

# Diabetes Newsletter



1600 North Second Street

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## Taking Diabetes to Heart

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*Keep your heart with all diligence;  
for from it flow the springs of life.*  
—Proverbs 4:23

It is well documented that the risk of heart disease is 2–4 times higher in people with diabetes as compared to the general population. In fact, the risk is so high that two in three people with diabetes die from heart disease or stroke. However, when you have diabetes, it is *uncontrolled* blood glucose levels that place you at the highest risk for heart disease. Uncontrolled blood glucose levels and related complications may contribute to the development of fatty deposits on the insides of your blood vessels. This is referred to as *atherosclerosis*, the “hardening of the arteries” that can reduce the amount of blood flow to the heart, brain, and limbs.

What this means for people with diabetes is that they may develop heart disease at an earlier age than others and that their chance of having a heart attack is as high as that of a person without diabetes who has already had a heart attack. While women who don’t have diabetes see their risk of heart disease increase dramatically after menopause, women with diabetes have an increased risk even before menopause, because diabetes cancels out the protective effects of higher levels of estrogen. Also, heart attacks in people with diabetes tend to be more serious, being more likely to result in death.

### Assessing your risk factors

In addition to uncontrolled blood glucose levels, there are other risk factors for heart disease that are common among people with diabetes. Since many of them can be treated effectively, your cardiovascular risk factors should be assessed by your physician at least once a year. Timely diagnosis allows you to develop a plan with your diabetes care team to prevent or treat existing heart disease. The following factors contribute to heart disease risk:

**Genetics.** Heart disease tends to run in families, and so does diabetes. When you have diabetes, your risk for heart disease may be higher if a family member has had a heart attack at a younger age (before 55 years old for men and before 65 years old for women).

**Central weight.** Carrying extra weight around your waist raises your risk of heart disease. You may have heard central weight distribution referred to as an “apple-shaped” weight pattern (as opposed to “pear-shaped,” where extra weight is concentrated in the hips and legs). Your risk further increases if you are obese. For that reason, the National Heart, Lung, and Blood Institute now recommends taking both body-mass index and waist circumference into consideration when assessing a person’s risk of heart disease. Men who are both obese and have a waist circumference of 40 inches or larger, and women who are obese and have a waist circumference of 35 inches or larger are at very high risk of developing cardiovascular disease.

Abdominal fat is associated with an increase the body’s production of low-density lipoprotein (LDL, or “bad”) cholesterol. A high level of LDL cholesterol or a high proportion of small, dense LDL cho-

lesterol particles raises the risk of heart disease.

**High blood pressure.** Chronic high blood pressure affects the majority of people with diabetes. High blood pressure is a major risk factor for atherosclerosis and heart disease and can contribute to other blood vessel problems in diabetes, as well.

**Dyslipidemia.** Having high total blood cholesterol, high LDL cholesterol, high triglycerides, and low HDL cholesterol raises the risk of heart disease. Cholesterol and triglycerides are collectively called blood lipids, and any combination of abnormal lipid levels is called dyslipidemia. People with Type 2 diabetes very often have high triglycerides, low HDL cholesterol, and a high proportion of small, dense LDL cholesterol particles, which are more harmful than normal LDL cholesterol particles.

**Smoking.** Smoking doubles your risk of developing heart disease. Smoking causes narrowing of the blood vessels and deprives them of oxygen, an important nutrient to the circulatory system.

#### Diabetes ABCs

In an effort to draw public attention to the connection between diabetes and heart disease and stroke, the American Diabetes Association and the American College of Cardiology have joined together in an educational initiative that focuses on the acronym “ABC.” The letters stand for “A1C,” “Blood Pressure,” and “Cholesterol.”

People with diabetes are encouraged to be aware of their A1C (also called HbA1c or glycosylated hemoglobin) level, blood pressure level, and cholesterol levels. It is hoped that increased awareness of these numbers, what they mean to a person’s health, and what a person’s target numbers are for good health will lead to more discussion with health-care providers and more action taken to bring levels into target range.

To read more about the ABCs, how often they should be measured, and recommended goals for most people with diabetes, see [“ABCs of Diabetes.”](#)

#### Modifying your lifestyle

The benefits of the healthy lifestyle habits that are recommended for the management of diabetes extend to your heart health, as well. A healthy lifestyle includes healthy eating, getting regular physical activity, maintaining a healthy weight, and stopping smoking if you smoke.

**Healthy eating.** Good nutrition is vital for anyone, and for people with diabetes it is an important part of their treatment plan. If you haven’t already worked with a dietitian to design an individualized meal plan, ask your diabetes care team for a referral to a registered dietitian. It is best to work with a dietitian who specializes in diabetes.

The good news is that you can tackle blood glucose, blood pressure, and blood lipid levels head-on with the right nutrition intake. Common recommendations include increasing the amount of fiber in your meal plan, which may help lower blood cholesterol. Foods such as oat bran, oatmeal, whole-grain breads and cereals, dried beans and peas (such as kidney beans, pinto beans, and black-eyed peas), fruits, and vegetables are all good sources of fiber.

Monitoring your fat intake can also be important for cholesterol control. Fat should make up no more than 30% of your total energy intake, and most of that fat should be monounsaturated or polyunsaturated. Limiting the amount of saturated fat, *trans* fat, and cholesterol you eat can help to lower your blood cholesterol levels. Efforts to control your blood pressure may include reducing your sodium (or salt) intake.

**Physical activity.** Performing regular physical activity or exercise can improve blood glucose control, help control weight, improve your overall well-being, and reduce your risk for heart disease. To achieve these results, performing at least 150 minutes of moderate-intensity aerobic activity a week and/or at least 90 minutes of vigorous aerobic exercise a week is recommended. The activity should be distributed over at least three days of the week, with no more than two consecutive days without physical activity.

