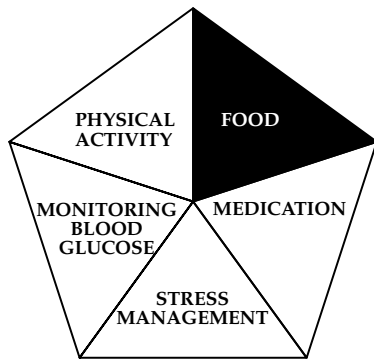


# Chapter 3: Food — Eating Healthy



You can make a difference in your blood glucose control through your food choices. When you have diabetes, your body may have problems using the energy from the food you eat. This can cause high blood glucose levels. Balancing what, when and how much you eat will help manage your blood glucose levels.

## Understanding How Food Affects Your Body

### Tip

Weight loss ideas are found in Chapter 6.

### Tip

Choose carbohydrate foods that are high in fiber such as whole grains, fruits, vegetables and legumes (navy, kidney and black beans, lentils). Fiber:

- slows digestion to make you feel fuller longer
- slows the rate carbohydrates are absorbed into your bloodstream
- helps reduce cholesterol by binding to the cholesterol in your digestive tract and getting rid of it.

Carbohydrates turn into glucose, affecting your blood glucose levels. There are no good or bad foods. Eating a variety of foods can improve your health and keep meals interesting.

The foods you eat fall into three main groups:

- **Protein:** Protein is important for healing, building muscle, strengthening your immune system, helping your body recover from stress and more!
- **Fat:** Fat is a major source of energy for the body. It also helps the body absorb important vitamins.
- **Carbohydrate:** Carbohydrates give your body energy.

All carbohydrate foods turn into glucose. Carbohydrate foods are starches (breads, crackers, cereals, rice, pasta), fruit and fruit juice, milk and yogurt, starchy vegetables (potatoes, dried beans, corn, sweet potatoes, winter squash) and sweets.

Do not avoid carbohydrate foods. They should make up 50 to 60 percent of your food plan.

Carbohydrate counting is a way to help you manage the amount of carbohydrate you eat.

## Important

It is not healthy to leave out carbohydrate foods while you try to lose weight and control your blood glucose level.

A carbohydrate choice is a serving that contains about 15 grams of carbohydrate. For most people with diabetes, a healthful meal plan has 3 to 5 (45 to 75 grams) carbohydrate choices at a meal and 0 to 2 (0 to 30 grams) carbohydrate choices for snacks.

## Important:

- According to the American Diabetes Association, it is best to consume about the same amount of carbohydrate choices at each of your meals. For example, if you have 4 carbohydrate choices at breakfast, try to have 4 carbohydrate choices at lunch and 4 carbohydrate choices at dinner.
- Your health care team can help you determine the right amount of carbohydrates for you to have at each snack. This will depend on:
  - the type of diabetes you have
  - how often you have low blood glucose
  - your body weight
  - your physical activity level.
- Eat your meals and snacks every 4 to 5 hours to help even out your blood glucose level. Do not skip meals. If you do, your body may make extra glucose to compensate. This can make controlling your blood glucose even harder.

## Dietary Carbohydrate Guidelines for Adults

	Weight Loss	Maintain Weight
Men	45 to 60 grams (3 to 4 carb choices) per meal	60 to 75 grams (4 to 5 carb choices) per meal
Women	30 to 45 grams (2 to 3 carb choices) per meal	45 to 60 grams (3 to 4 carb choices) per meal

## Breads and Flours

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Bagel: large	1	60 to 75	4 to 5
Bagel: mini	1	15	1
Bread: pumpernickel, rye, white, whole grain	1 slice	15	1
Bread: reduced-calorie	2 slices	15	1
Bread: sticks (soft), 6 to 7 inches	1 stick	30	2
Dinner roll: small	1	15	1
English muffin	one-half	15	1
Hoagie roll	1	75	5
Hot dog or hamburger bun	one-half	15	1
Muffin: extra large	1	50 to 75	4 to 5
Muffin: medium	1	24	1 ½
Pancake: 4 inches	1	15	1
Pita: 6 inches	1	30	2
Tortilla: flour, 6 inches	1	15	1
Waffle: frozen	1	15	1

## Cereals, Grains and Pasta

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Cereal: cooked and unsweetened	½ cup	15	1
Cereal: dry	½ to 1 ⅓ cup	20 to 45	1 to 3
Couscous: cooked	½ cup	15 to 20	1
Pasta: cooked (macaroni, noodles, spaghetti)	⅓ cup	15	1
Rice: brown, cooked	⅓ cup	15	1
Rice: white, cooked	⅓ cup	15	1
Rice: wild, cooked	½ cup	15	1

## Starchy Vegetables, Beans and Lentils

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Beans: baked	½ cup	30	2
Beans: black, garbanzo, kidney	½ cup	15 to 20	1
Corn	½ cup	15	1
Corn on the cob: 5 to 6 inches	1	15 to 20	1
Edamame	½ cup	13	1
Green peas	½ cup	15	1
Lentils	½ cup	20	1
Potatoes: baked	1 medium (7 to 8 ounces)	30 to 45	2 to 3
Potatoes: mashed	½ cup	15	1
Soybeans	1 cup	56	3
Squash: acorn	¼ medium (1 cup)	15	1
Squash: butternut	¼ medium (1 cup)	30	2
Yam (sweet potato)	½ cup	15	1

## Fruits and Fruit Juices

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Apple: small	1	15	1
Apple, grapefruit, orange or pineapple juice	½ cup	15	1
Banana: large	1	30	2
Berries: blackberries, blueberries, raspberries, strawberries	1 cup whole	15	1
Canned fruit: in juice	½ cup	15	1
Cherries	15	15	1
Clementines	2	15	1
Cranberry juice cocktail, grape, prune	⅓ cup	15	1
Fruit juice blends (100 percent juice)	⅓ cup	15	1
Fruit juice: reduced calorie	1 cup	10 to 15	1
Grapefruit: medium	one-half	15	1
Grapes	15	15	1
Kiwi: large	1	15	1
Mango	½ cup	15	1
Melon	1 cup cubes	15	1
Nectarine: medium	1	15	1
Orange: medium	1	15	1
Peach: medium	1	15	1
Pear: small	1	15	1
Pineapple	1 cup	20	1
Plums: small	2	15	1
Raisins	2 tablespoons	15	1
Tomato juice	1 cup	10	1

## Milk, Yogurt, and Non-dairy Milk and Yogurt

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Milk: buttermilk, fat-free, whole, 1%, 2%	1 cup	15	1
Milk: chocolate	1 cup	30	2
Milk (nondairy): rice milk	1 cup	23	1 ½
Milk (nondairy): soy milk	1 cup	9	½
Yogurt (nondairy): original or unflavored almond, cashew, coconut, soy	1 cup	25	1 ½
Yogurt: plain or artificially sweetened	¾ cup	15	1
Yogurt: sweetened with fruit	¾ cup	30	2

## Snacks and Sweets

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Angel food cake: unfrosted, 1-inch slice	1	15	1
Brownie: unfrosted, 2-by-2-inch	1	15	1
Cake: unfrosted, 2-by-2-inch	1	15	1
Cheesecake	1/12 of 9-inch	35 to 45	2 ½ to 3
Chips: potato or tortilla (regular)	10 to 15	15 to 20	1
Cookie: 3-inch	1	10 to 15	1
Cornbread	2-inch square	23 to 34	1 ½ to 2
Crackers: saltine	6	15	1
Crackers: snack	6 to 7	15	1

## Snacks and Sweets

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Cupcake: frosted, small	1	30	2
Frozen yogurt	½ cup	25	1 ½
Doughnut: cake	1	25	1 ½
Doughnut: glazed	1	35	2
Doughnut holes	2	15	1
Gelatin: regular	½ cup	15	1
Graham crackers	3 squares	15	1
Honey: regular	1 tablespoon	15	1
Ice cream cone: cake, sugar, wafer	1	3 to 9	0 to ½
Ice cream: light, low-fat, regular	½ cup	15	1
Jam and jelly: regular	1 tablespoon	15	1
Pie: one (single) crust	⅛ of 9-inch	25 to 45	1 ½ to 3
Pie: two (double) crusts	⅛ of 9-inch	45	3
Popcorn	3 cups	15	1
Pretzels: mini twists	20	25	1 ½
Pudding: regular	½ cup	30	2
Pudding: sugar-free	½ cup	15	1
Sherbet, sorbet, gelato	½ cup	30	2
Sugar: brown packed or white	1 tablespoon	15	1
Syrup: light	¼ cup	25	1 ½
Syrup: regular	¼ cup	52 to 60	3 ½ to 4
Syrup: sugar-free	¼ cup	15	1
Tater tots	5	15	1

## Convenience and Combination Foods

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Casserole (hot dish)	½ cup	15	1
Chili	1 cup	30	2
Coleslaw	½ cup	15	1
Hash browns	½ cup	16 to 20	1
Pasta or potato salad	½ cup	15 to 25	1 to 1 ½
Potatoes: french fries (frozen)	10 to 15	15	1
Soup: broth type	1 cup	15	1
Soup: cream type	1 cup	15 to 30	1 to 2
Stuffing	½ cup	10 to 15	1
Sub sandwich	6-inch	45	3

## Convenience and Combination Foods: Ethnic

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
<b>Asian</b>			
Chinese egg noodles	⅓ cup	15	1
Chow mein	1 cup	15 to 20	1
Chow mein noodles	½ cup	15	1
Egg roll: 5-inch	1	23	1 ½
Fried rice	⅓ cup	15	1
Lo mein (meat, noodles, vegetables)	1 cup	30 to 50	2 to 3
Stir-fry (meat, no rice)	1 cup	10	1
Sweet and sour: chicken or pork (no noodles, no rice)	1 cup	45	3
Sweet and sour sauce	1 tablespoon	15	1



