

Carbohydrate Counting

Carbohydrate counting, also called carb counting, is a meal planning tool for people living with diabetes. Carb counting involves using food labels and estimating portion sizes of foods to keep track of the amount of carbohydrates you eat at each meal or snack.

Carbohydrates are one of the main nutrients found in food and drinks. Protein and fat are the other main nutrients. Carbohydrates include starches, fiber, and sugars. Carb counting can help keep your blood sugar levels in a safe range because carbohydrates affect your blood sugar more than other nutrients. Please note that a ketogenic diet (a very low carb, high fat diet) is not recommended for people with type 1 diabetes.

The amount of carbohydrates you need in your diet

The amount of carbohydrates you need is based on your height, weight, activity level, and blood sugar levels. Most people do well in the following ranges:

- **Women need 30 to 45 grams per meal** (2 or 3 servings of carbohydrates per meal).
- **Men need 45 to 60 grams per meal** (3 or 4 servings of carbohydrates per meal).
- Snacks may be needed to satisfy hunger and carbohydrate needs. Your dietitian can provide you with recommendations for your needs. **You may be told to keep snacks around 0-20 grams.**

15 grams of carbohydrate = 1 carb choice or serving.

How to count carbohydrates

When reading food labels, use these tips to help you count carbohydrates:

- 1. Check the serving size.** All nutritional information on the label is based on 1 serving. Look at the common measure, such as cups or tablespoons. The grams (g) listed here are the weight of the serving.
The serving size for this product is 1 cup.
- 2. Look for total carbohydrates in grams.** This includes the fiber, sugars, and other carbohydrates in the food. Use this number when counting carbohydrates.

There are 22 grams of carbohydrate in this product per serving. If you ate 2 servings of this food, you would be getting 44 grams of carbohydrate.

Nutrition Facts	
6 servings per container	
Serving size	1 cup (140g)
Amount per serving	
Calories	170
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrate 22g	8%
Dietary Fiber 2g	7%
Total Sugars 16g	
Includes 8g Added Sugars	16%
Protein 2g	
Vitamin D 0mcg	0%
Calcium 20mg	2%
Iron 1mg	6%
Potassium 240mg	6%
*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet 2000 calories a day is used for general nutrition advice.	

3. Compare food labels. Start by comparing the serving sizes of products you eat, and then compare the grams of total carbohydrate. Look at the fiber and sugar content.

Please note that products marked as “sugar free,” “reduced sugar,” or “no sugar added” are not necessarily carbohydrate-free. Read the product’s food label to understand how many carbs you are eating.

Carbohydrate serving sizes

If you have a food exchange book or list, you can use it to look up carbohydrate grams for foods. Otherwise, read the product’s food label. If no food label is available, use the estimates on the next pages to calculate the carbohydrate grams for a food. Be aware that carbohydrate amounts can vary greatly between different types of the same food. For example, some breads are 15 grams a slice while others are closer to 25 grams.

Starch Group – 1 serving equals 15 grams of carbohydrate or 1 carb choice

Choose whole grains over refined grains.

1 serving =

- 1 (1 ounce) slice of bread
- 1 (1 ounce) small roll
- ¼ (1 ounce) bagel
- ½ hamburger bun or English muffin
- 1, 6-inch tortilla
- ⅓ cup cooked rice, pasta, barley or couscous
- ½ cup cooked bulgur wheat, lentils or legumes (dried beans or peas)
- ½ cup corn, sweet potato or green peas
- 3 ounce baked sweet or white potato
- ½ cup unsweetened cooked cereal
- ¾ cup unsweetened dry cereal
- ¾ ounce pretzels
- 3 cups hot air popped or microwave popcorn with no more than 3 grams of fat per serving



Fruit Group – 1 serving equals 15 grams of carbohydrate or 1 carb choice

1 serving =

- 1 small apple, orange or nectarine
- 1 medium peach
- ½ banana, large pear, grapefruit, or mango
- 1 kiwi
- 1 cup fresh berries
- 1 cup fresh melon cubes
- 17 small grapes (3 ounces)
- ½ cup canned fruit in juice or light syrup



- ½ cup fruit juice
- 2 tablespoons (Tbsp) dried fruit

Milk Group – 1 serving equals 15 grams of carbohydrate or 1 carb choice

1 serving =

- 1 cup (8 ounces) fat free or low fat milk
- 1 cup (8 ounces) plain yogurt
- 6 ounces light or plain Greek yogurt



Sweets and Added Sugars

Limit the amount of sweets you eat. They are high in carbohydrates and often high in calories and fat. This includes limiting the amount of cake, ice cream, pie, syrup, cookies, candies, and doughnuts you eat. Try to avoid adding table sugar, honey, or other sweeteners to your foods or beverages. Limiting sweets will help to keep your blood sugar in a healthier range.

Limit sugar to 9 teaspoons per day for men and 6 teaspoons per day for women. This is about 150 calories per day (36g sugar) for men and 100 calories per day (24g sugar) for women.

Fiber

A high fiber diet can help you have healthier blood sugar levels. Choose whole grains that are high in fiber as well as fruits, vegetables, beans, and lentils. Talk with your dietitian about how to increase fiber in your diet.

Foods that have little effect on blood sugar

Non-Starchy Vegetable Group — 1 serving equals 5 grams of carbohydrate

1 serving =

- 1 cup raw vegetables or salad greens
- ½ cup cooked vegetables
- ½ cup vegetable juice

These vegetables have few carbohydrate and little impact on your blood sugar.

