

## CARBOHYDRATE COUNTING

Carbohydrate counting is another way to maintain good blood glucose control while giving you the most flexibility in planning meals. Maintaining good blood glucose control helps prevent or delay long-term complications of diabetes. Foods are made up of 3 major components:

- Carbohydrate
- Fat
- Protein

**Carbohydrates are the component of food that affects blood sugar levels the most.** Keeping the amount of carbohydrate in the diet consistent will help keep blood sugar levels in control. You do not want to omit carbohydrates because they are healthy foods and provide you with vitamins, minerals and fiber. You only need to monitor how much you eat at one given time and throughout the day. The balance between the amount of carbohydrates in food and your pills or insulin determines how much your blood sugar levels go up after meals. ***This means you need to know what foods have carbohydrates, what average serving sizes are, and how many carbohydrates servings to eat.***

Food groups that contain a significant amount of carbohydrates are the:

- ☺ **Starch Group-Breads, Grains, Rice, Pasta, Cereals, & Starchy Vegetables [15 grams]**
- ☺ **Fruit Group [15 grams]**
- ☺ **Milk Group [12 grams]** (this includes fluid milk and yogurt, but not cheese)

The carbohydrates in food are measured in grams. One gram is about the weight of a paper clip. The magic number is 15 grams. This is about the amount of carbohydrates in one serving of food from the 3 food lists; Starch, Fruit & Milk [milk only has 12 grams but close enough to round up]. You can get this information from the Food Exchange and the Nutrition Facts panel on food labels.

How many carbs you should eat varies with your suggested calorie need.

**A general rule of thumb for meal planning is:**

**Women** 45-60 grams of carbohydrate per meal (depending on overall calorie needs)  
15 grams of carbohydrate per snack (one to two a day depending on personal need and preference)

**Men** 60-75 grams of carbohydrate per meal (depending on overall calorie needs)  
15-30 grams of carbohydrate per snack (one to two a day depending on personal need and preference)

Work with your Registered Dietitian or Certified Diabetes Educator for a plan based on your personal needs and food preferences.

**Remember, it's all about choices!**

**SERVING SIZES FOR DIABETES MEAL PLANNING**

**STARCH LIST**

All foods have about: **15 grams Carbohydrate**

**BREADS, GRAINS, RICE, PASTA & CEREALS**

**Cereals/Grains/Pastas**

Ready to eat cereal, unsweetened	¾ cup
Sweetened	½ cup
Bran cereal (All Bran)	1/3 cup
Bran cereal, flakes	½ cup
Cooked cereals	½ cup
Puffed cereal, unsweetened	1 ½ cup
Pasta, any type, cooked	½ cup
Rice, white or brown, cooked	1/3 cup
Couscous	1/3 cup
Kasha	½ cup

**Beans/Peas/Lentils**

Beans, peas, lentils, all types, cooked (inc. lima beans, kidney, etc)	1/2 cup
Baked beans, all brands	1/3 cup

**Starchy Vegetables**

Corn or peas	½ cup
Corn on cob, large ear	½ ear
Plantain	½ cup
Potato, baked 3 ozs.	1 small
Potato, mashed	½ cup
Winter squash (ex.- acorn, butternut)	1 cup
Sweet potato	½ cup
Mixed vegg with corn, peas or lima	½ cup
French Fries, oven baked, 2 oz	1 cup
Fast food fried [+1 fat]	10 fries
Most starch veg Soups [+ 1 fat ]	1 cup

**Breads**

Whole Wheat, white, rye, etc.	1 slice
Bagel 1 ounce, small frozen	½
Bruegger's or any large	1/3 to ¼
Diet bread, any brand [40 cal]	2 slices
English Muffin	½
Hamburger or hotdog roll	½
Pita, 6 inch	½
Dinner roll, small 1ounce	1



3 grams protein  
0-1 gram Fat  
80 Calories

Tortilla, 6 inch	1
Pancakes, 4 inch [+ fat]	1
Waffle, 4 inch [+ fat]	1



**Snacks/ Crackers**

Animal Crackers	8
Graham crackers- 3 small sections	1 sheet
Matzoh	¾ oz
Oyster Crackers	24
Popcorn, low or no fat	3 cups
Pretzels	¾ oz
Saltines	6
Rice cakes, 4 inch, unsweetened	2
Snack chips, fat free & baked	¾ oz
Biscuit, 2 ½ inches [+ 1 fat]	1
Buttery Crackers, Ritz [+ 1 fat]	6



**Dessert**

Angel food cake, 1/24 cake	1 oz
Brownie, unfrosted	2 inch square
Cake, unfrosted	2 inch square
Frosted	1 inch square
Cookie, small	2
Sandwich type	1
Donut, plain, medium	¾ donut
Glazed	½ donut
Ice cream, regular [+ 2 fat]	½ cup
Light, Low fat [+ 1 fat]	½ cup
Fat free	½ cup
Pudding, regular	¼ cup
Sugar free	½ cup
Sherbet, sorbet	¼ cup
Danish, 2 ½ oz	½
Frozen Yogurt	½ cup



