UW Medicine

Diabetes Meal Planning How foods affect your blood sugar

Foods contain 3 types of *macronutrients*: carbohydrate, protein, and fat. Macronutrients are the nutrients the body uses in the largest amounts. Macronutrients provide the calories, or energy, that your body uses for fuel. How many calories you need each day depends mostly on how active you are and whether you need to lose, gain, or maintain your weight. Carbohydrates have the greatest effect on blood glucose levels. Protein

Carbohydrates have the greatest effect on blood glucose levels. Protein and fat do not affect blood glucose as much.

Carbohydrates

Carbohydrates are the main source of energy for your body. They are also known as starches, sugar, or "carbs." Eating carbohydrates raises your blood glucose levels. To keep your blood glucose at healthy levels, eat balanced meals containing some carbohydrates, some protein, and lots of non-starchy vegetables.



How many carbohydrate choices are right for me?

Eat balanced meals containing some carbohydrates, some protein, and lots of non-starchy vegetables.

This table shows carbohydrate choices for men and women, based on whether they want to lose weight or maintain their weight. **These** suggestions are only a general guide.

	To Lose Weight	To Maintain Weight
Women	Eat 2 to 3 carb choices at each meal (30 to 45 grams)	Eat 3 to 4 carb choices at each meal (45 to 60 grams)
Men	Eat 3 to 4 carb choices at each meal (45 to 60 grams)	Eat 4 to 5 carb choices at each meal (60 to 75 grams)

One Serving of Carbohydrates

One serving of carbohydrate equals 15 grams of carbohydrates. When eating snacks, try to limit them to 1 serving or less of carbohydrates.

Each food serving in this table equals 1 serving (15 grams) of carbohydrate. Always read the Nutrition Facts label on packaged foods for the most accurate data.

Grains, Beans, Starchy Food	ls
 1 slice bread ½ hamburger bun ¼ bagel ½ English muffin 1 small pancake or waffle 1 small tortilla ¹/₃ cup cooked rice or pasta ½ cup cooked beans 	 ½ cup corn, peas, or winter squash ½ cup mashed potatoes (1 small potato) or other starchy foods ½ cup hot cereal 3 cups popped popcorn 1 small granola or energy bar 10 potato or tortilla chips 1 small piece of pizza
Fruits and Fruit Juices	
 1 small piece of most fruits ½ banana 1 cup fresh fruit ½ cup unsweetened canned fr 	 ¼ cup dried fruit 17 grapes ½ cup juice (4 ounces)
Dairy and Dairy Alternative	S
 1 cup milk (whole milk, skim, non-fat or nut/soy) 	• ² / ₃ cup yogurt (6 ounces)
Sweets	
 ½ small donut or muffin ½ cup ice cream or frozen yogurt 1 small cupcake 	 1-inch piece of cake or brownie 1 tablespoon sugar, jam, or syrup 1 small cookie

If You Take Insulin

If you use insulin to manage your diabetes, ask your diabetes care team to help you create your personal meal plan.

Protein, Fats, and Non-Starchy Vegetables

Here are examples of foods that contain little or no carbohydrates. These foods will not raise your blood glucose levels very much.

Proteins					
Beans and legumes*	Chicken	Peanuts and other nuts*			
Beef	Eggs	Pork			
Cheese	Fish	Soy, tofu, tempeh			
Fats					
Avocado	Butter	Oils			
Non-starchy Vegetables*					
Asparagus	Kale	Peppers			
Broccoli	Lettuce, salad greens	Snap peas			
Cauliflower	Mushrooms	Spinach, chard			
Cucumbers	Onions	Tomatoes			
Celery	Garlic	Zucchini			
Eggplant	Green beans				

* These foods contain some carbohydrate.

A Balanced Diet

Eating a balanced diet can help better you manage your blood glucose:

- Fill half your plate with non-starchy vegetables. These do not contain a lot of carbohydrates, but provide good nutrients and fiber. Always include a protein with your meals.
- Limit or avoid simple sugars such as juice, regular soda, sugar, syrups and candy. These foods tend to quickly raise blood glucose levels but do not provide many nutrients.

Tips for Planning Your Meals

- Try to eat at regular times. Most people with diabetes do well with a meal plan that includes 3 meals a day.
- Divide your daily carbohydrate intake between 3 meals. Avoid eating carbohydrates at only 1 meal a day. Spreading out your carbohydrate intake will improve your overall blood glucose and help you enjoy your meals.

- Include a snack in your meal plan if you are hungry or your meal is going to be delayed. But, eating snacks if you are not hungry just adds calories you don't need.
- Practice measuring or weighing your carbohydrate foods to learn the right portion size for you. Knowing portion sizes will help you count carbohydrates more accurately.
- When eating packaged foods:
 - Read the Nutrition Facts label to find the **Total Carbohydrate** content in grams per serving:
 - Use standard measuring cups or spoons to measure exactly how much you are eating or drinking of the food.
 - Look at the **serving size** on the Nutrition Facts label. How many servings are you eating or drinking?
 - Calculate the total carbohydrate of the amount of the food you are actually eating.
- Eat whole (unprocessed) foods as much as you can.
- Drink water when you are thirsty. Avoid juices and drinks that contain sugar, such as soda pop, energy drinks, and sweet teas.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Diabetes Institute: 206.598.4882

UW Medicine Neighborhood Clinics: 206.520.5000

Other patients: Please call your healthcare provider: