

HEALTHY EATING

Eating well is an important tool for managing your diabetes. A well balanced diet can help you maintain a healthy weight and keep your blood sugar in range. Food is made of three main nutrients that supply your body with energy: carbohydrate, protein and fat. Each of these nutrients does something different in your body.

Carbohydrates (Carbs):

- Are your body's main source of energy.
- Are broken down into glucose (sugar) to be used by your body's cells for energy.
- Raise your blood sugar.

Protein:

- Is used by your body to build and repair tissue, like muscles.
- Some foods contain both protein and carbs, like dried beans.
- Has very little effect on blood sugar levels.

Fat:

- Helps your body absorb certain nutrients, like vitamins E and K.
- Helps protect your organs and keep your body warm.
- Has very little effect on blood sugar levels.

Carbohydrate Counting

Since carbs are the nutrient with the biggest effect on blood sugar, people with diabetes often count carbs. Even though carbs raise blood sugar, they should not be avoided. They provide your body with nutrition and energy. Some carb foods are more nutritious than others. Your blood sugar increases when you eat carbs regardless of the type you are eating. Your dietitian will help you with a personal meal plan.

There are three main types of carbohydrate:

- Sugar
- Starch
- Fiber

Foods with carbohydrate include:

- Grains
- Beans and lentils
- Starchy vegetables
- Fruits and fruit juice
- Milk and yogurt
- Sweets and sugary drinks

Reading Labels for Carbohydrate Counting

To understand how many carbs you are eating, it is important to look at the Nutrition Facts label. Focus on the serving size, total carb, dietary fiber, and sugars.

Serving Size

The nutrition information on the label is based on the serving size listed at the top. The container may have more than one serving. If you eat double the serving size, the nutrients will be doubled as well. Knowing the serving size will help you determine how much you can eat based on your meal plan.

Total Carbohydrate

This is the total amount of carb in one serving. The total carb includes all starches, dietary fibers, and sugars that will raise your blood sugar. Your dietitian can provide you with the number of carbs that are right for you.

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	8%
Total Sugars 12g	24%
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Dietary Fiber

Fiber is a type of carb. It is included in the amount of total carb listed on the label. Fiber is associated with many health benefits, including digestive health and blood sugar control. Aim for 20-35 grams of fiber per day from whole grains, beans, fruits, and vegetables.

Sugars

Sugar is a type of carbohydrate. It is included in the amount of total carb listed on the label. Total sugars include sugars that occur naturally in foods as well as sugars added during processing (added sugars). Natural sugars are found in nutritious foods like fruit and milk. Added sugars are found in less nutritious foods like candy and other sweets. Limit added sugars.

Additional Carbohydrate Counting Tools

In addition to reading nutrition labels, there are other tools to use in finding the amount of carbs in foods.

Smartphone Downloadable Apps (free)

- CalorieKing (iOS only)
- ControlMyWeight (iOS only)
- MyFitnessPal
- Lose It!
- mySugr (diabetes tracker)

Websites

- Calorie King: <http://www.calorieking.com>
- WebMD: <https://www.webmd.com/diet/healthtool-food-calorie-counter>
- My Fitness Pal: <https://www.myfitnesspal.com/food/calorie-chart-nutrition-facts>

Books

- *The CalorieKing Calorie, Fat & Carbohydrate Counter* by Allan Borushek
- *The Complete Guide to Carb Counting*, 3rd Edition by the American Diabetes Association

How Many Carbohydrates Do I Need?

The amount of carbs that are right varies from person to person. It is based on age, height, weight, gender, activity level and personal preference. Your dietitian will be able to tell you how many carbs are a good amount for you.

Timing of Meals and Snacks

The more you eat at one time, the harder it is to control your blood sugar. Use the following guidelines to try to eat regular meals and snacks:

- Spread carbs throughout the day.
- Avoid skipping meals which can lead to overeating later.
- Eat every 4-5 hours during the day.
- Eat small snacks between meals if you need them.
- Keep your overnight fasting time between 8 and 10 hours.

Carbohydrate Content of Common Foods

Grains	Serving Size	Carbohydrate Grams
Bagel	Large (4-5 inches)	48-67
Bread (white or whole wheat)	1 slice	12-22
Bun (hamburger or hotdog)	1 bun (1.5 oz)	18-23
Cereal, cooked, unsweetened	½ cup	13-19
Cereal, granola	½ cup	25-45
Cereal, ready-to-eat, sweetened	¾ cup	22-30
Cereal, ready-to-eat, unsweetened	¾ cup	15-22
Couscous, cooked	½ cup	18-23
English Muffin	1 whole	22-30
Pancake or Waffle	1 (4 inches)	11-15
Pasta, cooked	1 cup	37-45
Quinoa, cooked	½ cup	20
Rice, cooked	1 cup	45
Roll	1 roll (1 oz)	13-15
Tortilla	2 corn or 1 flour (6 inches)	18-22

Beans and Lentils	Serving Size	Carbohydrate Grams
Baked Beans	½ cup	25-30
Beans, cooked (black, pinto, etc.)	½ cup	13-18
Lentils or Split Peas, cooked	½ cup	18-21
Refried beans, canned	½ cup	15-20

Starchy Vegetables	Serving Size	Carbohydrate Grams
Corn	1 cup	28-32
Lima Beans	½ cup	15-20
Mixed Vegetables	1 cup	15-20
Peas	½ cup	11-13
Potato, baked (sweet or white)	1 whole, 4 inches (6 oz)	30-36
Potato, mashed	½ cup	15-20
Winter Squash (acorn, butternut, etc.)	1 cup cooked	18

Fruit and Fruit Juice	Serving Size	Carbohydrate Grams
Apple	Small (4 oz)	15
Applesauce, unsweetened	½ cup	12
Apricots, fresh	Medium (2 oz)	6
Banana	Medium/Large (7 oz)	30
Berries (strawberries, blueberries, etc.)	1 cup	11-20
Canned fruit, in light syrup	½ cup	18-20
Cherries (sweet)	1 cup	18-24
Dates	Medium/Large (0.3-0.5 oz)	5-10
Dried fruit (raisins, raisins, etc.)	¼ cup	28-32
Grapefruit	½ Medium fruit	13
Grapes	½ cup	13-15
Juice (apple, orange, grape)	½ cup	11-16
Kiwi	Small/Medium (2.5 oz)	10-11
Mango	½ cup	13
Melon (cantaloupe, watermelon, etc.)	1 cup	11-16
Orange	Small/Medium (5 oz)	11-15
Peach or Nectarine	Small/Medium (5 oz)	12-16
Pear	Small/Medium (6 oz)	18-25
Pineapple	1 cup	20
Plum	Small/Medium (3 oz)	7-10
Prunes, dried	3-4 Medium (1 oz)	17
Tangerine	Medium (4 oz)	13

Snacks	Serving Size	Carbohydrate Grams
Chips (potato or tortilla)	10-15 chips (1 oz)	14-19
Crackers, snack such as saltines	3-5 crackers (0.5 oz)	10-12
Crackers, small such as Goldfish	1 oz	18-21
Granola Bar	1 bar	15-26
Popcorn	3 cups	14-20
Pretzel twists, mini	17 (¾ oz)	17

Milk and Yogurt	Serving Size	Carbohydrate Grams
Milk (skim, 1%, 2% or whole)	1 cup	12
Almond and nut milks, unsweetened	1 cup	1-2
Almond and nut milks, sweetened	1 cup	11-20
Soy milk, unsweetened	1 cup	4-8
Soy milk, sweetened	1 cup	10-25
Yogurt or Greek Yogurt, plain	6 oz	6-8
Yogurt or Greek Yogurt, sweetened	6 oz	14-28

Sweets and Sugary Drinks	Serving Size	Carbohydrate Grams
Brownie or cake, frosted	2-inch square piece	23-29
Candy, hard	3 pieces	15
Candy bar, chocolate, snack size	~2 inch	13
Cookie	1 large or 2 small	11-15
Coffee Creamer (flavored liquid)	1 Tbsp	6-7
Donut	3-4 inches	21-33
Frozen Yogurt	½ cup	17-35
Gelatin, regular	½ cup	19
Ice Cream	½ cup	14-19
Jam or Jelly	1 Tbsp	14-15
Sugar (brown or white), Honey	1 Tbsp	13-17
Syrup, light	2 Tbsp	13
Syrup, regular	2 Tbsp	26-30

Combination Foods	Serving Size	Carbohydrate Grams
Asian Entrée, no rice	1 cup	11-20
Burrito, frozen	7 inches long	38-51
Casserole or Hot Dish	1 cup	30-35
Chili, with meat and beans	1 cup	28
Hamburger, fast-food	Small	28-31
Lasagna, frozen	3 inches by 4 inches	26 to 36
Pasta or Potato Salad	1/ 2 cup	19 to 28
Pizza, medium (12 inch) thin crust	1 slice (1/8 of pizza)	15-17
Pizza, medium regular or pan crust	1 slice (1/8 of pizza)	25-28
Pizza, medium deep dish	1 slice (1/8 of pizza)	40-45

Artificial Sweeteners and Sugar Alcohols

Artificial sweeteners are also known as sugar substitutes. They are food additives used to sweeten foods without the use of sugar. Because they do not contain sugar, they contain few or no calories. They taste much sweeter than sugar and can be used in smaller amounts when used in place of sugar. Foods that contain artificial sweeteners may still contain carbs. It is important to read food labels to make sure these foods fit within your meal plan. The most common artificial sweeteners are:

- Sucralose (Splenda[®])
- Stevia (Sweetleaf[™], Truvia[®])
- Aspartame (NutraSweet[®], Equal[®])
- Saccharin (Sweet'N Low[®])

Sugar alcohols are a reduced calorie sweetener found in products such as ice cream, cookies, candy and gum. They are found in foods labeled as “sugar-free” or “no sugar added”. Sugar alcohols may cause gas, bloating or diarrhea and typically need to be eaten in moderation. The most common sugar alcohols are:

- Erythritol
- Maltitol
- Mannitol
- Sorbitol
- Xylitol
- Isomalt

Foods with sugar alcohols contain carbs and will still affect blood sugar. It is important to read food labels for total carbs to make sure these foods fit within your meal plan. If you eat a lot of foods with sugar alcohols, talk to your diabetes educator or dietitian about how to count carbs for these foods.

Managing Portions

When you are trying to eat healthy it is important to know how much you are eating. It is easy to over or under estimate portion sizes. Eating too much may lead to weight gain and uncontrolled blood sugar. Eating too little may also lead to uncontrolled blood sugar as well as poor nutrition and lack of energy. Knowing portion sizes will help you eat a balanced diet.

The most accurate way to know how much you are eating is to measure or weigh your food. You can use measuring cups and spoons or a food scale. When this is not an option, portions can also be estimated using common household items.



Half cup fruit, beans, rice, noodles, or ice cream = **cupcake wrapper, half of a baseball**



One teaspoon margarine or oil = **tip of first finger**



One pancake or tortilla = **compact disc**



One cup cooked vegetables, salad, baked potato = **baseball**



1 to 1½ ounces cheese = **four dice**



Three ounces of meat or poultry = **palm of hand**

Tips for managing portions:

Pay attention to your physical appetite and be mindful of why you are eating

- Sometimes we eat for reasons other than hunger such as stress, boredom, or social events.
- If you often eat for reasons other than hunger, identify the reason and work towards finding a solution. For example, if you eat when you feel stressed, replace eating with a stress-relieving activity such as going for a walk or calling a friend.

Tracking your meals and snacks can help you be more mindful of your food habits.