## FRUIT LIST



All foods have about: **15 grams carbohydrates**  
**60 calories**

**All fruit listed can be fresh, frozen or canned-packed in juice, water or lite syrup**

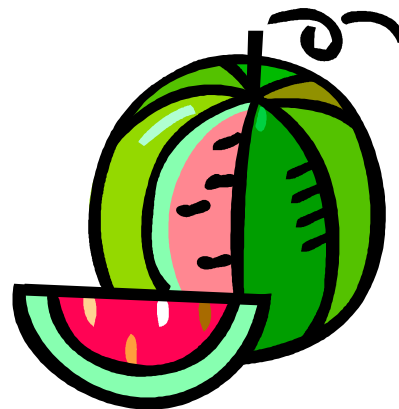
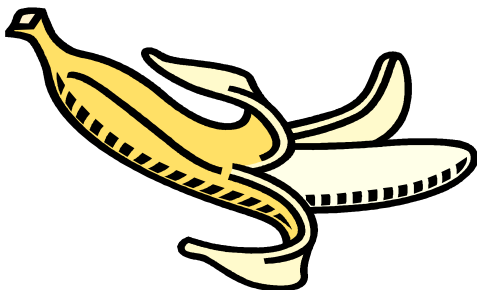
All canned fruit	½ cup
Apple, fresh	1 medium
Applesauce, unsweetened	½ cup
Apricots, fresh	4 medium
Banana, 5 inch	1
Blackberries, fresh	¾ cup
Cantaloupe, small 5 inches	1/3 melon
Cubes	1 cup
Cherries, large, fresh	12
Figs, fresh, 2 inch	2
Grapefruit, large	½
Canned segments	¾ cup
Grapes, fresh, small	15
Honeydew melon, medium	1/8 melon
Cubes	1 cup
Kiwi, large	1
Mango, fresh, small	½
Nectarine, fresh 2 inch	1
Orange, fresh 2 ½ inch	1
Papaya, fresh	1 cup
Peach, fresh, 2 ¾ inch	1
Pear, fresh, small	1
Persimmon, medium	2
Pineapple, fresh	¾ cup
Plum, fresh, 2 inch	1
Pomegranate, fresh	½
Raspberries	1 cup
Strawberries	1 ¼ cup
Tangerine, fresh, 2 ½ inch	1
Watermelon, fresh, cubed	1 ¼ cup

### Dried Fruit

Apples	4 rings
Apricots	7 halves
Dates, medium	2 ½
Figs	1 ½
Prunes, medium	3
Raisins	2 TBS.
Cranberries	2 TBS.

### Juices

Apple juice	½ cup
Apple cider	½ cup
Grapefruit	½ cup
Orange	½ cup
Pineapple	½ cup
Cranberry	1/3 cup
Grape	1/3 cup
Prune	1/3 cup
Fruit Juice blends	1/3 cup
Cranberry, low calorie	1 cup



## MILK LIST



All foods have about: **12 grams carbohydrates**

8 grams protein

Calories vary depending on fat

### Low & Fat Free Dairy

Have about 90 calories & small amount fat per serving

Fat free milk	1 cup
1% milk	1 cup
Buttermilk	1 cup
Dry Nonfat milk	1/3 cup
Yogurt, plain, nonfat	1 cup
Yogurt, nonfat artificially Sweetened	1 cup
Hot cocoa, artificially Sweetened	1 cup

### MILK COMPARISON

<u>TYPE</u>	<u>FAT</u>	<u>CALORIES</u>
Fat Free Milk	Trace	90
1 % Milk	1 gram	100
2% Milk	5 grams	120
Whole Milk	8 grams	150

### Reduced Fat Dairy

Have about 120 calories & about 5 grams fat per serving

2% milk	1 cup
Yogurt, plain, low fat	1 cup
Yogurt, low fat, artificially Sweetened	1 cup

### High Fat Dairy

Have about 150 calories & about 8 grams fat per serving

Whole milk	1 cup
Evaporated whole milk	1/2 cup
Yogurt, plain	1 cup
Yogurt, low fat with fruit & sugar sweetened (about 250 calories)	1/2 cup



## VEGETABLE LIST

### Non-starchy vegetables

All vegetable portions are the same

½ cup cooked

1 cup raw

This includes all following vegetables:

Artichokes

Asparagus

Bean sprouts

Beets

Broccoli

Cabbage

Carrots

Cauliflower

Celery

Cucumber

Eggplant

Greens, all varieties including collard, turnip, kale, escarole

Green Beans

Kohlrabi

Leeks

Mushrooms

Okra

Onions

Peppers

Rutabaga

Salad Greens, all types

Sauerkraut

Snow peas

Spinach

Summer squash

Tomatoes & Tomato Sauce

Turnips

Zucchini

Water chestnuts

Tomato juice                      ½ cup

Vegetable juice                    ½ cup



**FILL UP ON LOW CALORIE, LOW FAT  
VEGETABLES IF YOU ARE STILL HUNGRY  
AT MEALS OR SNACKS-THEY ONLY HAVE  
25 CALORIES PER HALF CUP!!**