People with Type 2 diabetes are additionally encouraged to do resistance exercises targeting all major muscle groups three times weekly, as long as they have no contraindications, or medical reasons not to perform resistance exercise.

Before increasing your level of physical activity or starting a formal exercise plan, discuss your plans with

your diabetes care team. Your health-care providers may want to conduct certain medical tests prior to exercise, especially if you have been sedentary. In addition, you and your diabetes care team should talk about how to control your blood glucose levels during exercise and when to make adjustments to your usual diabetes regimen. (For more about physical activity, see “Staying Active.”)

**Healthy weight.** The goals you set with your diabetes care team for staying active and eating healthfully should help you to achieve and maintain a healthy weight. If you need to lose weight, a sensible, gradual weight loss plan is most likely to result in permanent weight loss. Increasing your physical activity while consuming fewer calories will help to make sure the weight you are losing is fat and not muscle.

**Stopping smoking.** If you smoke, quitting is highly recommended because of the detrimental effects smoking has on the blood vessels and heart. That is not to say it is easy. The first step is deciding that you are willing to quit, then working with your diabetes care team to decide on a plan that will work for you.

### **Medication**

If lifestyle changes alone don't bring your blood glucose, blood pressure, and blood cholesterol levels into target range, drug therapy may be necessary. Some people are reluctant to take drugs, particularly if they are experiencing no symptoms or don't feel bad on a day-to-day basis. But while high blood glucose, high blood pressure, and cholesterol disorders may cause no or few symptoms in the early stages, over time they can do real damage to your internal organs, which will cause symptoms, so it is important to treat them early.

Regularly monitoring your A1C level, blood pressure, and blood lipids will provide you and your diabetes care team with the information needed to make decisions about your need for drug therapy. Remember, medication is not the enemy if it helps keep your “ABCs” in order.

Aspirin therapy is currently recommended in people with diabetes as a standard practice of care. It has been shown to reduce the risk of heart attack by 30% and the risk of stroke by 20%. However, aspirin therapy is not for everyone, so you should consult your physician before you start to take aspirin regularly. Your physician will take into consideration your age, your heart disease risk factors, other drugs you might be taking, and your heart health history in making a recommendation regarding aspirin therapy.

### **Symptoms of heart disease**

Angina, or pain that occurs when a blood vessel to the heart is narrowed and blood flow is reduced, is a common sign of heart disease. The pain can vary in severity from one episode to the next and can include chest discomfort or pain that radiates to your shoulders, arms, jaw, or back, especially during exercise. The pain may go away when you rest or take a medicine that your physician prescribes for the angina. Angina does not typically cause permanent damage to the heart muscle, but it is a symptom of diminished blood flow to the heart and a warning of an increased risk of having a heart attack.

When a blood vessel that flows to the heart becomes blocked and blood flow to the heart is inhibited, a heart attack occurs. If not enough blood reaches a part of the heart muscle, permanent damage will result.

Men and women tend to have somewhat different symptoms when having a heart attack. Common symptoms of a heart attack in men include the following:

- Chest pain, pressure, or discomfort
- Pain or discomfort in the arms, back, jaw, neck, or stomach
- Shortness of breath
- Sweating
- Nausea and sometimes vomiting
- Dizziness or a feeling of light-headedness

Common symptoms of a heart attack in women include these:

- Unusual fatigue
- Sleep disturbances
- Shortness of breath
- Diffuse discomfort
- Depression

Regardless of sex, not everyone who has a heart attack has all the symptoms. In fact, some people, those with diabetes, may have very subtle symptoms or none at all. This is usually because of nerve damage caused by

diabetes, which may result in lack of pain during a heart attack.

If you believe you are having a heart attack, don't delay: Get emergency help immediately. Keep in mind that treatment is most effective if given within an hour of a heart attack and can prevent damage to the heart that may be permanent.

Another common form of heart disease is congestive heart failure, a chronic condition in which the heart cannot pump blood properly, causing tiredness and weakness, and fluid builds up inside body tissues. If the buildup is in the lungs, breathing becomes difficult. Fluid buildup can also result in swelling in the feet, legs, and abdomen. Uncontrolled blood glucose levels in people with diabetes may lead to small blood vessel (microvascular) disease, which contributes to loss of heart-muscle tone, resulting in congestive heart failure. People with diabetes have at least twice the risk of congestive heart failure as those without diabetes.

**Staying heart-healthy**

While having diabetes does increase your risk for heart disease, it doesn't make it inevitable. Work with your diabetes care team to learn all you can about the risks you have, the ongoing options for treatment, and the best action plan to keep you in good health. After all, it is truly a matter to take to heart!



#### Bad Weather Notice

This time of year the weather can get nasty. Please call before coming to the support groups if you have any questions about if we are having the support group due to bad weather. You can call 660-890-7084 for this information.

Thanks

## Clinton Support Group

### TOPIC

Enhanced Fitness

### DATE

Thursday,  
January 14, 2010

### TIME

10:30—11:30 a.m.

### PLACE

GVMH Medical Plaza Classroom

### Presented By:

Teresa Lillibridge, BSW, MA

This is a 12 week exercise program that is designed for seniors. You don't have to have diabetes to come, anyone is welcome. So bring a friend.

## Warsaw Support Group

### TOPIC

Retinopathy

### DATE

Tuesday,  
January 12, 2010

### TIME

11:30 am—12:30 p.m.

### PLACE

Warsaw GVMH Medical Clinic Rehab Center

### Presented By:

Jamie Ketterman, RN, BSN, CDE