

# DIABETES EDUCATION

## CARBOHYDRATE COUNTING

### Why Is Carbohydrate Counting Important?

- Helps to control blood glucose level so that you feel better
- Helps you plan your meals
- Ideally, you should have a consistent amount of carbohydrates in your diet throughout the day – in other words, don't eat them all in one meal

### Which Foods Have Carbohydrates?



Breadfruit ('ulu)



Taro



Sweet potato



Yams



Rice



Coconut



Corn



Bread



Cereal



Chips



Cookies



Sweets



Fruits



Juice



Milk



Soda

## Carbohydrates in Meal Planning

- In diabetes meal planning, one carbohydrate choice, or “carb choice” has about 15 grams of carbohydrate.
- Read Nutrition Facts on food labels to know how many grams of carbohydrate are in foods you eat.

## Meal-Planning Tips

- For many adults, eating 3–5 carb choices at each meal and 1–2 carb choices for each snack works well.
- Check your blood glucose regularly to see if you need to adjust when you eat carbohydrates.
- Eating foods that have fiber, such as vegetables and whole grains, is very good for controlling your blood sugar.
- Eat 4–6 ounces of fish, chicken, or lean meat each day for your healthy protein source.

## Label-Reading Tips

- Pay attention to the label’s standard serving size and servings per container/package.
  - In this example, the serving size is **1 ounce or about 21 pieces**
- Check the total grams of carbohydrate. This is the amount of carbohydrate in one standard serving.
  - In this example, the total grams of carbohydrate is **14 grams per serving**
- Divide the grams of total carbohydrate by 15 to find the number of carbohydrate choices in one standard serving.
  - In this example, the amount of carbohydrate choices you would get if you ate ONE serving would be **one carbohydrate choice**

<b>Nutrition Facts</b>	
Serving Size 1 oz. (28g/About 21 pieces)	
Servings Per Container About 2	
Amount Per Serving	
<b>Calories</b> 170	Calories from Fat 110
<b>% Daily Value*</b>	
<b>Total Fat</b> 11g	<b>17%</b>
Saturated Fat 1.5g	<b>8%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 250mg	<b>10%</b>
<b>Total Carbohydrate</b> 14g	<b>5%</b>
Dietary Fiber less than 1g	<b>2%</b>
Sugars 0g	
<b>Protein</b> 2g	

## **Examples of 1 Carbohydrate Choice**

***Each choice has about 15 grams of carbohydrate***

### **Starches**

- 2 pieces of breadfruit (2 ounces)
- 1 slice of bread (1 ounce)
- 1/3 cup cooked rice (white or brown)
- 3/4 cup unsweetened cereal, ready-to-eat
- 1/2 cup sugar-frosted cereal, ready-to-eat
- 1 single-serving bag of potato chips
- 1/2 hamburger bun or hot dog bun (3/4 ounce)
- 4–6 crackers (average size)
- 1/3 cup pasta

### **Fruit**

- 1 small fresh fruit (3/4–1 cup)
- 1 medium-sized banana
- 1/2 papaya or mango
- 1/2 cup canned or frozen fruit
- 2 tablespoons dried fruit (apricots, raisins, prunes, blueberries, cranberries, etc.)
- 15 medium grapes
- 3/4 cup fresh pineapple
- 1/2 cup apple, grapefruit, orange, or pineapple juice
- 1/3 cup grape or cranberry juice

### **Starchy Vegetables/Beans**

- 1/2 cup cooked beans or peas
- 1/2 cup corn
- 1/2 cup cooked sweet potato
- 1/3 cup cooked yams or taro
- 1/2 cup mashed potato

### **Milk**

- 1 cup fat-free or reduced-fat milk
- 1/2 cup chocolate milk
- 1/2 cup evaporated milk
- 1 cup soy milk (unsweetened)
- 2/3 cup plain yogurt
- 2 cups almond milk (unsweetened)
- 1/2 cup rice milk (unsweetened)

### **Sweets and Desserts**

- 2-inch-square cake (unfrosted)
- 2 small cookies (2/3 ounce)
- 1/2 cup ice cream or pudding
- 1/2 fruit toaster pastry
- 1 tablespoon syrup, jam, jelly, sugar, agave, or honey

# Sample Meal Plan

Breakfast	Lunch	Dinner	Snacks (if recommended)
2 pieces breadfruit ½ papaya 1 boiled egg 1 cup 1% milk Coffee/tea	3 oz grilled fish 1/3 cup cooked taro 1 small salad w/light dressing 1 medium-sized banana 1 cup melon 1 cup light yogurt Water	3 oz lean chicken 1/3 cup cooked brown rice 1 cup broccoli 1 cup cooked carrots 1 small apple 1 cup 1% milk	1 slice of bread 1 Tbsp peanut butter Unsweetened iced tea

## Portion Control



One fist clenched = 8 fluid ounces  
 • Cold and hot beverages



Two hands, cupped = 1 cup  
 • Breakfast cereal  
 • Soup  
 • Green salads (lettuce or spinach)  
 • Mixed dishes (chili, stew, macaroni and cheese)  
 • Chinese food



One hand, cupped = 1/2 cup  
 • Pasta, rice  
 • Hot cereal (oatmeal, farina)  
 • Fruit salad, berries, applesauce  
 • Tomato or spaghetti sauce  
 • Beans (cooked or canned)  
 • Cole slaw or potato salad  
 • Mashed potatoes  
 • Cottage cheese  
 • Pudding, gelatin



Palm of hand = 3 ounces  
 • Cooked meats (hamburger patty, chicken breast, fish fillet, pork loin)  
 • Canned fish (tuna, salmon)



Two thumbs together = 1 tablespoon  
 • Peanut butter  
 • Salad dressing  
 • Sour cream  
 • Dips  
 • Whipped topping  
 • Dessert sauces  
 • Margarine  
 • Cream cheese  
 • Mayonnaise

\*Adapted from MyPyramid.gov. This handout is only a guide. The amounts of foods in your meal plan may be different. Provided as a FREE educational service on [www.learningaboutdiabetes.org](http://www.learningaboutdiabetes.org). © 2008 Learning About Diabetes, Inc. All rights reserved.

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