## Convenience and Combination Foods: Ethnic

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
<b>Italian</b>			
Lasagna	4-by-4-inch piece	45 to 60	3 to 4
Pizza: thick crust	1/8 large	30 to 45	2 to 3
Pizza: thin crust	1/8 large	25 to 35	1 1/2 to 2
Ravioli (no sauce)	9 to 11	45 to 60	3 to 4
Tomato sauce	1/2 cup	15	1
<b>Mexican</b>			
Burrito: 6- to 8-inch	1	45 to 60	3 to 4
Enchilada: 8-inch	1	50	3
Fajita: 6- to 8-inch	1	20	1
Quesadilla: 8- to 10-inches	1	30 to 40	2 to 3
Refried beans	1/2 cup	20	1
Taco: corn shell, 6 inches	2	15	1
Tortilla: flour, 6 inches	1	15	1

## Free Foods

A free food is any food or beverage that contains fewer than 20 calories or 5 grams of carbohydrate per serving. Foods with a serving size listed below should be limited to no more than 3 servings at one time.

Carbohydrate-free beverages (club soda, calorie-free flavored water, diet soft drinks, coffee, and hot or unsweetened teas) will not affect blood glucose.

Food	Serving Size	Carbohydrate Grams	Carbohydrate Choice
Artificial sweeteners	1 teaspoon	0 to 1	0
Barbeque sauce	2 teaspoons	4	0
Cocktail sauce	2 tablespoons	3	0
Creamer	2 teaspoons	0	0
Dill pickles	4 slices	1	0
Gravy	¼ cup	3	0
Herbs and spices	1 teaspoon	1	0
Ketchup	1 tablespoon	4	0
Lemon and lime juice	1 tablespoon	2	0
Mustard	2 tablespoons	3	0
Non-dairy creamer (original or unflavored): almond, cashew, coconut, soy	2 teaspoons	0	0
Non-dairy creamer (unsweetened flavored): almond, cashew, coconut, soy	2 teaspoons	4	0
Olives	4 to 6	1	0
Salsa	2 tablespoons	2	0
Soy sauce	1 tablespoon	1	0
Steak sauce	1 tablespoon	3 to 5	0

<b>Food</b>	<b>Serving Size</b>	<b>Carbohydrate Grams</b>	<b>Carbohydrate Choice</b>
Sugar-free ice pops	1	3	0
Sugar-free gelatin	½ cup	1	0
Sugar-free jam or jelly	1 tablespoon	5	0
Sugar-free syrup	2 tablespoons	5	0

# Vegetables

One serving of the following vegetables (½ cup cooked or 1 cup raw) has about 5 grams of carbohydrate. Three servings of vegetables at a meal or snack equals 1 carbohydrate choice.

- alfalfa sprouts
- artichokes
- asparagus
- beans  
(green, Italian, waxed)
- bean sprouts
- broccoli
- Brussels sprouts
- cabbage
- cauliflower
- celery
- collard greens
- cucumber
- eggplant
- endive
- greens
- lettuce
- mushrooms
- mustard greens
- peppers
- radishes
- spinach
- squash: summer
- Swiss chard
- zucchini

One serving of the following vegetables (½ cup cooked or 1 cup raw) has more than 5 grams of carbohydrate but not enough to be considered a starchy vegetable.

- beets
- carrots
- jicama
- kohlrabi
- leeks
- okra
- onions
- parsnips
- pea pods
- pumpkin
- rhubarb
- rutabaga
- squash: spaghetti
- tomatoes
- turnips

# Heart-healthy Eating With Diabetes: Making Good Protein and Fat Choices

People who have diabetes are more at risk for heart disease. That means the type and amount of protein and fat you eat can affect your heart health.

Poultry, meat and fish are high in protein which help your muscles stay healthy. However, if you eat too much of these, you add extra calories and fat. Most adults need about **6 to 8 ounces of meat** (weight after cooking) each day. Think of this as one small and one medium serving each day. Three ounces look like a deck of playing cards.

You need to eat fat for good health. Fat provides energy and important nutrients. It is important to choose foods that have healthful fats. (See the list below.)

Unhealthful fats can clog blood vessels which can cause a heart attack or stroke. A general rule is to use 1 to 2 teaspoons of fat at each meal.

Types of Fats in Food			
Monounsaturated (most healthful)	Polyunsaturated (healthful)	Saturated (not healthful)	Hydrogenated and partially hydrogenated trans fats (not healthful)
<ul style="list-style-type: none"> <li>■ avocados</li> <li>■ most nuts</li> <li>■ olive, avocado and peanut oil</li> <li>■ peanut butter (natural or trans fat-free)</li> <li>■ tub margarine (trans fat-free with liquid oil as first ingredient)</li> </ul>	<ul style="list-style-type: none"> <li>■ fatty fish (tuna, salmon, trout)</li> <li>■ sunflower, corn and soybean oils</li> <li>■ walnuts</li> </ul>	<ul style="list-style-type: none"> <li>■ coconut and palm oils</li> <li>■ fatty meats</li> <li>■ high-fat milk and cheese</li> <li>■ lard</li> <li>■ butter</li> </ul>	<ul style="list-style-type: none"> <li>■ crackers, cookies, cakes, doughnuts, pastries</li> <li>■ fried fast food and chips</li> <li>■ many pre-packaged or prepared foods</li> <li>■ shortening and stick margarine</li> </ul>

# Fats

Fat contains more than two times the calories as the same amount of protein or carbohydrate. One serving size equals 5 grams of fat or less.

