

Guide to Carbohydrate Counting

A Simple Meal-Planning Method for People with Diabetes

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A healthy diet

A healthy diet includes foods and drinks that have vitamins, minerals and other healthy nutrients, with little or no added sugars, saturated fats or salt (sodium).

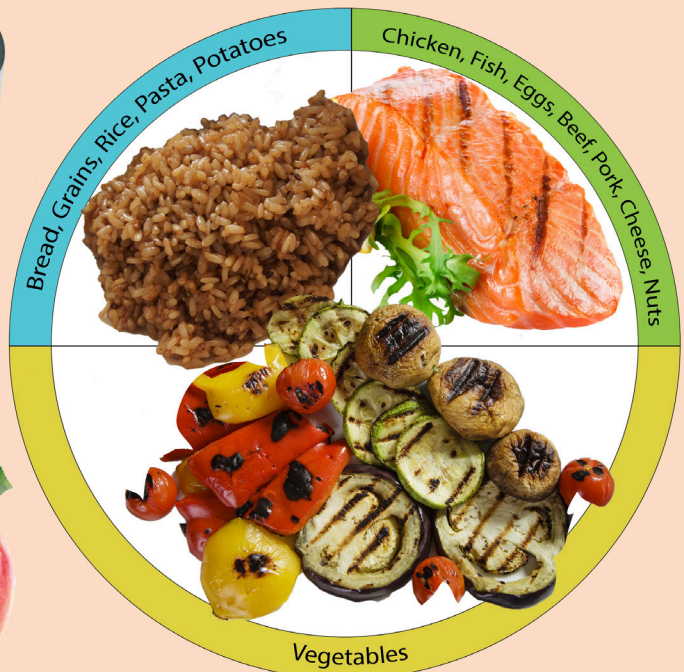
Make half your plate vegetables.

- Eat red, orange and dark-green vegetables, beans, peas and lentils.
- Focus on whole fruits.

Milk, Yogurt or Non-Dairy Option



Fruit



Switch to skim or 1% milk.

- They have the same amount of calcium and nutrients as whole milk, but less fat and calories. Try low-fat or fat-free yogurt.
- Try lactose-free milk or calcium-fortified soy products instead of dairy.
- Choose low-fat cheese.

Make at least half your grains whole.

- Choose 100% whole-grain cereals, breads, crackers, rice and pasta.

Vary your protein food choices.

- Choose lean meats, poultry, seafood, fish, eggs, beans, peas, lentils, nuts and seeds, and soy products.

Choose foods with less added sugars, saturated fat, and sodium.

- Choose mono and polyunsaturated and Omega 3 fats most often.
- Limit sweet drinks and alcoholic drinks (like wine, beer and cocktails).
- Choose whole foods most often. Limit processed foods.

Keep your food safe to eat—visit www.FoodSafety.gov.

*Adapted from Let's Eat for the Health of It, Home and Garden Bulletin
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To learn more, visit www.dietaryguidelines.gov

Introduction

Guide to Carbohydrate Counting is written for people of all ages who have diabetes mellitus. It explains, in basic terms, the connection between food and blood sugar. This booklet works best when used under the direction of a registered dietitian who can help you design a meal plans that matches your needs.

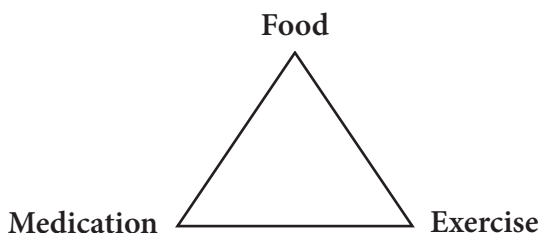
People with diabetes should work with their care team (doctors, nurses, dietitians and other healthcare providers) to track their diabetes and learn how to stay healthy.

Food products listed in this booklet do not reflect an endorsement of any particular food. Rather, they represent a random sampling of common foods eaten in the United States.

Diabetes: A balancing act

Insulin is a hormone made by the pancreas. It works to control blood sugar (blood glucose) by helping your body break down and use nutrients from food.

When you have diabetes, your body can't make enough insulin, it can't properly use the insulin it does make, or both. Maintaining good blood sugar control is an important part of staying healthy with diabetes. You can manage your blood sugar with a healthy diet, medicine and/or insulin and exercise.



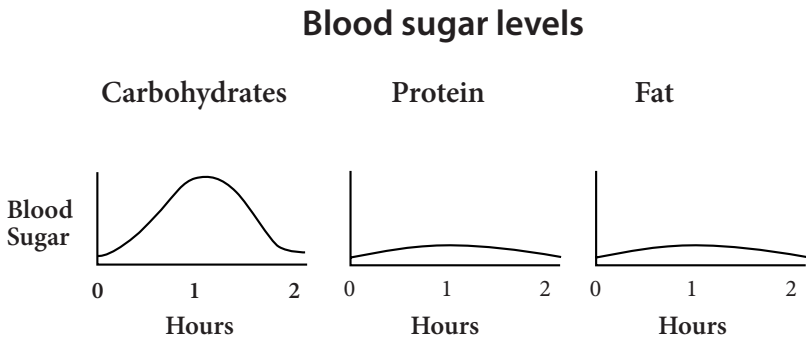
Healthy eating

Eating a healthy, well-balanced diet is an important part of taking care of yourself. A simple way to eat healthfully is to use the plate example at the beginning of this booklet. This plate shows that half of your plate should include vegetables, $\frac{1}{4}$ should include grains, and $\frac{1}{4}$ lean proteins. Add fruit and low-fat dairy or milk alternative. Limit saturated and trans fats and added sugars. Be sure to review your special nutrition needs with a dietitian.

