 serving has *30 grams* of carbs (“carbohydrates”). But, 30 grams of carbs counts as 2 servings of carbs. So, the 1 serving of oatmeal would have 2 servings of carbs. Foods have different amounts of carbs. This influences the serving size or number of servings you can eat. There are some foods with 1 serving of carbs. Examples are:

- One small banana
- One slice of bread
- Half a cup of mashed potatoes.

People like counting carbs. You can eat your favorite foods once you know how the carb count. The amount of carbs you eat tells you how much your blood sugars will go up. You will know how many carbs you can eat in a meal—and keep blood sugar in your range. Figure that out by testing your blood sugar before your meal. Then, test your blood sugar 2 hours after your meal. Use the after meal test to tell if the amount of carbs worked. The amount worked if:

- Your blood sugar is in your range
- Your blood sugar is less than 50 points higher than before you ate.

Let’s say you start to count your carbs and test your blood sugar after you eat. You do this for a couple of weeks. You find that eating 45 grams of carbs in a meal is OK for your blood sugar. This means you can have three servings of carbs (at 15 grams apiece) per meal. Now you have some choices to make. Maybe you'd like two starches and a fruit (two slices of bread and a small orange) for lunch. Or you want a fruit, milk and a starch. The choice is yours. All you need to do is make sure your servings or units of measure are right. (Is that ½ cup or 1 cup of pasta?) If your portion size doubles, so will the carb content.

You do not have to keep all of this in your head. Start by learning a few carb counts for your favorite foods. Then a few things can help you. You can:

- Write them down
- Use flash cards
- Buy a pocket-sized carb guide (from grocery store checkout)
- Use online carb guides or tools.

“Good” carb, “bad” carb?

Use common sense to choose healthy carbs. An apple and a cookie can have the same amount of carbs. But, the apple is still better for you. Instead of candies and pies, choose breads, cereals, pasta, fruits or milk. It is OK to have a treat sometimes. But, remember the carbs in it count toward your total for the day.

Use nutrition labels to calculate carbs

When you eat prepared foods, read the label to know what you are eating. The label lists the total amount of carbs, per serving. The amount will be in grams. Look for the total amount of carbs (“**Total Carbohydrate**”) and not just the grams of sugar. This will be the amount of carbs per serving in the food. You need to decide how much you'll eat. For example, the serving size may be $\frac{3}{4}$ cup. But, you plan to eat $1\frac{1}{2}$ cups. Then, you must double the total carbs listed for a serving. That is how you will know the amount of carbs you will be eating.

When you'll be eating out, plan ahead. Many eating places have nutrition facts for their foods. You may be able to get this online or at the restaurant. Before long you'll know the carbs for different foods. That makes it easy to order a meal within your carb budget.

Beware of low-carb marketing

You may see “low-carb,” “carb-wise” or “carb-fit” on foods you buy. These terms are used for marketing. But, the FDA (Food and Drug Administration) has not defined these terms. You may think you can eat more of these products, but think again. They tend to cost more. And, you will not need them once you get the hang of carb counting the foods you enjoy most. The product may have fewer carbs but have high fat and calories. Remember, too, that foods that say “sugar-free” are not free of carbs. Always focus on the grams of total carbs per serving. That is the number that matters. Then decide whether it is for you.

What are “net carbs”?

You may see the term “net carbs” on packaged foods. This came from the low-carb diet business. “Net carbs” starts with the total grams of carbs. Then, they subtract grams of fiber and some alcohols (“sugar alcohol” and “glycerin”). But, beware. This is more for marketing – it is not based so much on science. It encourages you to eat more of the foods that say they have few “net carbs.” People who count only

the “net carbs” tend to think they can overeat. Instead, they could use carb counting and eat their favorite foods.

Balance your meals

Spread your day's carbs across your meals and snacks to keep your blood sugar even. Eat 3 to 4 servings of carbs at each meal. And, eat 1 to 2 servings in snacks. But, make sure you don't exceed your daily carb budget. (This depends on your weight and weight goals. Your health team may want you to do this a different way.) Do not forget about balanced meals, with:

- Carbs
- Some protein
- Vegetables
- Healthy fats.

Do not save all your carbs for a big feast or special occasion. This does not work. Overloading on carbs at one meal shows up in your blood sugar. The goal is even blood sugars through the day, from meal-to-meal.

Top tips for carb (carbohydrate) counting

1. **Check food labels.** This is the only way to count carbs accurately. To control blood sugar, a serving of carbs is 15 grams. This stays true! No matter what the label says about the carbs in 1 of its servings.
2. **Spread your carbs across meals and snacks for the day.** This controls blood sugar even more.
3. **Plan ahead for meals.** Know the nutrition content for the recipes you use and places you eat.
4. **Select a variety of carb sources.** Get most of them from the fruits, milk and starches groups.

*****Authored by Johns Hopkins University and Johns Hopkins Health System*****