Examples of non-starchy vegetables include:

- | | | |
|--------------------|-------------------------|-------------------|
| • Artichoke | • Carrots | • Peppers |
| • Asparagus | • Cauliflower | • Radish |
| • Bean sprouts | • Celery | • Snow peas |
| • Beets | • Cucumber | • Sugar snap peas |
| • Bok choy | • Green or yellow beans | • Tomatoes |
| • Broccoli | • Salad greens | • Turnips |
| • Brussels sprouts | • Mushrooms | • Yellow squash |
| • Cabbage | • Onions | • Zucchini |



Meat and Meat Substitutes Group

Avoid meats that are high in saturated fat, such as bacon and sausage.

1 serving =

- 1 egg, 2 egg whites, or ¼ cup egg substitute
- 1 ounce turkey breast or chicken breast, skin removed
- 1 ounce lean lunch meat (with 3 grams or less of fat per ounce)
- 1 ounce fish fillet
- 1 ounce canned tuna in water
- 1 ounce shellfish
- 1 ounce lean beef, lamb, or pork (limit to 1 to 2 times per week)
- 1 ounce of cheese (limit cheese to 1 to 2 ounces per day)
- ¼ cup nonfat or low fat cottage cheese
- ½ cup cooked beans (black beans, kidney, chickpeas or lentils): count as 1 serving of starch and 1 serving of meat
- 4 ounces tofu
- 2 tablespoons peanut butter
- 2 tablespoons seeds
- 1 ounce nuts



Fats

Limit the amount of fats you eat. Fats are high in calories and some contain saturated fats, trans fats, and cholesterol that increase your risk for heart disease.

1 serving (5 grams of fat) =

- 1 teaspoon oil (vegetable, corn, canola, olive, etc.)
- 1 teaspoon butter or margarine
- 1 teaspoon mayonnaise
- 1 tablespoon salad dressing
- 1 tablespoon cream cheese
- 2 tablespoons avocado
- 8 to 10 large olives
- 1 slice bacon



Sample menu for 45 grams of carbohydrate per meal

Breakfast				
1 whole wheat waffle	or	1 slice of toast	=	15 grams
1 cup low fat milk	or	1 tablespoon jelly	=	15 grams
½ large banana	or	1 small orange	=	15 grams
2 tablespoons natural peanut butter	or	1 hard boiled egg	=	0
Lunch				
3 ounces tuna fish	or	2 tablespoon natural peanut butter	=	0
½ bagel (2 ounces)	or	2 slices of bread	=	30 grams
1 tablespoon light mayonnaise	or	2 tablespoons hummus	=	0
½ cup cooked broccoli	or	1 cup celery sticks	=	0
½ cup fruit cocktail	or	¾ cup blueberries	=	15 grams
Snack				
½ cup vegetable juice	or	1 cup raw carrots	=	0
2 tablespoons sunflower seeds	or	1 tablespoon salad dressing	=	0
Dinner				
1 medium baked potato (6 ounces)	or	2 small dinner rolls	=	30 grams
3 ounces grilled chicken	or	3 ounces steak	=	0
1 tablespoon fat free sour cream	or	1 tablespoon salad dressing	=	0
½ cup California mixed vegetables (broccoli and carrots)	or	1 cup salad	=	0
1 cup strawberries	or	1 cup low fat milk	=	15 grams
Snack				
Sugar free gelatin	or	Sugar free popsicle	=	0
Total grams of carbohydrate for day			=	135 grams

Sample menu for 60 grams of carbohydrate per meal

Breakfast				
1 English muffin	or	1 cup unsweetened cooked cereal, such as oatmeal	=	30 grams
1 teaspoon margarine	or	4 English walnut halves	=	0
1 cup plain yogurt	or	1 cup fat free milk	=	15 grams
1 cup strawberries	or	1 small apple	=	15 grams
1 hard boiled egg	or	1 ounce turkey sausage	=	0
Lunch				
3 ounce low sodium turkey lunch meat	or	3 ounce lean ground beef or other meat	=	0
2 slices of bread	or	$\frac{2}{3}$ cup rice	=	30 grams
1 cup low fat milk	or	$\frac{1}{2}$ cup black beans	=	15 grams
1 cup salad greens	or	Cooked peppers, onions, tomatoes (no limit)	=	0
1 tablespoon salad dressing	or	1 tablespoon fat free sour cream	=	0
$\frac{1}{2}$ banana	or	1, 6-inch tortilla	=	15 grams
Snack				
1 cup sliced cucumbers	or	1 cup celery sticks	=	0
1 tablespoon salad dressing	or	2 tablespoons natural peanut butter	=	0
Dinner				
$\frac{1}{2}$ cup mashed potatoes	or	1, 6-inch tortilla	=	15 grams
3 ounces roasted, baked or broiled meat, fish or chicken	or	2 ounces lean ground beef or chicken	=	0
2 teaspoons margarine	or	1 ounce jack cheese	=	0
Salad with non-starchy vegetables and 1 tablespoon salad dressing	or	$\frac{1}{4}$ cup salsa	=	0
1 slice bread	or	$\frac{1}{2}$ cup refried beans	=	15 grams
$\frac{1}{2}$ cup corn	or	1 cup vegetable soup	=	15 grams
$\frac{1}{2}$ cup unsweetened canned fruit	or	$\frac{1}{2}$ small fresh mango	=	15 grams
Snack				
1 ounce cheese	or	Sugar free popsicle	=	0
Total grams of carbohydrate for day			=	185 grams