How nutrients affect blood sugar

Foods contain 6 nutrients: **carbohydrates, protein, fat, vitamins, minerals, and water.** Carbohydrates, protein, and fat provide energy (calories). Of these nutrients, carbohydrates have the most effect on blood sugar. In some people, meals with large amounts of protein and fat may affect blood sugar 3 to 5 hours after the meal.

The graphs below show how carbohydrates, protein and fat affect blood sugar:



Nutrients in foods

Meats, poultry, fish, eggs, dairy products, legumes (beans, peas, lentils and peanuts), tree nuts, and seeds contain **protein** and varying amounts of **fat**. Fats are in oils, butter, margarine, spreads, salad dressings and many other foods. **Vitamins, minerals** and **water** are in all foods. Eating many different foods will help you get the right amounts of vitamins and minerals in your diet.

Foods that have healthy **carbohydrates** include all grains and grain products (bread, rice, pasta and cereal: 100 percent whole grain is best), fruits (fresh fruit, canned and dried fruit, and fruit juice), starchy vegetables (potatoes, corn, peas and winter squash), milk and yogurt, beans and lentils.

Foods that have less healthy carbohydrates are candy, desserts, salty and fatty snack foods, and sweetened drinks. The 2 main types of carbohydrates in these foods are **starches** and **sugars**.

Fiber is a carbohydrate that your body can't digest, so it has little effect on blood sugar. Fiber is found in whole grains, fruits, vegetables, beans, peas, lentils, nuts and seeds. Fiber is an important part of a healthy diet—it aids digestion and can help lower cholesterol. Try to eat 20 to 35 grams a day of fiber.

Since carbohydrates have the most effect on blood sugar, the main way to control blood sugar (through diet) is to control how much carbohydrates you eat. **You should not avoid healthy carbohydrates. Eating a steady amount of healthy carbohydrates during the day will help you control your blood sugar.**

If you use insulin, you can learn to adjust your rapid-acting insulin dose to the amount of carbohydrates you will eat. Talk with your

dietitian, nurse or doctor about how best to do this. You and your dietitian can also decide how many carbohydrates you should eat for each meal and snack to help you control your blood sugar.

Protein foods, non-starchy vegetables, and fats

When eaten in the right portions, protein foods (meat, poultry, fish and seafood, eggs and cheese), non-starchy vegetables and fats don't have much effect on blood sugar because they have few or no carbohydrates. Your dietitian will help you find the right amounts of protein, non-starchy vegetables and fats for your good health.

Proteins: Different protein foods have different amounts of fat. Try to choose lean sources of protein (see page 5) and use low-fat cooking methods such as boiling, broiling, baking, grilling, roasting, steaming and stir-frying. Trim all fat off meats before cooking.

Non-starchy vegetables: Vegetables are an important part of a balanced diet. Try to eat 3 to 5 servings each day. Most vegetables are very low in carbohydrates (they have an average of 5 grams of carbohydrate per serving). A serving size is typically ½ cup of cooked vegetables or vegetable juice, or 1 cup of raw, leafy vegetables.

Starchy vegetables (such as corn, peas, potatoes and winter squash) have more carbohydrates than non-starchy vegetables. You should count starchy vegetables as part of your daily carbohydrates.

Fats: Fats don't have a big effect on blood sugar when eaten in the recommended amounts. Choose lean proteins and low-fat or fat-free dairy products. Eat very few fatty snacks and desserts. For a heart-healthy diet, choose mostly from the monounsaturated and polyunsaturated groups, along with the omega-3 fatty acid list. Limit saturated and trans fats: Too much of these can raise cholesterol. (See page 6.)

Proteins

Lower fat

USDA Select or Choice lean beef
(round, sirloin, flank, tenderloin, lean or extra lean ground beef, roast)

Goat, lamb and veal chops, lean pork
(fresh and boiled ham, Canadian bacon, tenderloin, loin chops)

Poultry without skin (chicken, turkey, Cornish game hen), **lean ground turkey and chicken**

Fish (fresh and frozen fish, crab, shrimp, lobster, clams, tuna in water, sardines, oysters, herring, salmon)

Wild game (venison, buffalo, ostrich, or rabbit; goose, duck, or pheasant without the skin)

Low-fat cheeses (cottage cheese; fat-free or low-fat cheese products; grated Parmesan; part skim-milk cheeses such as ricotta and mozzarella)

Tofu, tempeh, soy products, egg whites, egg substitutes, low-fat deli meats

Higher fat

USDA Prime Cuts (ribs, corned beef, prime rib, hot dogs, regular ground beef)

Spareribs, ground pork, sausage, chorizo, pickled pigs' feet, bacon

Fried poultry (chicken, turkey, Cornish game hen), poultry with skin, regular ground turkey and chicken

Fried fish

Organ meats

High-fat cheeses (Cheddar, Swiss, Colby, Monterey Jack, American, etc.)

High-fat deli meats (bologna, pastrami, salami, corned beef, prosciutto, summer sausage, Braunschweiger, etc.)

Bratwurst, Italian sausage, Polish sausage

Egg yolks

Fats

Choose these:		Limit these:
Monounsaturated	Polyunsaturated	Saturated
Olive oil Peanut oil Canola oil Avocados* Olives, black and green Almonds, cashews, peanuts, pecans, peanut butter* Tahini, sesame seeds*	Margarine, soft tub or squeeze bottle (regular and diet) Mayonnaise (regular and diet) Salad dressing (regular and diet)* Corn, sunflower, safflower, sesame, and soybean oils Pumpkin seeds, sunflower seeds* Walnuts*	Fatty meats, poultry with skin, bacon, salt pork, fatback, chitterlings Butter, lard, shortening Hydrogenated fats, partially-hydrogenated fats Coconut, coconut oils, coconut milk Cream cheese, sour cream Palm and palm kernel oils; cocoa butter High-fat dairy products (whole milk, 2% milk, most cheese), whipped cream,* and half-and-half
	Omega-3 fats	Trans fats
	Mackerel, herring, salmon, albacore, tuna, sardines, anchovies, trout Flaxseed oil, soybean oil, canola oil Flaxseed* Walnuts*	Hydrogenated fats, partially hydrogenated fats Stick margarine, shortening Commercial bakery products* Commercial fried foods* Commercial snack foods*

* *These foods may contain carbohydrates.*

Sodium (salt)

We advise people with diabetes to eat less **sodium** (salt and salty foods). If you have high blood pressure, try to limit your sodium intake to 1,500 mg (milligrams) a day or less. Read the Nutrition Facts labels for sodium. Limit your use of salt both in cooking and at the table. One teaspoon of table salt has about 2,300 mg of sodium. Use salt-free seasonings like Mrs. Dash, pepper, vinegar, lemon, herbs and spices. Adding plenty of fruits, vegetables and low-fat or fat-free dairy products can also help lower blood pressure.

Convenience and processed foods (snack items, canned and packaged foods, and processed meats and cheeses), **condiments** (ketchup, mustard, soy sauce, pickles, olives), **restaurant foods**, and **fast foods** tend to be very high in sodium. (All fast-food and chain restaurants have nutritional information available on their websites.) Fresh, unprocessed foods like fresh meats, milk, fruits, vegetables and grains are lower in sodium.

If the label reads:	It means:
“low sodium”	140 mg or less sodium per serving
“very low sodium”	35 mg or less per serving
“sodium free”	less than 5 mg per serving
“reduced sodium” or “less sodium”	at least 25 percent less than original
“light sodium”	at least 50 percent less than original
“unsalted” or “no salt added”	no salt added during processing

Free foods

Free foods are any foods that contain fewer than 20 calories or 5 grams of carbohydrates per serving. Be careful to watch the sodium content and pay attention to portion size. If the serving adds up to 12 to 15 grams of carbohydrates, count it as 1 carb choice (see page 10).

Beverages (drinks)

Bouillon, broth, consommé
Carbonated or mineral water
Club soda
Coffee
Diet soft drinks
Tea
Tonic water (sugar-free)

Sugar-free

Gelatin
Gum
Sugar substitutes
(aspartame, saccharin,
acesulfame K, sucralose,
neotame, stevia)

Spices and herbs

All spices and herbs

Condiments (sauces, dressings)

BBQ sauce (1 Tbsp = 1 serving)*
Horseradish
Ketchup (1 Tbsp = 1 serving)*
Lemon and lime juice
Mustard
Pickle
Relish (1 Tbsp = 1 serving)*
Salsa (¼ cup = 1 serving)*
Soy sauce (2 Tbsp = 1 serving)*
Tabasco sauce
Taco sauce (1 Tbsp = 1 serving)*
Teriyaki sauce (1 Tbsp = 1 serving)*
Vinegar

* 1 serving = about 5 grams
of carbohydrates

How to read food labels for “total carbohydrate”

Food labels, like the one shown below, offer useful information about the nutrients in the foods you eat. Total carbohydrate appears on every food label.

Note: Sugar (from added, naturally occurring and other sources) is included in the total carbohydrate.

Also look at the **serving size** on the label and compare it to the amount you’re eating. If the serving size is a ½ cup, and you eat 1 cup, then you’re eating 2 servings. (You need to multiply the numbers on the label by 2).

The weight of the serving is in parentheses () after the serving size. Don’t confuse the weight of the serving with the number of Total Carbohydrate grams.



Nutrition Facts		
4 servings per container		
Serving size	½ cup (90g)	
Amount per serving		
Calories	100	
		% Daily Value
Total Fat 3g		5%
Saturated Fat 0g		0%
<i>Trans</i> Fat 0g		0%
Cholesterol 0mg		0%
Sodium 300mg		13%
Total Carbohydrate 13g		4%
Dietary Fiber 3g		12%
Total Sugars 3g		
Includes 2g Added Sugars		4%
Protein 3g		

What counts as a carb (carbohydrate) choice?

Keeping track of **carb choices** is another way to count carbohydrates. One carb choice equals about 15 grams of carbohydrate in the food you eat (see page 9). When reading food labels, **divide the grams of carbohydrate by 15 to determine how many carb choices are in the food.**

The list on pages page 13–32 shows a variety of foods, their typical serving sizes, and the number of carbohydrates (carb choices and grams) in each. You can combine different foods to reach the particular number of carbohydrates in your meal plan. For example, 4 carb choices for breakfast might include:

8 ounces of skim milk	= 1 carb choice (13 grams carbohydrate)
1 large banana	= 2 carb choices (30 grams carbohydrate)
$\frac{3}{4}$ cup cold cereal, unsweetened	= 1 carb choice (15 grams carbohydrate)
Total	= 4 carb choices (about 60 grams carbohydrate)

You don't need to avoid healthy foods that are high in carbohydrates or eat the same foods every day. Basing your diet on carb choices or grams of carbohydrate gives you choices in the foods you eat. **Eating steady amounts of carbohydrates at each meal and snack spread throughout the day will help you control your blood sugar.** This will help you control your blood sugar levels, along with medicine and exercise. It's important to eat a balanced diet that contains foods from all of the food groups in the MyPlate example on page iv. Try to choose most of your carbohydrates from healthy, low-fat foods.

The following information will help you measure serving sizes accurately:

Common Household Measurements

3 teaspoons (tsp) = 1 tablespoon (Tbsp)

4 Tbsp = $\frac{1}{4}$ cup = 2 fluid ounces

8 Tbsp = $\frac{1}{2}$ cup = 4 fluid ounces

16 Tbsp = 1 cup = 8 fluid ounces

1 cup = $\frac{1}{2}$ pint

2 cups = 1 pint

1 ounce = 30 grams (dry weight)

More Tips

3 ounces cooked meat / protein = a deck of cards or the size of a woman's palm

1 ounce cheese = 4 stacked dice

$\frac{1}{2}$ cup casserole, grain, or vegetable covers about $\frac{1}{4}$ of a standard-size dinner plate

$\frac{1}{2}$ cup fruit (or any other food) = the size of a tennis ball

The meal plan

Below are the suggested daily carbohydrate servings for most adults. A balanced diet includes lean proteins, vegetables and small amounts of healthy fats, added to healthy carbohydrates (whole grains, starchy vegetables, peas, beans, legumes, fruits and low-fat or fat-free milk products). Review the plate example at the beginning of this booklet for the recommended number of servings per day.

Here's an example of a healthy plan to control carbohydrates, calories and blood sugar in most adults:

	<i>For Men</i>		<i>For Women</i>	
	Carb choices	Grams	Carb choices	Grams
<i>Breakfast</i>	4 to 5	60 to 75	3 to 4	45 to 60
<i>Morning snack</i>	1 to 2	15 to 30	1 to 2	15 to 30
<i>Lunch</i>	4 to 5	60 to 75	3 to 4	45 to 60
<i>Afternoon snack</i>	1 to 2	15 to 30	1 to 2	15 to 30
<i>Dinner</i>	4 to 5	60 to 75	3 to 4	45 to 60
<i>Bedtime snack</i>	1 to 2	15 to 30	1 to 2	15 to 30

Ask your dietitian to help you create your own meal plan, using the chart on page 35.

Carbohydrates in common foods

Pages page 13–32 list common foods, their usual serving sizes, and the number of carbohydrates they contain. **All portions are for cooked, ready-to-eat servings.** (Use a measuring cup or kitchen scale to check portion sizes.) **Throughout the list, an asterisk (*) marks foods that are high in fat.** Use these foods in small amounts, balancing high-fat and low-fat foods throughout the day for a healthy diet.

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Breads</i>			
Bread, sandwich type	1 slice (1–1.5 oz)	1–1½	12–22
Bread, reduced calorie	1 slice (1 oz)	½	9
Breadstick, soft	1 stick (6" or 1 oz)	1	17
Challah	1 small (1 oz)	1	15
Chapati	1 piece (6" or 1 oz)	1	16
Corn bread*	1 cube (2" or 1 oz)	1	20
Croutons*	½ cup	½	11
Dinner roll	1 small roll (1 oz)	1	13
Focaccia bread	1 wedge (2 oz)	12	28
Hot dog/hamburger bun	1 bun (1.5–2 oz)	1½–2	22–30
Injera bread, Ethiopian	⅓ of 1 large (1 oz)	1	25
Anjera bread, Somali	1 anjera (8" or 2 oz)	1	14
Lefse	1 plain (1 oz)	1	15
Malawah,* Somali	1 malawah (8" or 2 oz)	1	18
Matzo	1 (1 oz)	1½	23
Muufo, corn, Somali	1 (3 oz)	2	34
Naan	2 oz	2	30
Pita, small	1 pita (6.5" or 2 oz)	2	33
Taco shell, hard	2 shells	1	16
Tortilla, corn or flour	1 shell (6" or 1 oz)	1	13
Tortilla, flour	1 shell (8" or 2 oz)	2	25
<i>Pasta and Grains</i>			
Barley	½ cup	1½	22
Corn meal/polenta	½ cup	1	19
Couscous	½ cup	1	18

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Pasta and Grains (continued)</i>			
Fufu	½ cup	2 ½	40
Kasha / buckwheat	½ cup	1	17
Millet	½ cup	1½	21
Pasta or noodles (white or whole wheat)	½ cup	1½	22
Pasta salad*	½ cup	1	19
Quinoa	½ cup	1	20
Rice, white or brown	½ cup	1½	22
Rice, wild	½ cup	1	18
Rice noodles	½ cup	1½	22
Spelt	½ cup	2	26
Stuffing*	½ cup	1½	22
Wheat pilaf / bulgur	½ cup	1	17
<i>Breakfast Items</i>			
Bagel, from bagel shop	1 bagel	4–5	60–75
Bagel, store-bought	1 bagel	1½–4	22–60
Biscuit, buttermilk*	1 biscuit (2 oz)	2	27
Bran cereal, flaked	1 cup	2–3	32–45
Cereal, dry, sweetened	1 cup	1½–2½	25–38
Cereal, dry, unsweetened	1 cup	1½–2	22–29
Cereal, granola*	½ cup	2–2½	35–40
Cereal, hot (plain oatmeal, grits, Cream of Wheat)	1 cup	2	27–30
Cinnamon roll*	1 small (2 oz)	2	30
Croissant*	1 small (2 oz)	2	26

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Breakfast Items (continued)</i>			
Danish*	1 small (2 oz)	2	29
Doughnut, cake*	1 small (2 oz)	2	27
Doughnut, frosted / glazed*	1 small (2 oz)	2	27
English muffin	1 muffin	2	26
French toast* (no syrup)	1 slice	1–1½	12–22
Hash browns*	½ cup	1	19
Muffin, small*	1 muffin (1 oz)	1	15
Muffin, medium*	1 muffin (2 oz)	2	28
Muffin, large*	1 muffin (3 oz)	3	42
Muffin, giant*	1 muffin (6 oz)	5½	84
Pancakes* (no syrup)	1 pancake (6")	1½	22
Scone*	1 small (2 oz)	2	30
Toaster waffle, small* (no syrup)	1 waffle	1	15

Starchy Vegetables, Dried Beans, Peas and Lentils

Baked beans	½ cup	2	27
Casava	½ cup	1½	22
Corn	½ cup	1	15
Corn on the cob	1 large ear	2	28
Dried beans, peas, or lentils, cooked	½ cup	1	15–20
Edamame	½ cup	½	8
French fries*	small order fast food (2.6 oz)	2	30
Fresh green peas	½ cup	1	12