## Heart-healthy Fats (Monounsaturated and Polyunsaturated)

Fat	Serving Size
Avocado	2 tablespoons or 1/8 medium
Margarine: reduced-fat tub	1 tablespoon
Margarine: trans fat-free, tub or squeeze	1 teaspoon
Mayonnaise (made with canola oil)	1 tablespoon
Mayonnaise (made with canola oil): light/ reduced fat	1 tablespoon
Nuts: ■ almonds, cashews, mixed nuts ■ peanuts ■ pecans, walnuts	8 10 4 halves
Oil (most kinds)	1 teaspoon
Olives, large (black or green)	10
Peanut butter (natural or trans fat-free) or nut butter	1 teaspoon
Salad dressing (Italian, vinaigrette, Russian)	1 tablespoon
Salad dressing: reduced fat, light	2 tablespoons
Sunflower seeds	1 tablespoon

## Less Heart-healthy Fats (Saturated Fat)

Fat	Serving Size
Alfredo sauce	2 tablespoons
Bacon	1 slice
Butter	1 teaspoon
Cream cheese: light or reduced fat	2 tablespoons
Cream cheese: regular	1 tablespoon
Cream: regular or light	2 tablespoons
Gravy	2 tablespoons
Shortening	1 teaspoon
Sour cream: light or reduced fat	4 tablespoons
Sour cream: regular	2 tablespoons
Tartar sauce	1 tablespoon

## Dietary Fat Guidelines for Adults

	Weight Loss	Maintain Weight
Men	40 to 55 grams a day	65 to 75 grams a day
Women	30 to 45 grams a day	55 to 65 grams a day

### Tips to decrease saturated fat

- Buy lean cuts of meat such as round or loin.
- Trim all fat from meat before cooking.
- Remove skin and fat from chicken and turkey before cooking.
- Bake, roast, slow cook, broil, braise or grill meats instead of frying.
- Choose white meat more often than dark meat.
- Drain off fat after cooking and blot with a paper towel.
- Use a nonstick surface to pan broil foods.
- Do not eat gravies made with fatty drippings.
- Microwave, steam or par boil vegetables in a small amount of water and season with only a small amount of fat or with spices.
- Use low-fat or fat-free margarine, mayonnaise, salad dressings, cream cheese and sour cream more often than regular versions.



## Meat and Meat Substitutes

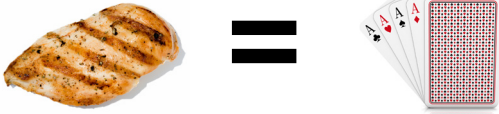
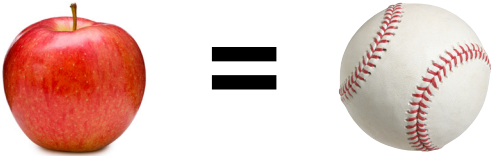
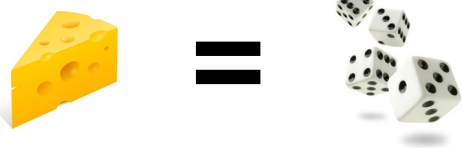
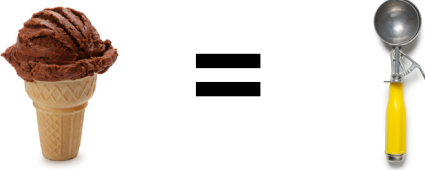
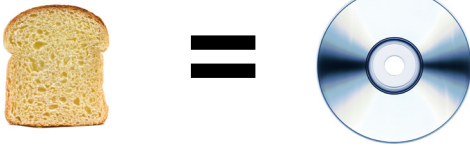
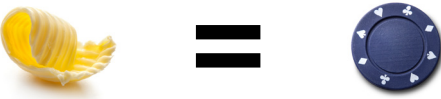
Meat and meat substitutes have protein and some fat but no carbohydrates. For most people, the recommended amount of protein is between 6 to 8 ounces a day. (A piece of meat that looks like the size of a deck of cards is equal to 3 ounces.)

In the following chart, each serving size equals about 7 grams of protein.

