

Carbohydrate Counting: The Basics

Counting carbohydrates in the foods you eat can help you control your blood glucose. This is because carbohydrates raise your blood glucose more than any other nutrient.

Foods can be divided into three nutrient groups: carbohydrates, meats and meat substitutes, and fats. Carbohydrates such as grains, fruits, vegetables, and low-fat milk are healthy foods. They provide energy, vitamins, minerals, and fiber.

The balance between the amount of carbohydrates you eat and insulin determines how much your blood glucose level goes up after meals. This means you need to know what foods have carbohydrates and how many carbohydrate servings to eat to keep your blood glucose within the target range.

Carbohydrate-Counting Meal Plans

Your dietitian can help you set up a meal plan based on counting the carbohydrates you eat. First, you and the dietitian will decide how many carbohydrate servings you should eat at

meals and snacks based on how carbohydrate foods affect your blood glucose.

By checking your blood glucose levels, you can tell when and where changes in the plan might be needed. If your blood glucose levels are too high, you may need to eat fewer carbohydrate servings, be more physically active, or work with your health care team to add or make changes in diabetes medicines.

Carbohydrate Foods

Carbohydrates are starches and sugars and can be found in many foods. These include:

- Breads, crackers, and cereals
- Pasta, rice, and grains
- Starchy vegetables, such as potatoes, corn, and peas
- Nonstarchy vegetables, such as broccoli, salad greens, and carrots
- Milk and yogurt
- Fruits and juices
- Sweets and desserts

Foods that contain sugars, such as cakes, cookies, and candy, are counted as carbohydrate servings but do not

provide vitamins or minerals like the healthier types of carbohydrates.

Serving Sizes

Measuring and weighing your foods will help you learn what carbohydrate servings look like.

- Carbohydrates are measured in grams (g).
- One carbohydrate serving = 15 g of carbohydrate.
- The best way to find out how many grams of carbohydrates are in foods is by checking the Nutrition Facts panel of food labels. Food lists and reference books are also available.

Other Nutrients

Counting carbohydrates is key, but you also need to mind the other types of foods you eat.

- Most adults need 6 oz of meat or meat substitutes in a day. A 3-oz serving of cooked meat is about the size of a deck of cards.
- Limit saturated fats such as bacon, butter, cream, solid shortenings, and high-fat meats.

- Eating too many servings of meats and meat substitutes and fats can cause weight gain and other problems, such as heart disease.

Carbohydrate counting allows you more flexibility in food choices and can help keep your blood glucose levels within target range. For a referral to a registered dietitian, call 1-800-366-1655.

How to Count Carbohydrates	
Grams of carbohydrate	Count as
0–5 g	Do not count
6–10 g	1/2 carbohydrate serving or 1/2 starch, fruit, or milk serving
11–20 g	1 carbohydrate serving or 1 starch, fruit, or milk serving
21–25 g	1 1/2 carbohydrate servings or 1 1/2 starch, fruit, or milk servings
26–35 g	2 carbohydrate servings or 2 starch, fruit, or milk servings



Adapted from: Daly A, Bolderman K, Franz M, Kulkarni K: *Basic Carbohydrate Counting*. Alexandria, Va., and Chicago, American Diabetes Association and American Dietetic Association, 2003