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Starchy Vegetables, Dried Beans, Peas and Lentils (continued)</i>			
Parsnips	½ cup	1	13
Potato, baked, small	1 potato (3 oz)	1	18
Potato, baked, medium	1 potato (5.5 oz)	2	34
Potato, mashed	½ cup	1	18
Potato pancake*	1 med. pancake	1	11
Potato salad*	½ cup	1	14
Pumpkin, mashed	½ cup	½	10
Squash, winter	½ cup	1	11
Sweet potato, small baked	1 potato (4 oz)	1½	24
Sweet potato, mashed	½ cup	1½	21
Taro	½ cup	1½	23
Yam, baked	1 yam (4 oz)	2	31
Yam, mashed	½ cup	1	18
<i>Non-starchy Vegetables</i>			
Lettuce or spinach, raw	1 cup	0	1
All other non-starchy vegetables: asparagus, beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, celery, cooked greens, cucumber, eggplant, green beans, ½ cup 0 2–6 mushrooms, onion, peppers, radish, tomato, turnip, zucchini, etc.			

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Soups</i>			
Bean*	1 cup	1–2	20–34
Borscht	1 cup	1	14
Chicken noodle	1 cup	1	13
<i>Soups (continued)</i>			
Chili, with beans*	1 cup	1½	25
Cream of broccoli*	1 cup	1	20
Matzo ball	1 cup	1	15
Minestrone	1 cup	1½	22
New England clam chowder*	1 cup	1½	21
Ramen noodles*	1 pkg.	3½	52
Split pea	1 cup	2	30
Tomato with milk	1 cup	1½	23
Vegetable	1 cup	1½	18–25
Wild rice with chicken*	1 cup	1	18
<i>Crackers, Chips, Nuts and Popcorn</i>			
Chips, baked (potato or tortilla)	12 chips	1½	23
Goldfish crackers	55 crackers	1	20
Graham crackers	2 full crackers	1½	21
Nuts and seeds, all kinds*	¼ cup	½	4–6
Popcorn, caramel*	1 cup	1	12
Popcorn, plain popped	3 cups	1	18

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Crackers, Chips, Nuts and Popcorn (continued)</i>			
Popcorn, microwave,* mini bag	1 bag	1½	21
Popcorn, microwave,* regular bag	1 bag	3	43–48
Potato or tortilla chips*	18 chips (1 oz)	1	15
Pretzel sticks	31 sticks (¾ oz)	1	15
Rice cakes, large	2 cakes	1	15
Ritz Crackers*	8 crackers	1	16
Saltine crackers	6 crackers	1	13
Triscuits*	5 crackers	1	16
Wheat Thins*	12 crackers	1	16

Condiments, Spreads

Barbecue sauce	1 Tbsp	0–½	2–9
Catsup	1 Tbsp	0	4
Cranberry sauce	2 Tbsp	1	13
Agave, brown sugar, white sugar, honey, jelly, jam	1 Tbsp	1	12–17
Jelly or jam, sugar-free	2 Tbsp	0	5
Peanut butter*	2 Tbsp	0	5–8
Relish or chutney	1 Tbsp	0	5
Syrup (pancake)	2 Tbsp	2	28
Syrup (pancake), light	2 Tbsp	1	13
Syrup (pancake), sugar- free	2 Tbsp	0	0–5

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fats</i>			
Butter,* margarine,* oils*	1 tsp	0	0
Cream cheese,* plain	2 Tbsp	0	0
Gravy*	2 Tbsp	0	2–3
Guacamole*	2 Tbsp	0	3
Half-and-Half,* regular or fat-free	1 Tbsp	0	0–1
Mayonnaise* or Miracle Whip,* regular or light	1 Tbsp	0	0–2
Olives,* black or green	5 olives	0	1–2
Salad dressings, light or fat-free	2 Tbsp	0–1	2–14
Salad dressings, regular*	2 Tbsp	0	0–5
Sour cream,* regular or light	1 Tbsp	0	0–2
Whipped cream,* regular or light	2 tbsp	0	0–2

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Meats and Meat Substitutes</i>			
Beef,* pork,* chicken, turkey, fish, seafood, lamb,* goat,* or wild game (plain)	3 oz	0	0
Breaded or battered meat,* chicken,* turkey,* or fish*	3 oz	½–1	7–15
Egg*	1	0	0
Cheese*	1 oz	0	0
Tempeh	3.5 oz	½–1	9–20
Tofu	4 oz	0	2
<i>Fresh, Canned and Dried Fruits</i>			
Apple	1 small	1	14
	1 medium	1	19
	1 large	2	28
Avocado*	1 medium	1	17
Banana	1 small	1½	23
	1 medium	2	27
	1 large	2	30
Berries: blackberries	1 cup whole	1	14
blueberries	1 cup whole	1½	21
raspberries	1 cup whole	1	15
strawberries	1 cup whole	1	11

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fresh, Canned and Dried Fruits (continued)</i>			
Canned fruit, unsweetened	½ cup	1	15
Cherries	15	1	15
Clementine	1 small	½	9
Dried fruit: raisins	2 Tbsp	1	15
craisins	2 Tbsp	1	17
dates	2–3 dates	1	15
Grapefruit	½ large	1	13
Grapes	15 or ½ cup	1	13
Kiwi	1 medium	1	11
Mango	½ cup	1	12
Melon: cantaloupe	1 cup, cubed	1	13
honeydew	1 cup, cubed	1	16
watermelon	1 cup, cubed	1	12
Nectarine	1 large	1	16
	1 small	1	15
Orange	1 medium	1½	21
	1 large	2	33
Paypaya	1 cup	1	16
	1 small	1	12
Peach	1 medium	1	14
	1 large	1	17