Meat	Serving Size
Beef or veal	1 ounce
Canned fish	¼ cup
Cheese	1 ounce
Cottage cheese	¼ cup
Egg: medium	1
Egg substitute	¼ cup
Fish and seafood	1 ounce
Game	1 ounce
Hot dogs	1 ounce
Lamb	1 ounce
Lunch meat (choose lean cuts)	1 ounce
Peanut butter	1 tablespoon
Pork	1 ounce
Poultry (chicken, turkey)	1 ounce
Soy or veggie burgers	1 ounce
Tempeh	¼ cup
Tofu	⅓ cup

# Understanding Portion Sizes

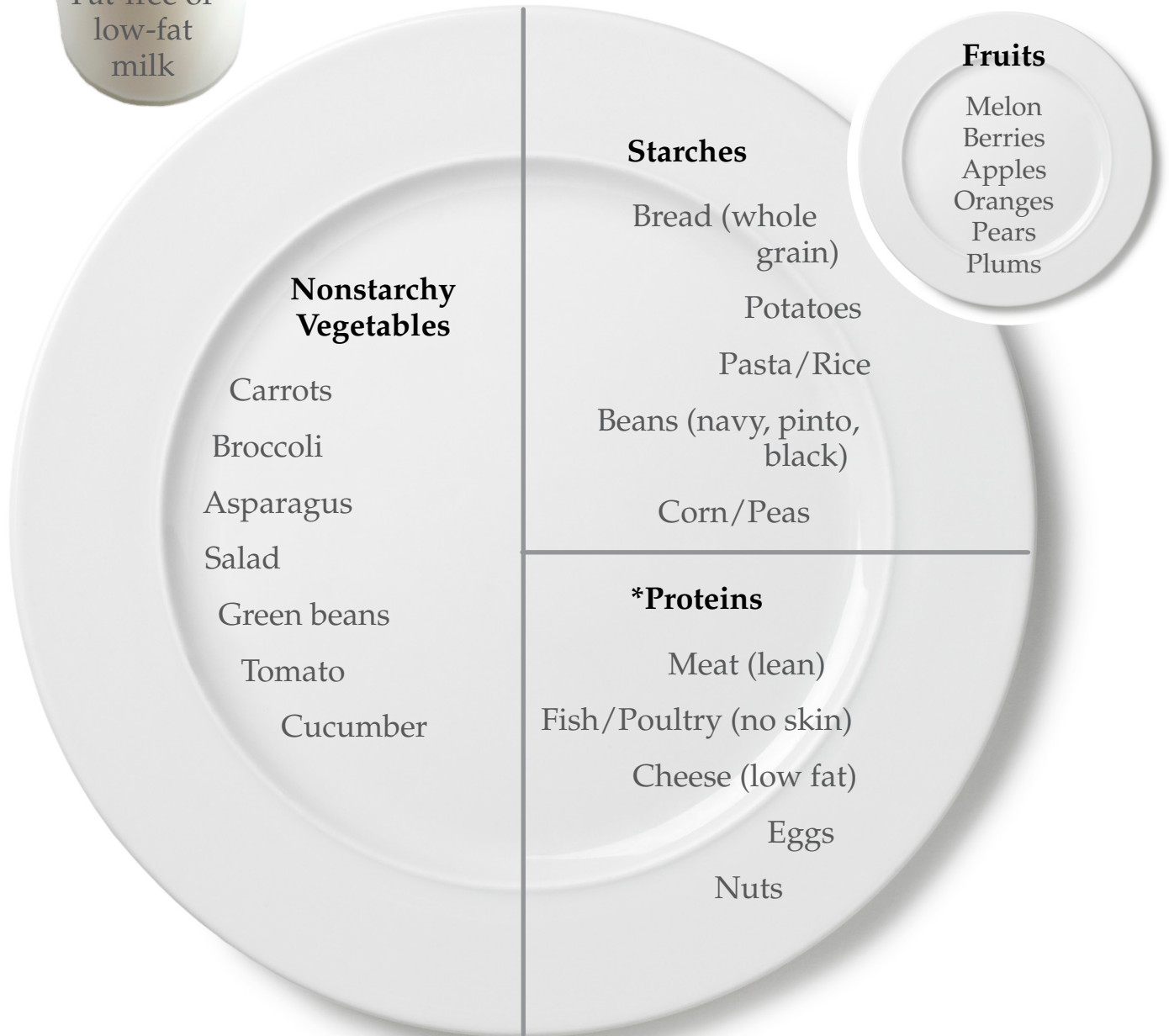
When a food scale or measuring cups aren't handy, you can still estimate your portion. Remember:

<p>Three ounces of meat is about the size and thickness of a deck of playing cards.</p>	
<p>One medium apple or 1 cup of cooked vegetables is about the size of a baseball.</p>	
<p>One ounce of cheese is about the size of 4 stacked dice.</p>	
<p>One-half cup of ice cream or 1/2 cup of cooked pasta is about the size of an ice cream scoop.</p>	
<p>One slice of bread or one 6-inch tortilla is about the size of a DVD.</p>	
<p>One teaspoon of butter is about the size of a poker chip.</p>	

# What Should You Put on Your Plate?



When you are planning your meals, try to think about what your plate should look like. Use the example below to help you think about how your plate should look.



**\*For people following a vegetarian or vegan diet, beans are a main source of protein. (One-fourth cup of cooked beans or peas counts as 1 ounce of protein.)**

**For breakfast:**

- half of your plate should be starches
- the other half should be split between protein and fruit.

**For lunch and dinner:**

- half of your plate should be full of nonstarchy vegetables
- the other half should be split between protein and starches
- a small dish of fruit, if you want.

## What Should You Drink?

### Tip

Make sure to drink plenty of water. You can add freshly squeezed lemon or lime for an extra boost of flavor!

