

## Introduction to Carbohydrates and Diabetes

- Food is made up of 3 main substances:
  - Carbohydrates (*bread, fruits, sugar, milk*)
  - Protein (*meat, fish, milk, eggs, cheese, poultry*)
  - Fat (*oil, butter, mayonnaise, margarine*)
- Carbohydrate-rich foods provide energy for our bodies in an easily used form.
- Because carbohydrates turn into blood sugar it is important to manage the amount of carbohydrate-rich foods you eat.
- Carbohydrate is found in the following foods:
  - bread and cereals
  - grains (*wheat, rice, corn, etc.*)
  - pasta
  - fruit (*fresh, canned or dried*)
  - juices and juice drinks
  - sugar-free products
  - milk and yogurt
  - ice cream and frozen yogurt
  - sugar and sweets (*sugar, honey, molasses, etc.*)
- Carbohydrates are measured in grams (g)
- When reading labels it is important to look at **serving size** and **grams of total carbohydrates**. It is not necessary to look at sugar content. The grams of sugar in a food is part of the total carbohydrate content. The amount of total carbohydrates is what affects your blood sugar regardless of the amount of sugar.
- Other important nutrition tips for blood sugar management include:
  - Eat on a regular schedule (every 4 to 6 hours)
  - Do not skip meals
  - Distribute your carbohydrate intake evenly throughout the day
  - Stay physically active

- Most people need 3 to 5 servings of carbohydrates at each meal (or 9 to 15 servings consumed evenly throughout the day).
  - You probably need 3 to 4 servings per meal if you are:
    - older
    - less active
    - consider yourself overweight
  - You probably need 4 to 5 servings per meal if you are:
    - younger
    - more active
    - consider yourself at a healthy weight
- Each of the following is considered one serving of carbohydrates and each serving contains approximately 15 grams of total carbohydrates:

3/4 cup dry unsweetened cereal	1/2 cup hot cereal
1/2 cup sweetened cereal	1/3 cup raisin bran
1 slice of bread	1/2 cup potato
1/3 cup pasta (cooked)	1/3 cup rice or pasta (cooked)
1/2 cup corn or peas	1/2 English muffin or bulkie
1/2 small (2 ounce) bagel	3 cups popcorn
1/2 cup legumes	6 Saltine-type crackers
1/3 cup baked beans	2 rice cakes
1-1/2 Fig Newtons®	1-1/2 graham strips (3 squares)
3/4 ounce pretzels	
1 Tbsp. jam or jelly	
1 cup milk	2/3 cup fat-free, sugar-free yogurt
1/2 cup ice cream	1/3 cup frozen yogurt
1/2 cup juice	1 medium piece of fresh fruit
1/4 cup dried fruit	1/2 cup canned fruit (no sugar added)
15 grapes	1/2 banana
1 cup melon	2 Tbsp. raisins

When you attend the Diabetes Nutrition Program you will receive more detailed information about nutrition and blood sugar management. If you have questions, a Nutrition Education Specialist is available to help. (508) 852-6175 or 1-888-392-0173