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fresh, Canned and Dried Fruits (continued)</i>			
Pear	1 small	1	18
	1 medium	2	25
	1 large	2	33
Plantain, cooked	½ cup	2	29
Plum	1 small	1/2	7
	1 medium	1/2	10
	1 large	1	14
Pineapple	½ cup	1	11
Pomegranate	½ cup seeds	1	16
Tangerine	1 medium	1	13
<i>Fruit Juices</i>			
Apple, grapefruit, orange, pineapple, cranberry, grape	½ cup (4 oz)	1	12–20
Prune	½ cup	1½	22
Cranberry, low-calorie	1 cup (8 oz)	1	11
<i>Soft Drinks, Coffee Drinks and Cocoa</i>			
Cappuccino (espresso, foamed milk)	12 oz	1	11
Chai tea latte, with skim milk	12 oz	2	34
Chocolate, hot, with skim milk	12 oz	2½	40
Cocoa, hot	1 packet	1–1½	15–24

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Soft Drinks, Coffee Drinks and Cocoa (continued)</i>			
Cocoa, hot, sugar-free	1 packet	½–1	10–14
Gatorade	12 oz	1	20
Gatorade G2	12 oz	0	5
Gatorade Zero	12 oz	0	0
Latte (espresso, steamed milk)	12 oz	1	16
Lemonade, punch, Kool-Aid	8 oz	2	30
Mocha (espresso, chocolate, skim milk)	12 oz	2	31
Powerade	12 oz	1½	25
Powerade Zero	12 oz	0	0
Soda, diet	12 oz	0	0
Soda, regular	12 oz	2½–3	38–46
<i>Milk, Milk Substitutes and Yogurt</i>			
Almond milk	1 cup (8 oz)	0–1	2–16
Buttermilk, low-fat	1 cup (8 oz)	1	12–13
Chocolate milk, low-fat	1 cup (8 oz)	2	26
Milk (skim, 1%, 2%,* whole*)	1 cup (8 oz)	1	11–13
Rice Dream, vanilla	1 cup (8 oz)	2	27
Silk soymilk, vanilla	1 cup (8 oz)	½	10
Yogurt, fruit	6–8 oz	2–3	27–45
Yogurt, Greek	5 oz	½–1	6–19
Yogurt, light	6–8 oz	1	11–16
Yogurt, plain, low-fat	1 cup (8 oz)	1	16

Food Choice	Typical Serving	Carb Choices	Carb Grams
Combination Foods			
— Mexican —			
Burrito*	1 small	2½–4	39–65
Fajita*	1 small	2–3	32–42
Quesadilla*	1 entree size	2–4½	32–66
Refried beans*	½ cup	1	17
Salsa	¼ cup	0	4
Taco,* hard shell	2 small shells	1	13
Taco,* soft shell	1 small	1	12–18
Tamale*	1 small (3 oz)	1	18
— Italian —			
Calzone*	1 regular	3–6	45–93
Lasagna*	1 cup	2	30
Manicotti*	2 pieces	2–3	31–44
Pizza,* thick, restaurant	1 med. slice	2	27–29
Pizza,* thin, restaurant	1 med. slice	1½	21–23
Ravioli*	1 cup	2	28–32
Spaghetti with meat sauce*	1 cup	3	45
Spaghetti sauce from jar; Ragu, Prego	½ cup	1	12
Tortellini*	1 cup	2–3	31–49

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Combination Foods (continued)</i>			
— Asian/Indian ————			
Basmati, jasmine, or plain white rice	1 cup	3	44
Chow mein (no rice)	1 cup	½	10
Chow mein noodles, dry	½ cup	1	13
Egg roll* / spring roll	1 large roll	1	15
Fried rice*	1 cup	3	42
Lo mein*	1 cup	2–3	35–41
Mock duck	3 oz	0	3
Pho*	1 order	4–6	60–90
Samosa*	1 medium	1	15
Stir-fry, meat and vegetables only	1 cup	½	6–9
Sweet and sour chicken* (no rice)	1 cup	3	46
Wonton wrappers, plain	4 wontons	1	16
— Mid-Eastern ————			
Falafel sandwich*	1 sandwich	3½–5	53–72
Grape leaves, stuffed*	3 small	1	12
Gyros sandwich*	12 oz	2–3½	40–55
Hummus*	4 Tbsp	½	8
Spinach pie*	1 serving	2½	37
Tabbouleh	½ cup	1	15

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Combination Foods (continued)</i>			
— American —————			
Barbecue ribs with BBQ sauce*	6 oz	½–1½	8–22
Beef stew*	1 cup	1	15–20
Casserole or hotdish*	1 cup	2	30
Chef salad*	1 entree size	½–1	8–16
Hamburger Helper*	1 cup	1½–2	24–32
Hamburger on bun*	1 sandwich	2	30
Healthy Choice entree	1 entree	1½–4½	23–66
Hot dog on bun*	1 sandwich	1½–2	21–30
Lean Cuisine entree	1 entree	1–4½	15–66
Macaroni and cheese, boxed*	1 cup	3	44
Sandwich, meat and/or cheese*	1 sandwich	2½–3	24–44
Sandwich, peanut butter* and jelly	1 sandwich with 1 Tbsp jelly	2½–4	39–60
Sandwich wrap*	1 wrap	2½–4	38–56
Veggie burger on bun	1 sandwich	2–2½	28–40

Food Choice	Typical Serving	Carb Choices	Carb Grams
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Fast Foods (All chain restaurants post nutrition facts for all menu items online. Try searching the restaurant's Web site for "nutrition facts.")

