

Carbohydrate Counting

Carbohydrate counting, or "**carb counting**," is a meal planning technique for managing your blood glucose levels. Foods that contain carbohydrate raise blood glucose. By keeping track of how many grams of carbohydrate you eat and setting a limit for your maximum amount to eat, you can help to keep your blood glucose levels in your target range. Finding the right amount of carbohydrate depends on many things including how active you are and what, if any, medicines you take.

How Much Carb?

- Breakfast: 30 grams
- Lunch: 30 grams
- Dinner: 45 grams
- Snacks (x2): up to 15 grams each

What Foods Have Carbohydrate?

Foods that contain carbohydrate are:

- starchy foods like bread, cereal, rice, and crackers
- fruit and juice
- milk and yogurt
- dried beans like pinto beans and soy products like veggie burgers
- starchy vegetables like potatoes and corn
- sweets and snack foods like sodas, juice drinks, cake, cookies, candy, and chips

Non-starchy vegetables have a little bit of carbohydrate but in general are very low in sugar.

How Much Carbohydrate is in These Foods?

Reading food labels is a great way to know how much carbohydrate is in a food. For foods that do not have a label, you have to estimate how much carbohydrate is in it. Keeping general serving sizes in mind will help you estimate how much carbohydrate you are eating.

For example there is about **15 grams of carbohydrate** in:

- 1 small piece of fresh fruit (4 oz)
- 1/2 cup of canned or frozen fruit
- 1 slice of bread (1 oz) or 1 (6 inch) tortilla
- 1/2 cup of oatmeal
- 1/3 cup of pasta or rice
- 4-6 crackers
- 1/2 English muffin or hamburger bun
- 1/2 cup of black beans or starchy vegetable
- 1/4 of a large baked potato (3 oz)
- 2/3 cup of plain fat-free yogurt or sweetened with sugar substitutes
- 2 small cookies
- 2 inch square brownie or cake without frosting
- 1/2 cup ice cream or sherbet
- 1 tbsp syrup, jam, jelly, sugar or honey
- 2 tbsp light syrup
- 6 chicken nuggets
- 1/2 cup of casserole
- 1 cup of soup
- 1/4 serving of a medium french fry

Protein and Fat

With carbohydrate counting, it is easy to forget about the protein and fat in meals. Always include a source of protein and fat to balance out your meal.

Using Food Labels

Carbohydrate counting is easier when food labels are available. You can look at how much carbohydrate is in the foods you want to eat and decide how much of the food you can eat. The two most important lines with carbohydrate counting are the serving size and the total carbohydrate amount.

- Look at the **servicing size**. All the information on the label is about this serving of food. If you will be eating a larger serving, then you will need to double or triple the information on the label.
- Look at the **grams of total carbohydrate**.
 - Total carbohydrate on the label includes sugar, starch, and fiber.
 - Know the amount of carb you can eat, figure out the portion size to match.
- If you are trying to lose weight, look at the **calories**. Comparing products can be helpful to find those lower in calories per serving.
- To cut risk of heart disease and stroke, look at **saturated and trans fats**. Look for products with the lowest amount of saturated and trans fats per serving.
- For people with high blood pressure, look at the **sodium**. Look for foods with less sodium.

Above information adapted from ADA website: <http://www.diabetes.org/food-and-fitness/food/planning-meals/carb-counting/?loc=ff-diabetesmealplans>



Examples of Carb Amounts in Foods

Bread, Cereal, Grain, Pasta, and Rice		One serving = 15 g carbs
Bagel (1/3 large bagel or 1 oz) Biscuit (2 1/2 inches across) Bread, white or whole wheat, pumpernickel, rye (1 slice or 1 oz) Bun, hamburger/hot dog (1/2 bun or 1 oz) Crackers, saltine or round butter (4 to 6) English muffin (1/2) Melba toast (4 slices) Oyster crackers (20) Pancake or waffle (4 inches across) Stuffing (1/3 cup) Tortilla, corn or flour (6 inches across)	Cereals: Bran cereal, flakes (1/2 cup) Cold cereal, unsweetened (3/4 cup) Cold cereal, sugar-coated (1/2 cup) Cooked cereal, oatmeal, grits (1/2 cup) Granola (1/4 cup) Puffed cereal (1 1/2 cups)	Grains (cooked): Barley (1/3 cup) Couscous (1/3 cup) Pasta (1/3 cup) Rice, white or brown (1/3 cup)

Starchy Vegetables		One serving = 15 g carbs
Breadfruit (1/4 cup small cubes) Corn/peas (1/2 cup) Corn on the cob, large (1/2 cob) Mixed vegetables with corn, peas, or pasta (1 cup) Potato, baked (1 small or 1/4 large, 3 oz)	Potatoes, mashed (1/2 cup) Pumpkin, cooked (1 cup small cubes) Squash, acorn, butternut (1 cup) Sweet potato (1/2 cup) Yam (1/2 cup)	

Dried Beans, Peas, and Lentils		One serving = 15 g carbs
Baked beans (1/3 cup) Beans—black, garbanzo, kidney, navy, lima, pinto, white (cooked 1/2 cup) Lentils (cooked 1/2 cup)	Hummus (1/3 cup) Refried beans (1/2 cup) Peas—black-eyed, split, cooked (1/2 cup)	

Nonstarchy Vegetables		One serving = 5 g carbs
In general, 1 serving = 1 cup raw, 1/2 cup cooked, 1/2 cup juice, or 1/2 cup tomato sauce.		
Beans (wax or green); bean sprouts; beets; broccoli; brussels sprouts; cabbage; carrots; cauliflower; celery; cucumber; eggplant; greens; lettuce; mushrooms; okra; onions; pea pods; peppers; radishes; rutabaga; spinach; tomatoes; zucchini.		



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Sweets	
<p>One serving = 15 g carbs</p> <p>Brownie, unfrosted (1¼-inch square—1 oz) Cake, unfrosted (2-inch square—1 oz) Cookies (2 small, sandwich type) Fruit juice bars (1 bar—3 oz) Ice cream (½ cup) Jam/jelly (1 tbsp) Muffin (¼ of 4-oz muffin) Pancake syrup (1 tbsp) Regular gelatin (½ cup) Regular soda (½ cup) Sports drinks (1 cup) Yogurt, frozen (½ cup)</p>	<p>One serving = 30 g carbs</p> <p>Cupcake, small, frosted (1¾) Doughnut, glazed (2-3 oz) Milk, chocolate (1 cup) Pie, pumpkin (⅓ pie) Pudding (½ cup) Rice pudding, sweet rice with milk (½ cup) Sherbet (½ cup) <i>Please note that this has more carbs:</i> Pie, fruit, 2 crusts (⅓ pie is 45 g of carbs)</p>

Snack Foods	
One serving = 15 g carbs	
<p>Animal crackers (8 crackers) Gingersnaps (3 cookies) Graham crackers (3 squares) Rice cakes (2 cakes)</p>	<p>Popped popcorn (3 cups) Pretzels (¾ oz) Snack chips (15-20 chips) Vanilla wafers (5 wafers)</p>

Milk	
One serving = 12-15 g carbs	
<p>Fat-free or low-fat milk, soy or cow's (1 cup) Fat-free plain yogurt (⅔ cup)</p>	<p>Fat-free, artificially sweetened flavored yogurt (⅔ cup)</p>

Fruit	
One serving = 15 g carbs	
<p>Apple or orange (1 small) Apricots (4 whole or 8 dried halves) Banana, extra small (1 or 4 oz) Blueberries (¾ cup) Canned fruit in juice (½ cup) Cantaloupe (1 cup cubes) Cherries (12) Dried fruit (2 tbsp) Grapefruit, large (½) Grapes, small (17) Juice, prune or grape, fruit juice blends, 100% juice (⅓ cup) Juice, unsweetened (½ cup)</p>	<p>Kiwi (1) Mango (½ small or ½ cup) Papaya (½ of small fruit or 1 cup cubes) Passion fruit (¼ cup) Peach (1 medium) Pear (½ large) Pineapple (¾ cup) Plum (2 small) or 3 dried plums Raspberries (1 cup) Strawberries (1¼ cup) Watermelon (1¼ cup)</p>

Foods That Don't Have Carbs Meat/chicken/poultry/fish do not have carbs, but if they are prepared with sauces or breaded, they may contain carbs. Check the Nutrition Facts on the package or jar. Plan to eat 4 to 6 ounces of lean meat/meat substitutes per day. Also, fats (such as oils) do not contain carbs, but eating too much fat may add extra calories to your meal plan.

Combination Foods

Mixing It Up

How can you figure out how many carbs are in mixed foods such as salads, soups, and casseroles?

Below are some examples to help you know what you are getting.

Food	Serving Size	Carbs
Baked empanada	1 empanada	36 g
Burrito (beef and bean)	5 oz	45 g
Casseroles	1 cup	30 g
Chili (beef and bean)	1 cup	30 g
Frozen enchilada dinner	1 11-oz dinner	63 g
Hamburger	1 2-oz bun	30 g
Lasagna (meat)	1 cup	30 g
Macaroni & cheese	1 cup	30 g
Orange chicken (meat w/ sweet sauce)	1 cup	45 g
Pita pocket sandwich	1 4½-oz sandwich	45 g
Pizza (thin crust, cheese)	¼ of a 12-inch pizza	30 g
Pot pie	1 7-oz pie	38 g
Soup	1 cup	15 g
Spaghetti with meatballs	1 cup	30 g
Stew	1 cup	15 g
Submarine sandwich	1 6-inch sub	45 g
Taco (meat and cheese)	1 taco	15 g

Be Choosy When Eating Out

When eating out, choose meals that are within your meal plan. Most fast food restaurants provide nutrition facts brochures or offer information on their websites that you can use to look up the amount of carbs in meals. Practice measuring foods at home to learn how to estimate portion sizes in a restaurant.

Remember your options when eating out:

- Try different restaurants
- Look over the whole menu and then select items that meet your carb needs
- Ask for your foods to be prepared in a healthier way (see tips below)

When eating out, remember:

- Portion sizes are often large
- You may get more fat and sodium (salt) than you need
- Calories can add up quickly
- You may not get many fruits and vegetables
- You often will not get much fiber

<p>Browse the menu for dishes cooked by these healthier methods:</p> <ul style="list-style-type: none">• Steamed• Grilled• Roasted• Broiled• Baked• Poached• Red sauces (instead of white ones)• Lightly sautéed	<p>Ask for what YOU want:</p> <ul style="list-style-type: none">• Nutrition information• Description about how the food is cooked• Salad dressing on the side in order to use less than the whole serving• Smaller or half portions• Less sauce in general• Extra veggies on the side• Skip appetizers, bread, and butter
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Best Choices When Eating Out

Remember that when eating out you can share or ask for a box/bag to take home half of the food for the next meal. Here are some suggestions of items to choose when you dine out:

Chinese

Try brown rice if available; steamed dumplings; lots of veggies; and low-salt soy sauce.

Fast Food

Order plain hamburger; veggie burger; grilled chicken or fish sandwich; salads with grilled chicken and low-fat dressing; apple sauce or apple dippers as a side; yogurt parfait; salad or chili instead of fries in value meal; grilled chicken filet; baked potato with chili, broccoli, or chives.

Indian

Select lentil soup, chicken tikka; GO EASY on naan bread or get lighter pappadams instead. AVOID fried items.

Fried Chicken

Select BBQ chicken sandwich; chicken breast (take off skin and breading); green beans, mashed potatoes, or corn on the cob as sides.

Italian

Choose salads with dressing on the side; pasta with tomato (marinara) sauce and vegetables; appetizer serving sizes; baked, broiled, grilled, or poached fish/chicken/veal; Italian ice. AVOID cheese-stuffed items.

Sandwich Restaurants

Choose veggie sandwiches; turkey breast sandwich on wheat roll and add extra vegetables; baked chips or pretzels if you decide to have chips.

Japanese

Order sushi; light soy sauce; noodles in soup; vegetable rolls. LIMIT starch portions and AVOID dishes with mayo and "tempura" (= fried).

Mexican Fast Food

Order food that has fresh salsa, grilled steak, or choose a beef/chicken soft taco and items with soft tortillas. AVOID crispy (fried) chips and shells.

Mexican

Order food that has fresh salsa, grilled steak, or choose a beef/chicken soft taco and items with soft tortillas. AVOID crispy (fried) chips and shells. Choose vegetarian refried beans; items wrapped in soft (not fried) tortillas such as burritos, and ask for lots of vegetables. GO EASY on cheese and choose small portions of guacamole and sour cream.

Pizza

Order vegetarian; thin crust. AVOID stuffed crust; eat with salad if available to fill up. Select low-fat toppings like ham, chicken, vegetables, low-fat or less cheese.

Note that foods in restaurants or fast food places are usually very high in sodium. Many restaurants and food manufacturers now list the nutrition facts of their foods on their websites.

Above examples of carbohydrate amounts from:

http://www.lillydiabetes.com/documents/pdf/HI76722_English%20Only%20Carb%20Guide_FINAL_3.14.12.pdf