Sugary beverages and juice can add empty calories and carbohydrates. Limit or do not drink beverages that contain natural or added sugars such as iced tea, lemonade, soda and any beverage that is labeled as “sweetened.” Instead choose:

- 1 cup fat-free or 1 percent (%) milk
- 1 cup coffee or tea (no sugar)
- 8 ounces diet soda
- water.

## Using Sweeteners

### Did You Know?

Foods that are labeled “sugar-free” often have sugar alcohols such as mannitol, sorbitol, xylitol, lactitol, isomalt and maltitol. **Sugar-free does not mean it is carbohydrate-free.**

You can find sugar alcohols in sugar-free foods such as chocolate, cookies, hard candies or some ice creams.

There are two types of sweeteners:

- with calories:  
If you use granulated sugar, brown sugar, honey or syrup, use in moderation. One tablespoon of this sweetener has 15 grams of carbohydrate.
- without calories (sugar substitutes):  
Aspartame (Equal<sup>®</sup>, Nutrasweet<sup>®</sup>), saccharin (Sweet’N Low<sup>®</sup>), sucralose (Splenda<sup>®</sup>) or stevia (Truvia<sup>®</sup>, Pure Via<sup>™</sup>) adds a few to no calories or carbohydrates.

## How to Read Food Labels

<b>Nutrition Facts</b>	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
	<b>% Daily Value*</b>
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
<i>Trans</i> Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	<b>10%</b>
Calcium 260mg	<b>20%</b>
Iron 8mg	<b>45%</b>
Potassium 235mg	<b>6%</b>

\*The % Daily Value 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.

**Source of label: U.S. Food and Drug Administration**

Use the nutrition label at left to understand the following.

- **Serving size:** The serving size lists the amount of food in one serving and the number of servings in one package.
- **Calories:** Calories are a measure of energy released by a food or beverage.
- **Total fat:** Total fat includes all types of fat (saturated, unsaturated, trans). Fat is a major source of energy for the body. It also helps the body absorb important vitamins.
- **Saturated fat:** Saturated fat raises LDL (“bad”) cholesterol. Reduce saturated fats to help protect your heart.
- **Trans fat:** Trans fats may increase LDL (“bad”) cholesterol and decrease HDL (“good”) cholesterol, which increases your risk for heart disease. Eat as little trans fats as possible. Avoid foods that contain “partially hydrogenated” oils.
- **Cholesterol:** Foods from animals (meat, fish, eggs, cheese, butter) have cholesterol. Your body produces enough cholesterol for important functions such as digesting fats, making hormones and building cell walls.
- **Sodium:** Your body needs sodium to help its organs function well and fluids to be in balance. Sodium (salt) is typically used to add flavor and increase the amount of time foods stay fresh. A healthy amount of sodium to consume each day is 2,300 milligrams (mg) or less.
- **Total carbohydrate:** Carbohydrates give your body energy. However, too many can raise your blood glucose. See page 30 for guidelines.
- **Fiber:** Fiber is the part of food that cannot be broken down during digestion. Because it moves through your body “undigested,” it plays an important role in keeping your digestive system moving and functioning well.

- **Total sugars:** This is the total amount of natural sugars such as lactose (sugar in milk) or fructose (sugar in fruit) and added sugars.
- **Added sugars:** Added sugars are sugars added during the making (processing) of foods. Examples include sugar, honey, pure cane sugar, cane sugar, corn syrup, molasses, brown sugar, agave syrup, maple syrup — and more! Studies have shown consuming more than 10 percent of your total daily calories from added sugar makes it less likely that you will meet your nutrient needs (while staying within your calorie goal). Remember to read the ingredients list to look for sources of sugar!
- **Protein:** Protein is important for healing, building muscle, strengthening your immune system, helping your body recover from stress and more!
- **Percent (%) daily value:** Your body needs more of some nutrients (calcium, dietary fiber, potassium) and less of others (total fat, saturated fat, sodium, added sugars) to function at its best. The % daily value will help you know how much of that nutrient your body needs. In general for each nutrient:
  - 5% daily value or less is considered low
  - 20% daily value or more is considered high.

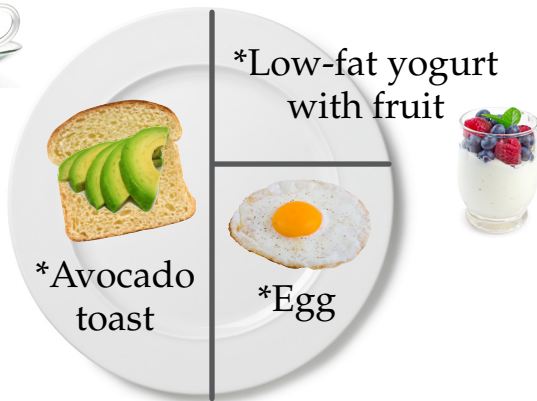
Grams of carbohydrate	Number of carbohydrate choices
0 to 5	0
6 to 10	½
11 to 20	1
21 to 25	1 ½
26 to 35	2
36 to 40	2 ½
41 to 50	3
51 to 55	3 ½
56 to 65	4
66 to 70	4 ½
71 to 80	5



