

Diabetes

Life Lines



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Diabetes - the Medical Perspective

There's one more reason to keep your blood glucose under control, to lower your risk for heart disease!

The risk of heart disease is 10 times higher in people with diabetes. New research has shown that people with diabetes can lower their risk of heart disease by 50% by controlling their blood glucose. Blood glucose control can be achieved by frequent self-monitoring of blood glucose, taking prescribed medication, making healthy food choices, and staying physically active. By keeping glucose levels as close to the target range as possible, a person with diabetes can lower their risk of heart attack and stroke.

Your doctor can tell you if you are keeping your blood glucose under control by a Hemoglobin A1c (HbA1c) test. The HbA1c test reflects a person's glucose level over the past 2-3 months. People with diabetes should aim to keep their HbA1c level close to the normal value of 6 percent or less.

Making healthy food choices, staying physically active and taking prescribed medication can help you get closer to your target HbA1c level. Limit foods high in fat and cholesterol. Eat at least 5 servings of fruits and vegetable a day. Be physically active at least 30 minutes a day. Take medication following your health care provider's instruction. All of these tips can help you achieve better blood glucose control.

For heart health, people with diabetes should also monitor their cholesterol and blood pressure regularly as well as blood glucose. By keeping blood glucose, blood pressure, and cholesterol as close to normal as possible, people with diabetes can keep their heart strong and live long healthy lives!

Diabetes and Food



The plate method is a simple and easy tool for people with diabetes. When eating out, Nutrition Facts might not be readily available. The plating method can be used as a meal planning guide for people with diabetes. For lunch and dinner:

1. Start with a 9-inch plate.
2. Draw an imaginary line through the middle of the plate.
3. Divide one of the halves in half, so it becomes two quarters.
4. Fill one quarter of the plate with carbohydrates/starch such as rice, pasta, potatoes, corn, or peas.
5. Fill another quarter of the plate with protein such as meat, fish, poultry, or tofu.
6. Fill the last half of the plate with non-starchy vegetables such as broccoli, carrots, cucumbers, salad, tomatoes, and cauliflower.
7. Then, add a glass of milk or a piece of fruit, and you have a variety of healthful foods.

Exercise as a Part of Living

Should you test your blood glucose before exercising? Your doctor may advise you to test your blood glucose if you:

- have type 1 diabetes
- take insulin
- take oral hypoglycemic agents that increase insulin secretion such as sulphonylureas or meglitinides
- have a history of hypoglycemia (low blood glucose)
- sometimes have very high blood glucose levels.

Testing your blood glucose gives you and your health care team more information about how your body reacts to exercising. This information makes it easier to recommend certain types of exercises, how long you should exercise, and how intensely you should exercise.

Your doctor might recommend that you test your blood glucose:

- about 30 minutes before exercising,
- right before exercising,
- after 30 minutes of exercising,
- and when you finish exercising.

If your blood glucose level is <70 mg/dl, a snack of 15 grams carbohydrate should raise the blood glucose level. Test your level again in about 15 minutes. If it is still low, eat again and test until the blood glucose level is close to 100 mg/dl. Then talk to your doctor about adjusting your medications so that additional food isn't needed in the future.

Recipes to Try

Spinach and Seafood Soup

6 cups fat-free chicken broth
1 cup water
1 tablespoon soy sauce
½ tablespoon minced ginger
½ tablespoon minced garlic
1-1/2 ounce spaghetti

10 1-cup servings

12 ounces skinless fish fillet
(sole or flounder)
8 ounces tiny cooked shrimp
1 cup peeled, sliced cucumber
8 ounces sliced mushrooms
¼ cup chopped green onions
4 cups chopped spinach leaves

1. Heat broth, water, soy sauce, ginger, and garlic to boiling in large pan.
2. Break pasta into 1-inch pieces and add to broth mixture; reduce heat and simmer until pasta is done, about 4 minutes.
3. Slice fish into ½ inch cubes. Add shrimp, fish, cucumber, mushrooms, and green onions to broth; simmer until fish flakes with a fork, about 2 minutes.
4. Stir in spinach. Serve hot.

Per serving:

Calories	73	Fat	1 grams
Protein	11 grams	Calories from fat	13%
Carbohydrate	6 grams	Cholesterol	42 grams
Fiber	1 gram	Sodium	796 mg

Microwave English Muffin Bread

Cornmeal
5 cups flour
2 teaspoons sugar
1 teaspoon salt

2 loaves, 13 slices each-26 servings

¼ teaspoon baking soda
2 ¼-ounce packages yeast
2 cups skim milk
½ cup water
non-fat cooking spray

1. Spray 2 microwave-safe loaf pans with non-fat cooking spray; sprinkle with cornmeal.
2. Combine 4 cups flour, sugar, salt, baking soda and yeast in large bowl.
3. Combine water and milk, heating until very warm, but not boiling. Add to dry mixture and beat well. Add remaining flour.
4. Divide dough in two, putting each half in loaf pan. Sprinkle with cornmeal. Cover and microwave on 50% power for 1 minute. Let dough rest 15 minutes. Repeat heating and resting.
5. Microwave on high for 6 ½ minutes. Allow to cool; slice; serve toasted.

Per serving (1 slice):

Calories	98	Fat	0 grams
Protein	3 gram	Calories from fat	0%
Carbohydrate	20 grams	Cholesterol	0 grams
Fiber	1 grams	Sodium	112 mg



Medication Update

Diabetes often causes damage to small blood vessels leading to eye disease (retinopathy), nerve damage (neuropathy), and kidney disease (nephropathy). A new drug being tested initially for positive effects on preventing or treating nervous tissue damage is also being tested to see the effects on eyes and kidneys. The drug, Ruboxistaurin, is the type that inhibits a certain enzyme that is believed to be involved in much of the small blood vessel damage.

A small pilot study with people who had diabetes and increased amounts of albumin in their urine showed favorable results. The increased albumin the urine is associated with later kidney disease. Those who were taking Ruboxistaurin had less albumin in their urine after 1 month of taking the drug.

There were side effects, though, the most common one being hypertension (high blood pressure). Because this was a small study, the drug will be tested again several times before it is available for treatment or prevention of kidney disease in those with diabetes.

News & Resources

If you have diabetes, your doctor should check your eyes or refer you to an eye doctor, an ophthalmologist, regularly. This advice may be especially true for those taking Avandia or Avandamet as an oral hypoglycemic agent to help control blood glucose. These drugs may increase swelling. Although rare, this swelling may occur in the back of the eye. If you are taking either of these drugs and notice changes in your vision or you have not had your eyes checked recently, contact your doctor.

The CDC has compiled many hurricane health and safety resources in English, Spanish, and several other languages. For instance, *Safety of Drugs Exposed to Hurricane Conditions* can be viewed at www.fda.gov/cder/emergency/default.htm. This resource discusses how drug products should be discarded if they came in contact with flood or contaminated water. In the case of urgently needed life-saving drugs, if the container is contaminated but the contents appear unaffected (pills are dry), the pills may be used until a replacement can be obtained.

Local Events