

Diabetes Meal Planning: Managing Your Carbohydrate Intake¹

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Managing Carbohydrate Intake

Maintaining a consistent carbohydrate intake throughout the day is an effective meal-planning method to help maintain your target blood glucose levels. Foods that contain carbohydrates have the greatest effect on blood glucose levels compared to foods that contain primarily protein or fat. Carbohydrates in foods that contribute to blood glucose include sugars and starches. Foods containing carbohydrates are divided into groups based on similar carbohydrate content per serving. The amount of carbohydrates you consume is based on your diabetes treatment goals and carbohydrate tolerance.

Foods that contain carbohydrates include:

- Grains such as breads, cereals, rice, and pasta
- Starchy vegetables such as corn, potato, sweet potato, sweet peas, and winter squash
- Legumes—dried peas and beans
- Milk and yogurt
- Fruit and fruit juices
- Desserts, sweets, and snack foods
- Batter, breading, and sweet sauces

Foods that contain **small amounts** of carbohydrates include:

- Nonstarchy vegetables such as broccoli, carrots, cauliflower, green beans, and leafy greens
- Nuts and seeds

Foods that **do not** contain carbohydrates include:

- Meat, poultry, and seafood (without batter, breading, or sweet sauces)
- Aged cheeses
- Oils and fats

What are the benefits of managing carbohydrates?

- Allows flexibility in your meal plan.
- Helps balance your food and medications.
- Helps control food portions to support a healthy weight.
- Keeps you in control of your blood glucose levels.

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Setting Up Your Plate—Managing Carbohydrates

Within the carbohydrate food groups, each choice contains approximately 15 grams of carbohydrate, and they can be exchanged for each other, although serving sizes will vary. For example, in the fruit group, a serving of fresh blueberries is $\frac{3}{4}$ cup, and a serving of orange juice is $\frac{1}{2}$ cup. In the starch group, a serving of cooked rice is $\frac{1}{3}$ cup, while for potatoes it is $\frac{1}{2}$ cup. In the milk group, one serving of milk is 1 cup, and a serving of low fat yogurt is $\frac{2}{3}$ cup.

Table 1. When planning meals and snacks, you can count the total number of carbohydrate grams or carbohydrate choices.

Carbohydrate Food Group 1 serving	Carbohydrate grams (g)	Carbohydrate Choices
Starch—grains	15	1
Starchy vegetables	15	1
Legumes—dried peas and beans	15	1
Milk and yogurt	12	1
Fruit and fruit juices	15	1
Low-Carbohydrate Food Group		
Nonstarchy vegetables	5	3 servings = 1 choice

An Example Dinner Menu

Below is an example dinner menu based on the American Diabetes Association's Diabetes Plate Method. For a demonstration video, see <https://www.youtube.com/watch?v=A6LZijdsGu0>.

Table 2. Example dinner.

Food Group	Food Choices
Starch	small baked potato
Protein	3 ounces sliced beef
Nonstarchy vegetables	1 $\frac{1}{2}$ cups assorted vegetables—carrots, broccoli, and green beans
Fruit	small apple
Milk or yogurt	$\frac{3}{4}$ cup soy milk and $\frac{1}{4}$ cup Greek yogurt (potato topping)

Because each person's dietary needs are different, it is important to consult with a Registered Dietitian (RD), preferably a Certified Diabetes Educator (CDE), to determine your daily calorie needs and exactly how many carbohydrate grams or carbohydrate food choices from each of the five food groups you require at each meal and snack. Make sure to consult with your healthcare provider before making any changes in your diabetes treatment plan.

Activity: Plan a Menu

Plan a 1-day menu based on the American Diabetes Association's Diabetes Plate Method. Click here to visit the [American Diabetes Association's Bookstore](#) to view the *Choose Your Foods: Food Lists for Diabetes* meal-planning guide.

Use a 9-inch plate plus a small bowl and 8 oz beverage glass to place foods from each of the five food groups: lean protein, starch, nonstarchy vegetables, fruit, and milk or yogurt. Visually divide your plate into sections for nonstarchy vegetables, starch, and lean protein foods (Figure 1). Two other small bowls or cups can be used for the fruit, milk, or yogurt, or these foods can be added to other foods on the plate. The key is to select healthful foods from each of the five food groups to create your healthy meal.

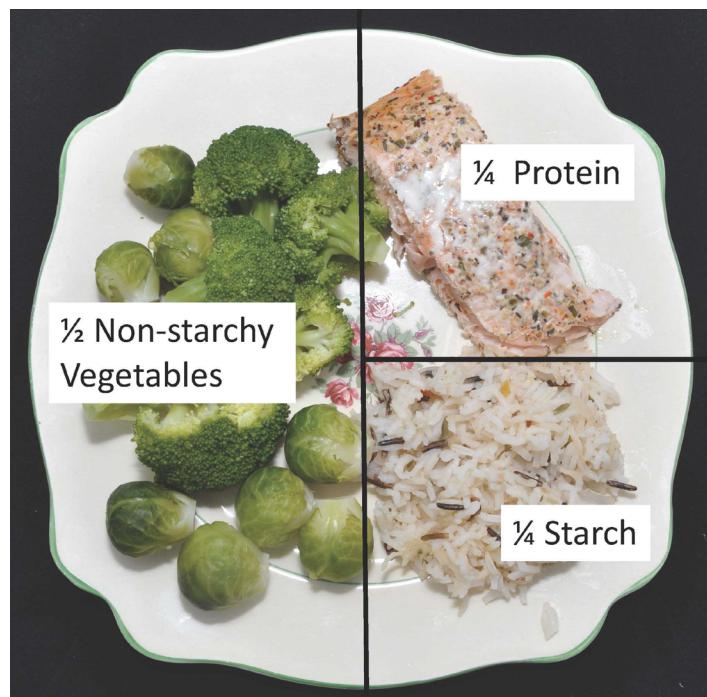


Figure 1. Example of the diabetes plate method (grilled salmon with basmati rice medley, broccoli, and Brussels sprouts).

Credits: Lincoln Zotarelli, UF/IFAS

Table 3. Making YOUR menu.

Food Group	YOUR Food Choices
Breakfast	
Starch	
Protein	
Nonstarchy vegetables	
Fruit	
Milk or yogurt	
Lunch	
Starch	
Protein	
Nonstarchy vegetables	
Fruit	
Milk or yogurt	
Dinner	
Starch	
Protein	
Nonstarchy vegetables	
Fruit	
Milk or yogurt	