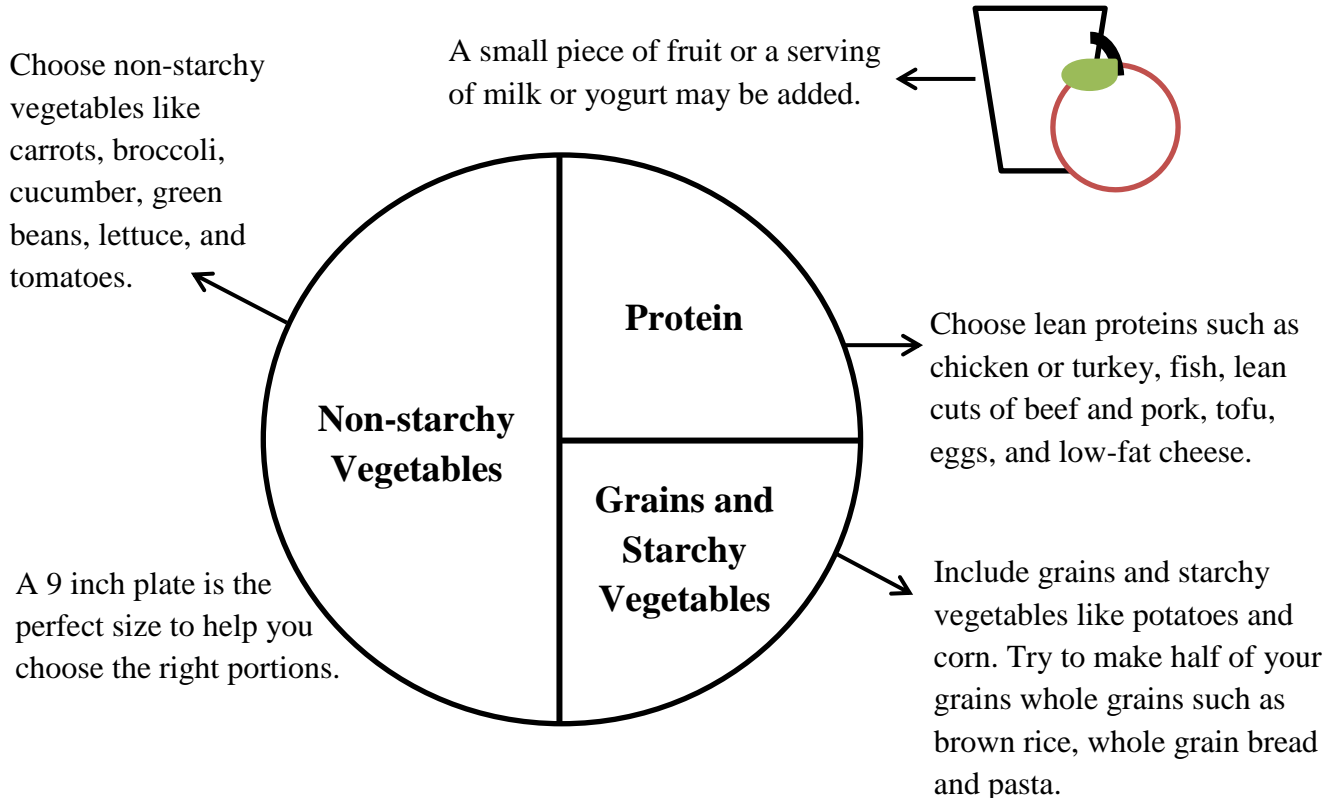
- You can write down food choices on paper or use technology such as a smartphone or tablet app.
- If you find there are certain foods you tend to overeat, try to change how you consume these foods. For example, if you overeat ice cream, perhaps avoid keeping ice cream at home. Instead, allow yourself to enjoy a small portion of ice cream at a restaurant once in a while.
- Treats are okay, just think about “how much” and “how often” you enjoy them.

Using smaller plates, bowls, and cups can also help you manage your portions.

- Typically, the larger your dish, the more food you will eat.
- A plate no larger than 9 inches will help you choose the right portions.
- Eat slowly and savor every bite.

Eating Balanced Meals

Balanced meals and snacks contain carbs, protein, and fat. Pairing these nutrients together can help you control blood sugars and maintain overall health. You can use the “Plate Method” as a tool to help you build balanced meals in the right portions.



Eating Balanced Snacks

A balanced snack contains carbs, protein and fat in the right portions. Use this guide to choose one food from each column for some balanced snack ideas.

