

READY, SET, START COUNTING

HOW TO USE CARBOHYDRATE COUNTING TO KEEP YOUR BLOOD GLUCOSE HEALTHY

When you have diabetes, keeping your blood glucose in a healthy range, will help you to feel your best today and in the future. You can use carbohydrate counting to plan the amount of carbohydrate you eat. This will help you to better manage your diabetes. Carbohydrate counting is not a diet. It is a *meal planning tool* that can help you to understand how your food choices affect your blood glucose level.

CARBOHYDRATE AND BLOOD GLUCOSE

Most of the carbohydrate you eat is digested to glucose. The right balance between carbohydrate and insulin (made by your pancreas or from injections) keeps your blood glucose normal. When you eat, how much you eat, and whether you have snacks, should be based on your lifestyle, medications, and meal planning goals. Your dietitian can help you choose the goal below that is best for you.

- ☐ **CONSISTENCY** If you use diabetes medications or insulin it may be important to eat a consistent amount of carbohydrate at consistent times. Planning the amount of carbohydrate you eat can keep your blood glucose from going too high or too low.
- ☐ **MAXIMUMS** If you use a healthy lifestyle to control your diabetes, or medications that do not cause low blood glucose, having a maximum limit for carbohydrate at meals will keep your blood glucose from going to high, but allows you to choose less carbohydrate when you wish.
- ☐ **MATCHING** Some insulin plans and medications allow you to vary your meal times or the amount of carbohydrate you eat. If you follow this type of plan you need to learn to match your medications, or insulin, to the amount of carbohydrate you eat.

TO COUNT CARBOHYDRATES YOU NEED TO KNOW:

FOODS THAT CONTAIN CARBOHYDRATE

- Grains, Breads, Cereals and Dried Beans
- Starchy Vegetables
- Fruits
- Milk and Yogurt
- Sweets and Desserts

(Non-starchy vegetables contain small amounts of carbohydrate. They do not affect your blood glucose unless you eat large amounts.)

PORTION SIZES

- A “carbohydrate choice” is a portion of food that has 15 grams of carbohydrate.
(1 carbohydrate choice = 15 grams of carbohydrate)
- Carbohydrate from any food will have the same effect on blood glucose. Small portions of sweets or sugar can be used in place of other carbohydrate foods.
- Measure or weigh foods to learn what common portion sizes look like. When you can't, use these estimates.



HOW TO READ A FOOD LABEL

- Find the standard **Serving Size**
- Find the **Total Carbohydrate** in one serving (Sugars are included in this number. Do not count separately)
- Compare the serving size from the label to your portion
- Calculate the amount of carbohydrate in your portion.
- You can count grams of carbohydrate or carbohydrate choices.

Nutrition Facts	Amount/Serving	%DV*	Amount/Serving	%DV*
Serv. size 2 cookies (28g) Calories 120 Fat Calories 60	Total Fat 7g	11%	Total Carb. 16g	6%
	Sat. Fat 2g	10%	Dietary Fiber 1g	3%
	Cholest. 0mg	0%	Sugars 0g	
	Sodium 110mg	5%	Sugar Alcohol 5g	
			Protein 2g	
*Percent Daily Values (DV) are based on a 2,000 calorie diet.				
Vitamin A 0% • Vitamin C 0% • Calcium 0% • Iron 6%				

CARBOHYDRATE CHOICES

Use food labels when you can. These food lists can help you when there is not a label.

EACH PORTION IS ONE CARBOHYDRATE CHOICE AND CONTAINS ABOUT 15 GRAMS OF CARBOHYDRATE.

Foods with less than 20 calories and 5 grams of carbohydrate are considered “free”. These include: noncaloric sodas and beverages, sugar substitutes, spices and seasonings.

Breads, Cereals, and Starchy Vegetables	Sweets and Snack Foods	Milk	Fruit	Vegetables
<ul style="list-style-type: none"> - 1 oz bread (1 slice bread, 1/4 large bagel, 6" tortilla) - 1/2 cup potato, peas, corn, cooked dried beans - 1/3 cup pasta or rice - 1 cup soup - 3/4 cup cold cereal - 1/2 cup cooked cereal 	<ul style="list-style-type: none"> - 3/4 oz snack food (pretzels, chips, 4-6 crackers) - 1 oz sweet snack (2 small sandwich cookies, 5 vanilla wafers) - 1 Tbsp sugar or honey - 1/2 cup ice cream 	<ul style="list-style-type: none"> - 1 cup milk - 2/3 cup unsweetened or yogurt sweetened with noncaloric sweetner 	<ul style="list-style-type: none"> - 1 small fresh fruit - 1/2 cup fruit - 1 cup melon or berries - 1/2 cup fruit juice - 1 cup juice sweetened with noncaloric sweetner - 1/4 cup dried fruit 	<ul style="list-style-type: none"> - 1 cup raw vegetables - 1/2 cup cooked vegetables <p>(3 portions is one carbohydrate choice)</p>

See the Exchange Lists for Meal Planning published by the American Dietetic Association of more detailed food lists and nutrition information. (1-800-eat-right)

Breakfast _____ : _____
 _____ carbohydrate choices or grams

Snack : _____

Lunch _____ : _____
 _____ carbohydrate choices or grams

Snack : _____

Dinner _____ : _____
 _____ carbohydrate choices or grams

Snack : _____

CARBOHYDRATE GOALS

Most women need about **3-4 carbohydrate choices** (45 to 60 grams of carbohydrate) at each meal, men generally need about **4-5** (60 to 75 grams of carbohydrate). If you eat snacks, **1-2 carbohydrate choices** (15-30 grams of carbohydrate) is reasonable. How many carbohydrate choices you need will depend on your size and activity level.

Healthy eating is more than just carbohydrate counting.

Try to eat a variety of foods, including 5 or more servings of fruits and vegetables, 6 grains (3 whole grains), 2 low-fat dairy, and small amounts of heart healthy fats. Foods in the meat and fat groups do not directly affect blood glucose but moderation is important because of their role in heart disease and general health.