Diabetes: How to Count Carbohydrates

Carbohydrate is the nutrient that affects blood sugar the most. The more carbohydrate you eat at one time, the higher your blood sugar level will rise. Spreading your carbohydrate out through the day can help you keep your blood sugar levels within a target range. If you take insulin, you can learn to match your dose of insulin to the grams of carbohydrate you eat.

Carbohydrate counting is the best way to plan a diet to control your blood sugar. It will help you feel more in control and give you more confidence in managing your diabetes.

Which foods have carbohydrate?
Carbohydrate comes in two forms:

• Starch (complex carbohydrate). Starch is found in foods such as breads, cereals, and certain vegetables such as potatoes and corn.

• Sugar (simple carbohydrate). Sugar is found in fruits, milk, yogurt, and sweets.

Foods with added sugar usually have more total carbohydrate in a serving than foods without added sugar. So a serving of fruit canned in syrup will have more carbohydrate than the same serving of fresh fruit. You can eat foods with sugar when you have diabetes. Just keep track of the amount of carbohydrate in them and stay within the amount you need.

What is the daily amount?
Your daily amount depends on several things—your weight, how active you are, what diabetes medicines you take, and what your goals are for your blood sugar levels. A registered dietitian or certified diabetes educator will help you plan how much carbohydrate to include in each meal and snack.

For most adults, a guideline for the daily amount of carbohydrate is:

• 45 to 60 grams at each meal. That's about the same as 3 to 4 carbohydrate servings.

• 15 to 20 grams at each snack. That's about the same as 1 carbohydrate serving.

Spreading your carbohydrate all through the day will help keep your blood sugar levels stable.

• Check your blood sugar level before and after you eat. This will show you how the food you eat affects your blood sugar.

• Record what you eat and your blood sugar results in a food record. Review the record with your dietitian or certified diabetes educator at each regular visit and whenever you think your meal plan needs adjusting.

• Eat a balanced diet that includes protein and limits fat. Protein-rich foods include meat, beans, and eggs. Ask how much fat you need.

How do you count carbohydrate?
Most packaged foods have labels that show the carbohydrate for a single serving. Get a guide from the American Diabetes Association. Once you know how much carbohydrate you can have each time you eat, you can use one of two ways...
to count. Use the method that is easiest for you. For both methods, foods have been grouped and serving sizes have been adjusted so that each serving has 15 grams of carbohydrate.

- **Counting grams.** If you wanted a breakfast with 45 grams of carbohydrate, you could choose three servings with 15 grams in each serving (3 servings x 15 grams per serving = 45 grams). So you could choose one serving each of oatmeal, milk, and half a banana. Or you could pick three servings of the same food, like a larger bowl of oatmeal. Or you could add up the carbohydrate on food labels until you get to 45 grams.

- **Counting servings.** In this method, 15 grams equals 1 serving. Instead of 45 grams of carbohydrate at breakfast, you would count 3 carbohydrate servings.

**Carbohydrate food guide**

This list is a general guideline for the carbohydrate content of common foods. If you eat a double portion, count it as two servings and count twice as many grams of carbohydrate.

It is important to know what makes a serving or standard portion. At first, it may be helpful to weigh or measure your food.

**Check the Nutrition Facts label on packaged or canned foods to see how much carbohydrate is in each serving.**

One serving of carbohydrate has 15 grams of carbohydrate. Of course, not all foods contain exactly 15 grams of carbohydrate. Typically if a food has 8 to 22 grams of carbohydrate, that is equal to 1 carbohydrate serving.

**Bread, cereal, rice, pasta, and starchy vegetables** (15 grams of carbohydrate per serving)

- 1 slice bread (1 oz)
- ¼ bagel, 3/4 cup dry cereal
- ½ cup cooked cereal
- 1/3 cup pasta, rice or other cooked grain
- ½ cup cooked beans, lentils, or peas
- ½ cup cooked corn
- ½ cup mashed potatoes

**Vegetables** (5 grams of carbohydrate per serving)

- 1 cup raw leafy vegetables
- ½ cup other vegetables, cooked or chopped raw
- ½ cup vegetable juice

**Fruits** (15 grams of carbohydrate per serving)

- 1 small apple, 1 medium orange, or half a banana
- ½ cup chopped, cooked, or canned fruit
- ½ cup fruit juice
- ¼ cup dried fruit

**Milk and yogurt** (15 grams of carbohydrate per serving). Food with added sugar will contain more carbohydrate. Check the label.

- 1 cup milk
- 2/3 cup plain yogurt

**Sweets.** The carbohydrate content of sweets varies. It depends on the ingredients. Talk with a registered dietitian about how to work these foods into your diet.