Carbohydrate: 15 grams	Protein/Fat
<ul style="list-style-type: none">• Crackers (Ritz[®]/Triscuit), 4-5• Pretzels, ~17 mini• Bread or Toast, 1 slice• Rice Cake, 2• Cereal, 3/4 cup (dry)• Oatmeal (unsweetened), 1/2 cup cooked• Tortilla, one 6" flour• Tortilla Chips, 10-15• Popcorn, 3 cups• Apple, small• Banana, half• Grapes, 1/2 cup• Berries, 1 cup• Melon, 1 cup• Sweet Cherries, 1/2 cup• Clementine, small• Dried Fruit, 1/8 cup• Milk, 1 cup• Yogurt, 5.3 oz.	<ul style="list-style-type: none">• Cheese, 1 oz• Nuts (ex: almonds, walnuts), 2 Tbsp• Hummus, 2 Tbsp.• Hard Boiled Egg• Beef/Turkey Jerky, 1 stick• Peanut Butter, 1 Tbsp• Cottage Cheese, 1/2 cup• Tuna/Chicken Salad, 1/2 cup• Olives, 10 large• Lunchmeat, 1 oz• Cooked Chicken or Turkey, 1 oz• Avocado, 2 Tbsp mashed

Dining Out

Eating balanced meals in the right portions can be a challenge when eating away from home. Try to limit how often you dine out. The following tips can help you make healthy choices.

Be prepared and know your meal plan

- Many restaurants provide nutrition information online.
- Before you get to the restaurant, select a few meal options that fit within your personal meal plan.
- Do not skip meals or snacks before dining out. This will help you avoid eating too much at the restaurant.

Estimate portions even if you cannot measure

- Restaurants often serve portions that are large enough for two people – split a meal with a friend.
- Do not overeat – ask for a take home box at the beginning of the meal.

Ask for foods made to order

- Ask for salad dressing or sauces on the side.
- Order meats that are baked, grilled or roasted instead of fried.

Alcohol

Alcohol can be included in a healthy meal plan if your blood sugar levels are within your target range. You will need to drink alcohol in moderation. Make sure your provider has told you it is safe to drink alcohol.

Know how alcohol affects blood sugar

- Alcohol can cause blood sugar to be high or low.
- The effect on blood sugar can vary based on the type of alcoholic beverage, the amount you drink, the food you eat and the diabetes medicines you are taking.

Drink alcohol in moderation

- Women should limit alcoholic beverages to no more than one serving per day.
- Men should limit alcoholic beverages to no more than two servings per day.
- A serving of alcohol is 1.5 ounces of liquor, 5 ounces of wine or 12 ounces of beer.

Be safe when drinking alcohol

- Alcohol can interfere with some medicines. Check with your provider or pharmacist to make sure it is safe for you to drink alcohol.
- Drink alcohol with a meal or snack, never on an empty stomach.
- Check your blood sugar more often when you are drinking.

Know how alcohol affects your cholesterol and weight

- Alcohol can raise your cholesterol and triglycerides. If your triglycerides are high, you should reduce or stop drinking alcohol.
- Alcohol contains calories but little nutrition. Drinking too much alcohol can make it hard to maintain a healthy weight.

Non-Alcoholic Beverages

Staying hydrated is an important part of a healthy lifestyle. However, your drink choices can affect your blood sugar levels. Drinks made with sugar will raise blood sugar levels.

Non-Caloric Beverages → Choose Most Often

- Water, plain or flavored with lemon, lime, or berries
- Unsweetened tea, unsweetened flavored sparkling water

Beverages sweetened with artificial sweeteners → Limit Intake

- Diet soda-pop, low-calorie powdered drink mixes
Sugar-free energy drinks, low or no-calorie sports drinks

Beverages sweetened with sugar → Avoid (unless treating a low blood sugar)

- Regular soda-pop, juice, sports drinks, sweetened tea
- Sweetened powdered drink mixes, sweetened coffee drinks

Meal Planning for Heart Health

Diabetes increases your risk for heart disease. Many things can affect heart health, including diet. A heart healthy diet includes fruits, vegetables, whole grains and healthy fats. It limits sodium, alcohol, unhealthy fats and excess sugar.

Dietary Fats

Cholesterol levels are affected by the dietary fats you eat. Some types of fats are better for your heart health than others. There are three main types of fats: unsaturated, saturated and trans fats.

Unsaturated Fats → Choose Most Often

- Improve heart health by lowering bad cholesterol levels (LDL)
- Food sources: olive oil, vegetable oil, avocado, nuts, seeds, peanut butter, mayonnaise

Saturated Fats → Limit Intake

- Increase risk for heart disease by raising bad cholesterol (LDL)
- Food sources: butter, heavy cream, sour cream, gravy, high fat meats or poultry, cheese, coconut oil

Trans Fats → Avoid

- Increase risk for heart disease by raising bad cholesterol (LDL), lowering good cholesterol (HDL)
- Food sources: fried foods, pastries, stick margarine, shortening, some cookies and crackers

Sodium (Salt)

Blood pressure is affected by your intake of sodium. Too much sodium can cause your body to hold extra water. This can lead to high blood pressure and strain on your heart. Sodium is mostly consumed as table salt.

High sodium food items

- Boxed and frozen foods
- Canned beans and vegetables
- Canned soups and broths
- Tomato sauce
- Crackers, chips, and popcorn
- Salted nuts and seeds
- Hot dogs, sausage, deli meat
- Pickles
- Olives
- Restaurant foods

Tips for reducing sodium intake

- Avoid high sodium foods or eat smaller portions.
- Buy fresh, frozen or no-added-salt canned vegetables.
- Rinse canned foods with water to reduce sodium by about half.
- Cook pasta, rice and hot cereal without salt.
- Use herbs, spices and salt-free seasoning blends.
- Be careful – foods labeled with terms like “reduced sodium”, “less sodium” or “light in sodium” may still be high in sodium.

Reading Labels for Heart Health

To understand how heart healthy a food is, it is important to look at the Nutrition Facts label. Focus on the serving size, total fat, saturated fat, trans fat, unsaturated fats and sodium.

Serving Size

The nutrition information on the label is based on the serving size listed at the top. The container may have more than one serving. If you eat double the serving size, the nutrients will be doubled as well.

Total Fat

This is the total amount of fat in one serving. The total fat includes all types of fats: saturated, trans and unsaturated fats.

Sodium

Most people should limit the amount of sodium they have to 2,300 mg or less per day. If you have high blood pressure, you may need even less. For reference, 1 teaspoon of table salt has 2,300 mg of sodium.

Nutrition Facts	
About 8 servings per container	
Serving size 1 cup (240mL)	
Amount per serving	
Calories 130	
% Daily Value*	
Total Fat 5g	6%
Saturated Fat 3g	6%
Trans Fat 0g	0%
Polyunsaturated Fat 0g	0%
Monounsaturated Fat 1.5g	3%
Cholesterol 20mg	7%
Sodium 135mg	6%
Total Carbohydrate 13g	5%
Dietary Fiber 0g	0%
Total Sugars 12g	24%
Includes 0g Added Sugars	0%
Protein 8g	16%
Vitamin D 2.5mcg 10% • Calcium 320mg 25%	
Iron 0mg 0% • Potassium 420mg 8%	
Vitamin A 150mcg 15% • Riboflavin 0.4mg 30%	
Vitamin B12 1.3mcg 50% • Phosphorus 240mg 20%	

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Saturated Fat

Limit your intake of saturated fat, especially if you have heart disease or want to lower your bad cholesterol (LDL).

Trans Fat

Try to avoid eating foods that contain trans fat. The best way to know if a food contains trans fat is to read the ingredient list. If you see the words “hydrogenated oil” or “partially hydrogenated oil”, choose a different food.

Unsaturated Fats

Polyunsaturated and monounsaturated fats are the two types of unsaturated fats. By law, they are not required to be listed on the nutrition label. If they are not listed, you can subtract the saturated and trans fats from the total fat. The remaining fat is unsaturated.