— Arby's -----

www.arbys.com

Arby's RB classic*	1 sandwich	2½	37
Beef 'n' cheddar*	1 sandwich	3	45
Buttermilk crispy chicken	1 sandwich	3	48
Chopped farmhouse turkey salad*	1 salad with dressing	½–1	10–16
Curly fries*	1 small order	3	49
Grand turkey club	1 sandwich	2½	37
Market fresh sandwich*	1 sandwich	3½–5½	53–83
Mozzarella sticks*	4 sticks	2½	37
Potato cakes*	2 cakes	1½	23
Steakhouse onion rings*	1 order	3½	52

— Burger King -----

www.burgerking.com

BK Big Fish*	1 sandwich	3	46
Chicken garden salad	1 salad with dressing	1	17
French fries*	1 small order	3	49
Grilled chicken sandwich	1 sandwich	2 ½	39
Hamburger / cheeseburger*	1 sandwich	2	26–27
Onion rings*	1 small order	3	41
Whopper / Whopper with Cheese*	1 sandwich	3½	49–50
Whopper Jr.*	1 sandwich	2	27

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fast Foods (continued)</i>			
— Chipotle —————			
www.chipotle.com			
Burrito with meat, rice, beans and toppings*	1 order	6–10	93–146
Burrito bowl*	1 order	3–7	42–102
Tacos*	3 crispy tacos	2½–8	38–126
Salad*	1 order	2–7	30–105
— Dairy Queen ———			
www.dairyqueen.com			
Blizzard*	1 small	4½–7	67–107
Dilly Bar, chocolate*	1 bar	1	19
DQ Fudge Bar	1 bar	1	13
DQ Sandwich*	1 sandwich	2	31
Ice cream cone, vanilla*	1 small cone	2½	36
Ice cream sundae*	1 small	3–4	37–59
Shake or malt*	1 small	4½–6	70–95
— KFC —————			
www.kfc.com			
BBQ baked beans	1 order	3	43
Biscuit*	1 biscuit	1½	22
Coleslaw*	1 order	1	14
Cornbread muffin*	1 muffin	2	28
Kentucky grilled chicken	1 piece	0	0

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fast Foods (continued)</i>			
Macaroni and cheese*	1 order	1½	20
Mashed potatoes	1 order	1	15
Original Recipe, breast*	1 piece	1	11
Original Recipe, thigh*	1 piece	½	8
Original Recipe, drumstick*	1 piece	0	4
— McDonald's ———			
www.mcdonalds.com			
BBQ sauce, honey, or sweet and sour sauce	1 pkg	1	11–12
Big Mac*	1 burger	3	47
Chicken classic grilled sandwich*	1 sandwich	3	42
Chicken McNuggets*	4 pieces	1	18
Egg McMuffin*	1 sandwich	2	31
Filet-O-Fish*	1 sandwich	2½	39
French fries*	1 small order	2	30
Fruit 'n Yogurt Parfait	1 order	2	30
Hamburger / cheeseburger	1 sandwich	2	32–33
Hash browns*	1 order	1	15
Quarter Pounder*	1 burger	3	42
Sausage biscuit*	1 sandwich	2	34
Southwest salad with grilled chicken*	1 salad	2	28

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fast Foods (continued)</i>			
— Noodles & Company ———			
www.noodles.com			
Noodles and pasta*	1 small order	3–5	47–71
	1 reg order	6–9	93–140
Sandwiches*	1 sandwich	2½–4½	40–69
Soup*	1 small order	1–1½	20–25
	1 reg order	2–2½	31–40
Salad, no dressing*	1 small order	½–1	9–16
	1 reg order	1–2	18–33
— Pizza Hut ———			
www.pizzahut.com			
Breadsticks*	1 breadstick	1	19
Hand-tossed pizza,* 12"	1 med. slice	1½–2	25–31
Marinara dipping sauce	3 oz	½	6
Original pan pizza,* 12"	1 med. slice	2	27–32
Thin 'n Crispy,* 12"	1 med. slice	1½	21–25
— Starbucks ———			
www.starbucks.com			
Caffè latte, nonfat milk	Tall	1	15
Caffè vanilla or mocha latte, nonfat milk	Tall	2	28–32
Cappuccino, nonfat milk	Tall	½	9

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fast Foods (continued)</i>			
Frappuccino blended coffee	Tall	2½	36
Frappuccino light blended coffee	Tall	1	20
Iced tea, nonfat milk	Tall	1 ½–2	8–28
White chocolate mocha, nonfat milk	Tall	2 ½	40
— Subway —————			
www.subway.com			
Chicken, roasted	6" sub	3	46
Cold cut*	6" sub	3	46
Ham	6" sub	3	46
Meatball Marinara*	6" sub	4	60
Roast beef	6" sub	3	45
Tuna*	6" sub	3	44
Turkey breast	6" sub	3	46
— Taco Bell —————			
www.tacobell.com			
Burrito supreme*	1 burrito	3–3½	49–52
Chicken burrito*	1 burrito	3	47
Chalupa supreme*	1 chalupa	2	31–33
Crunchy taco	1 taco	1	14
Fiesta taco salad*	1 order	5	73–78
Fresco soft taco*	1 taco	1	16–18

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Fast Foods (continued)</i>			
— Wendy's ————			
www.wendys.com			
Apple pecan chicken salad*	1 full salad	2	28
Baked potato*	1 potato	4–4½	61–66
Chili*	1 small serving	1 ½	21
Chocolate frosty*	1 small	3	49
French fries*	1 small	2½	40
Jr. hamburger / cheeseburger*	1 burger	2	25–26
Grilled chicken sandwich	1 sandwich	2 ½	38
<i>Desserts and Sweets</i>			
— Frozen Desserts —			
Ice cream*	½ cup	1–2	15–30
Ice cream, light	½ cup	1	15–20
Ice cream, sugar-free	½ cup	1	15–20
Chocolate,* caramel, or butterscotch topping	2 Tbsp	1½–2	22–30
Sherbet or sorbet	½ cup	1–2	20–30
Yogurt, frozen	½ cup	1–2	17–30
— Gelatin, Pudding and Custard —			
Custard*	½ cup	1	16–18
Gelatin	½ cup	1	17–19
Gelatin, sugar-free	½ cup	0	0

