



Diabetes Overview

(With Type 2 Diabetes Prevention Tips)

Emily Burns, VCU School of Pharmacy

Diabetes is a disease that prevents the body from using energy from food properly. Insulin is a hormone in your body that is produced by an organ called the pancreas. Insulin helps the body use sugar (glucose) for energy. When a person has diabetes, the body either has no insulin (type 1 diabetes) or too little insulin (type 2 diabetes). If there is not enough insulin to help turn sugar into energy, the level of sugar in the blood rises. Signs of diabetes are increased thirst, increased hunger, having to go to the restroom often (urination), dry mouth, hunger, tiredness, and blurred vision. Certain people are at a higher risk of developing diabetes, such as those with a family history of diabetes, being overweight, high blood pressure, and smoking. Diabetes can increase the risk of heart attacks, strokes, kidney disease, nerve damage, and blood vessel disease.

There are ways to prevent or delay type 2 diabetes. Losing weight and increasing daily physical activity can help. A good goal is to get 30 minutes of activity a day for five days a week. These 30 minutes can be spread out during the day, by taking the stairs or parking in the back of a parking lot. Many people find it easier when they find a partner to walk with because you can support each other. Changes in diet can also help prevent diabetes and increase weight loss. Creating a meal plan for the week can help lower the amount of fat and calories in your diet by making it harder to eat unhealthy foods. Other suggestions are drinking more water and less soda and juice, choosing whole grain breads and pastas over white breads and pastas, and eating more vegetables. These lifestyle changes have also been shown to delay or prevent other health conditions, as well as diabetes!

References:

1. www.diabetes.org
2. www.professional.diabetes.org

For more information about
diabetes, visit the *American
Diabetes Association*
website at:
<http://www.diabetes.org>



Hearts and Minds, Stress and Sugar

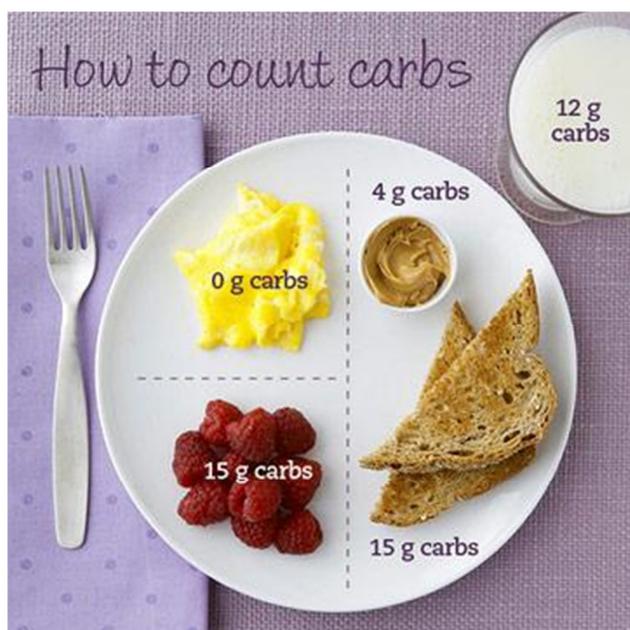
Briana Mezuk, VCU School of Pharmacy

Diabetes is a life-changing condition. Caring for diabetes means changing your diet, exercise routine, and limiting alcohol and cigarette use. These changes can be hard to make, but can be even harder if you have limited financial and social support. Over time, diabetes can become a source of stress in people's lives. Nearly 4 in 10 people with diabetes feel stressed. You may sometimes feel like taking a "diabetic holiday" (for example, eating high fat or high sugar foods) as a way to get relief from the stress of diabetes. In the short-term these "holidays" may reduce feelings of distress, in the long-term they raise sugar levels.

There are ways to care for diabetes that will help both your mind and body. Stress-management ideas, such as meditation, can improve sugar levels. Exercising improves both sugar levels and mood (especially if you exercise with family or friends). Group-based diabetes classes help improve sugar levels, and the group provides a support network to help you deal with feelings of distress. Richmond YMCAs offer these group-based diabetes classes. The YMCA has financial help to make these classes affordable for everyone.

References: 1. <https://www.ymcarichmond.org/health-fitness/public-health/diabetes-programs/>
2. <http://www.ymcarichmond.org/ymca-news/ymca-of-greater-richmond-helping-richmond-fight-diabetes/>

Carbohydrate Counting Basics



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In addition to the lifestyle changes you make and the medications prescribed by your physician, carbohydrate counting is a good way for people with diabetes to control their blood sugar (glucose) levels.

Carbohydrates are found in starchy and sugary foods such as beans, milk, fruit, and grains (ex. bread, pasta, rice, and cereal). The standard rule is one carbohydrate choice of a particular food is equal to 15 grams of carbohydrate.

Carbohydrate Counting Basics: Continued

Remember:

1 carbohydrate choice = 15 grams of carbohydrate

A Physician or Registered Dietitian can tell you how many carbohydrates you need at each meal. When you know how many grams of carbohydrate you need each meal, you can choose foods from any of the food groups to meet your needs. A good goal for most people is to aim to have **three to four** carbohydrate choices per meal—3-4 choices for breakfast, 3-4 choices for lunch, and 3-4 choices for dinner. You can eat four different carb choices or you could have four carbohydrate choice servings of the same food, it's up to you! Most importantly, you want to remain consistent with your carbohydrate intake from day to day. By keeping carbohydrate intake consistent, you can effectively keep your blood sugars on track!

Memorizing the one carbohydrate choice portion for all foods is tough and takes practice. A good starting place is to practice visualizing the correct amount of foods for one carbohydrate choice while you are at home using measuring cups. There are several resources available to help you with learning carbohydrate food choices, including pocket-sized carbohydrate counting references, a carbohydrate counting app on your smart phone and online websites. The MyFoodAdvisor on The American Diabetes Association website is a good place to start!

So what foods equal 1 carbohydrate choice? See some examples below:

Food (serving size)	Grams of Carbohydrate	Carbohydrate Choice
1 slice of bread	15	1
1 small banana	15	1
½ cup of cereal	15	1
1 cup skim milk	15	1
½ cup of yogurt	15	1
1/3 cup of pasta or rice	15	1

- References:** 1. (picture) <http://healthbeat.spectrumhealth.org/dining-with-diabetes-this-thanksgiving/>
 2. <https://www.nutritioncaremanual.org/>
 3. <http://www.diabetes.org/>

Diabetic Meal Planning During the Holiday Season

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The holiday season is a time for family and friends to come together and enjoy delicious homemade meals. This can be a challenge for diabetics who must control their carbohydrate and sugar intake. The National Diabetes Education Program (NDEP) has come up with several healthy eating tips, which allow diabetics to enjoy their favorite holiday dishes. These tips are:

- Eat a healthy snack before leaving home to prevent overeating.
- Plan out eating habits by deciding what and how much to eat.
- Bring a healthy dish and eat it slowly to avoid eating too much.
- Drink water and limit alcohol intake to 1 drink for women and 2 drinks for men.
- Trim fat from meats (each tablespoon of fat contains 100 calories)!

Diabetes-Friendly Thanksgiving Meal Plate



There are many low fat, high fiber foods that are good meal options at holiday gatherings. Try eating fresh fruits and vegetables, nuts, grilled or broiled lean meats, and chicken without the skin. Foods should be baked or broiled, not fried. Avoid use of whole milk or cream and use nonfat or 1% milk instead, since these are healthier. Many websites and cookbooks provide diabetes-friendly holiday recipes that are available. Consider using them for healthier meal planning during the holiday season.

References: 1. (picture) <http://healthbeat.spectrumhealth.org/dining-with-diabetes-this-thanksgiving/>
2. http://ndep.nih.gov/media/Healthy_Holiday_Eating.pdf
4. <http://www.cdc.gov/features/diabetesmanagement/>

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