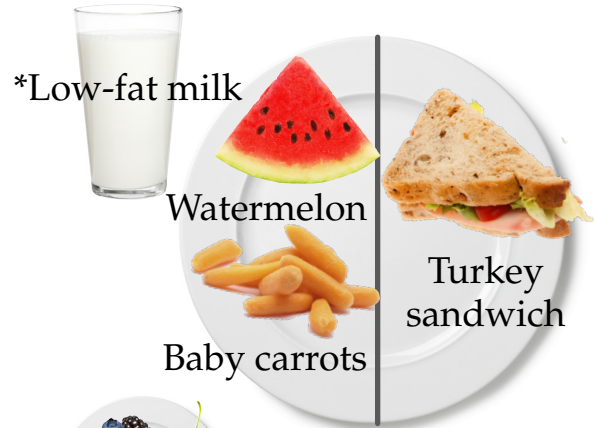
# Sample Meals and Snacks

## For meals:

### At breakfast:



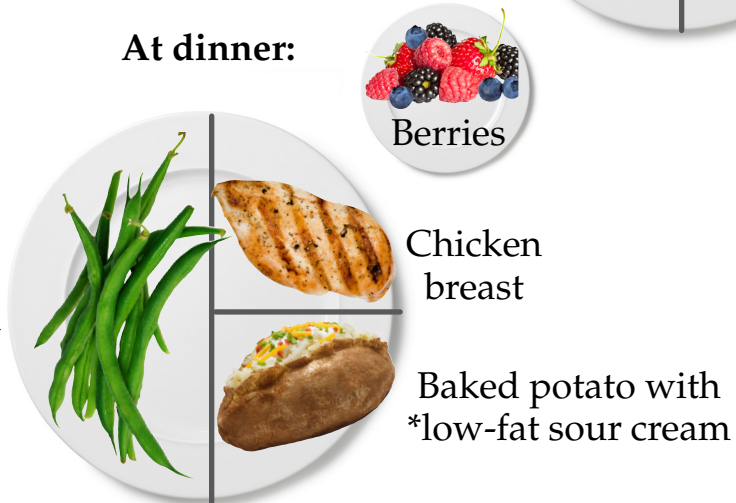
### At lunch:



### At dinner:



Green beans



## Important

Make sure to include healthful fats with each meal and snack. Examples of foods with healthful fats include:

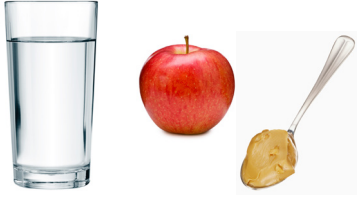
- olive oil
- peanut butter (natural)
- avocado
- dairy products (low-fat milk or yogurt).

Foods that contain healthful fats are noted with a star (\*) on pages 52 to 54.



## For snacks:

Apple with \*peanut butter (natural)



Bran flakes with \*low-fat milk



\*Low-fat yogurt with fruit





















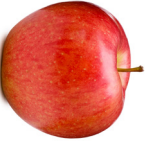

\*Nuts with dried fruit



Vegetables with \*hummus



Choose one food from each column to build a complete meal. Remember to include healthful fats!

Nonstarchy vegetables	Protein	Grains or starchy vegetable	Fruit	Beverage
 <p><b>Brussels sprouts</b> 1 cup raw or ½ cup cooked</p>	 <p><b>Chicken breast</b> 3 ounces cooked</p>	 <p><b>Brown rice</b> ⅓ cup cooked</p>	 <p><b>Banana</b> 1 small</p>	 <p><b>*Low-fat milk</b> 1 cup</p>
 <p><b>Bell peppers</b> 1 cup raw or ½ cup cooked</p>	 <p><b>*Fish</b> 3 ounces</p>	 <p><b>Sweet potato</b> 3 ounces or ½ cup cooked</p>	 <p><b>Grapes</b> 15 grapes</p>	 <p><b>Unsweetened tea</b> No limit</p>
 <p><b>Broccoli</b> 1 cup raw or ½ cup cooked</p>	 <p><b>*Egg</b> 1 to 2 medium</p>	 <p><b>Beans and legumes</b> ½ cup cooked</p>	 <p><b>Oranges</b> 1 small</p>	 <p><b>Sparkling water</b> No limit</p>
 <p><b>Green beans</b> 1 cup raw or ½ cup cooked</p>	 <p><b>*Tofu</b> 3 ounces cooked</p>	 <p><b>Peas</b> ½ cup cooked</p>	 <p><b>Apple</b> 1 small</p>	 <p><b>Black coffee</b> No limit</p>

**\*Sources of healthful fats.**

# Sample Meal Plans

## Breakfast examples with 4 carbohydrate choices

- 1 slice toast = 1 carbohydrate choice
- ½ cup hot cereal = 1 carbohydrate choice
- 1 tablespoon peanut butter
- ½ medium banana = 1 carbohydrate choice
- 1 cup (8 ounces) fat-free milk = 1 carbohydrate choice
- coffee or tea

-or-

- 1 (4-inch) pancake = 1 carbohydrate choice
- 1 egg
- 2 tablespoons of light syrup = 1 carbohydrate choice
- 1 cup melon or berries = 1 carbohydrate choice
- 1 cup fat-free milk = 1 carbohydrate choice
- 1 teaspoon margarine
- coffee or tea

-or-

- 1 ½ cups dry, unsweetened cereal with 1 cup fat-free milk = 3 carbohydrate choices
- ½ cup orange juice = 1 carbohydrate choice
- coffee or tea

## Lunch examples with 4 carbohydrate choices

- 1 hamburger bun = 2 carbohydrate choices
- 1 small hamburger
- 1 teaspoon mayonnaise
- green salad
- 1 tablespoons salad dressing
- 1 apple = 1 carbohydrate choice
- 1 cup fat-free milk = 1 carbohydrate choice

-or-

- 1 cup vegetable soup (broth-based with rice, noodles or navy beans) = 1 carbohydrate choice
- 1 sandwich (2 slices of bread, 2 ounces low-fat meat, 1 tablespoon light mayonnaise) = 2 carbohydrate choices
- 1 cup cantaloupe cubes = 1 carbohydrate choice
- coffee, tea or diet soda

**-or-**

- 3 slices thin crust medium-sized cheese pizza = 3 carbohydrate choices
- lettuce salad with 2 tablespoons low-calorie salad dressing
- ½ cup frozen yogurt = 1 carbohydrate choice
- coffee, tea or diet soda

#### **Dinner examples with 4 carbohydrate choices**

- 1 pork chop
- 1 small baked potato = 2 carbohydrate choices
- 1 teaspoon margarine
- ½ cup coleslaw
- 1 cup watermelon cubes = 1 carbohydrate choice
- 1 cup (8 ounces) fat-free milk = 1 carbohydrate choice

**-or-**

- 3 meatballs with ½ cup sauce = 1 carbohydrate choice
- ⅔ cup pasta = 2 carbohydrate choices
- green salad with 1 tablespoon dressing
- 1 cup strawberries = 1 carbohydrate choice
- coffee, tea or diet soda

**-or-**

- 1 cup stir-fry (meat, sauce and vegetables) = 1 carbohydrate choice
- ⅔ cup steamed rice = 2 carbohydrate choices
- 1 cup raspberries = 1 carbohydrate choice
- coffee, tea or diet soda

## Important

Talk with your health care team about the right amount of carbohydrates for you to have at each snack. This will depend on:

- the type of diabetes you have
- how often you have low blood glucose
- your body weight
- your physical activity level.

## Snack examples without carbohydrate

- 1 piece string cheese
- 8 almonds or cashews
- 1 ounce lean, low-sodium deli meat with 1 ounce Swiss or cheddar cheese
- 2 ounces lean meat such as chicken breast
- nonstarchy vegetables such as bell peppers, carrots, celery or cucumbers

## Snack examples with carbohydrate

- 1 piece fresh fruit with string cheese = 1 to 2 carbohydrate choices
- 1 cup fat-free milk and 3 graham crackers = 2 carbohydrate choices
- 6 ounces artificially sweetened yogurt = 1 carbohydrate choice
- 1 (3-inch) cookie = 1 carbohydrate choice
- 3 cups microwave light popcorn = 1 carbohydrate choice
- 1 granola bar (15 to 20 carbohydrate grams) = 1 carbohydrate choice
- 15 mini pretzel twists = 1 carbohydrate choice

## Meal Plan: What to Remember

- Enjoy your favorite foods in moderation.
- Eat some carbohydrates at each meal.
- Eat your regular meals at about the same time each day.
- Do not skip meals.
- Have a meal or snack every 4 to 6 hours while you are awake.

# Dining Out

## Tip

Limit alcohol. It can affect judgment and cause overeating.

- The portions are often too large.
- The amount and type of fat can be hard to figure.
- If you are very hungry, you may be tempted to make poor choices or eat too much.

## How to eat out

- Plan ahead. Do not go to a restaurant hungry.
- Eat moderate portions. Share a meal. Ask for a to-go box when you are served and put half of the meal into it before you start eating.
- Ask about child-size portions.
- Ask for salad dressing, sour cream, sauces, butter and mayonnaise on the side.
- Choose foods that are broiled, baked, grilled or steamed.
- Do not panic if you eat too much. Get back on track.

## Other tips

- You may eat or drink calorie-free and sugar-free foods. Be careful about sugar-free foods that have more than 20 calories per serving. Eating a lot of these foods may raise your blood glucose.
- Try to eat 3 to 5 servings of nonstarchy vegetables each day such as carrots, green and yellow beans, broccoli, cauliflower, lettuce and cucumbers. They have vitamins, minerals and fiber but not much carbohydrate.
- Low fat on a food label does not mean it is low in carbohydrates or calories.
- Sugar free does not mean it is carbohydrate free.

## Tip

If you are pregnant, check with your dietitian about a meal plan that is right for you.