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Desserts and Sweets (continued)</i>			
Pudding*	½ cup	1–1½	12–23
Pudding, rice	½ cup	1½	22
— Candy ————			
Chocolate bar*	1 bar (2 oz)	2	26–30
Chocolate bar, fun size*	1 fun-size bar	1	12–18
Chocolate bar, mini*	3 minis	1–1 ½	15–21
Jelly beans	22 small beans	1½	22
M&M's, plain or peanut*	1 small pkg.	2	30
Snickers*	1 bar (2 oz.)	2	28
Starburst	4 pieces	1	16
Sugar-free chocolate candy*	2–3 pieces	1½	22–25
Twix*	1 small pkg. (2 bars)	2 ½	37
Twizzlers	3 pieces	2	27
— Baked Goods ———			
Angel food cake	1 slice (2 oz)	2	32
Apple crisp*	½ cup	2½–3	38–43
Banana bread*	1 slice (2 oz)	2	33
Brownie*	1 square (2 oz)	2½	36
Cake and frosting*	1 piece (3 oz)	2½–3	35–48
Cheesecake, fruit topping*	1 slice (3 oz)	3	41–48
Cheesecake, plain*	1 slice (3 oz)	2	26
Cream pie*	⅛ pie	2–3½	30–53

Food Choice	Typical Serving	Carb Choices	Carb Grams
<i>Desserts and Sweets (continued)</i>			
Cupcake, frosted*	1 small	2	27–32
Dessert bar*	1 small	1½–2	24–30
Fruit pie*	⅛ pie	3–4	41–58
Pecan pie*	⅛ pie	4	65
— Cookies and Other Treats —			
Biscotti	1 piece (1 oz)	1	13–20
Cookies, assorted,* small	1 cookie (1 oz)	1	14–20
Cookies, assorted,* medium	1 cookie (1.5 oz)	1½–2	23–30
Cookies, assorted,* large	1 cookie (2–2.3 oz)	2–2½	29–40
Cookies, assorted,* jumbo	1 cookie (4 oz)	4½–5	67–78
Fig Newtons	2 cookies	1½	22
Fortune cookies	2 cookies	1	14
Granola bar, plain*	1 bar	1	15–20
Lorna Doone*	3 cookies	1	14
Oreos*	2 cookies	1	16
Rice Krispie Treat*	1 small bar	1	17
Vanilla wafers	5 cookies	1	13

Carbohydrate conversion guide

Grams carbohydrate	Carb choices
0 to 5 grams	0 carb choices
6 to 10 grams	½ carb choice
11 to 20 grams	1 carb choice
21 to 25 grams	1½ carb choices
26 to 35 grams	2 carb choices
36 to 40 grams	2½ carb choices
41 to 50 grams	3 carb choices
51 to 55 grams	3½ carb choices
56 to 65 grams	4 carb choices
66 to 70 grams	4½ carb choices
71 to 80 grams	5 carb choices
81 to 85 grams	5½ carb choices
86 to 95 grams	6 carb choices
96 to 100 grams	6½ carb choices
101 to 110 grams	7 carb choices
111 to 115 grams	7½ carb choices
116 to 125 grams	8 carb choices
126 to 130 grams	8½ carb choices
131 to 140 grams	9 carb choices
141 to 145 grams	9½ carb choices
146 to 155 grams	10 carb choices

Your meal plan

Time	Carb grams	Carb choices
Breakfast	_____	_____
Morning snack	_____	_____
Lunch	_____	_____
Afternoon snack	_____	_____
Dinner	_____	_____
Evening snack	_____	_____

Total amount of non-starchy vegetables per day: _____

Total amount of fat per day: _____

Total amount of saturated fat per day: _____

Total amount of trans fat per day: _____

Total amount of lean meat, poultry, fish, meat substitute, low-fat cheese, or eggs per day: _____

Remember: One carb choice equals about 15 grams carbohydrate. Use MyPlate at the beginning of this booklet to help you plan a healthy, well-balanced diet.

Sample menu

Ask your dietitian to fill out your sample menu.

Breakfast	Morning snack
Lunch	Afternoon snack
Dinner	Evening snack

Sample meal plan

Breakfast:

1 cup oatmeal = 2 carb choices (27 grams carbohydrate)

1 cup skim milk = 1 carb choice (13 grams carbohydrate)

1 large banana = 2 carb choices (30 grams carbohydrate)

Total: 5 carb choices (70 grams carbohydrate)

Morning snack:

1 small light yogurt = 1 carb choice (16 grams carbohydrate)

Lunch:

Sandwich

- 2 slices whole-wheat bread = 2 carb choices (30 grams carbohydrate)
- 3 ounces lean turkey = 0 carb choices (0 grams carbohydrate)
- Lettuce and tomato = 0 carb choices (5 grams carbohydrate)
- 1 teaspoon mayonnaise = 0 carb choices (0 grams carbohydrate)

1 cup vegetable soup = 1 carb choice (15 grams carbohydrate)

15 grapes = 1 carb choice (13 grams carbohydrate)

Total: 4½ carb choices (63 grams carbohydrate)

Afternoon snack:

1 small apple = 1 carb choice (15 grams carbohydrate)

Dinner:

3 ounces baked chicken = 0 carb choices (0 grams carbohydrate)

1 medium baked potato = 2 carb choices (34 grams carbohydrate)

1 teaspoon soft tub margarine = 0 carb choices (0 grams carbohydrate)

Small dinner salad = 0 carb choices (5 grams carbohydrate)

1 teaspoon vinegar and oil = 0 carb choices (0 grams carbohydrate)

1 cup skim milk = 1 carb choice (13 grams carbohydrate)

1 small cookie = 1 carb choice (14 grams carbohydrate)

Total: 4½ carb choices (66 grams carbohydrate)

Evening snack:

3 cups popcorn = 1 carb choice (18 grams carbohydrate)

2 teaspoons soft tub margarine = 0 carb choices
(0 grams carbohydrate)

Notes:

