

DIABETES: DANGEROUS, CONTROLLABLE

There are two essential facts you should understand about diabetes: It can lead to catastrophic complications, including heart disease, stroke, kidney failure, loss of vision and nerve damage. And, with appropriate medical care, diabetes is quite controllable, and persons who have it can lead active, normal lives.

Diabetes – or by its proper name, diabetes mellitus – is a disease that involves your body's ability to use insulin, a hormone essential for the processing of glucose (blood sugar), your body's main source of fuel. Produced by the pancreas, insulin enables the cells in every part of your body to absorb glucose for energy and nutrition.

There are three major types of diabetes. Type I, accounting for five to 10 percent of all cases, results when your pancreas is unable to make insulin, or makes only a small amount. Type II, constituting 90 to 95 percent of cases, usually involves an inability by your cells to absorb and use the insulin to convert glucose to energy. Lastly, gestational diabetes is a form that can develop during pregnancy, affecting two to five percent of pregnant women. It usually resolves soon after childbirth – but having had it increases your risk of developing Type II later in life.

Risk factors for diabetes include a family history of the disease, obesity and lack of exercise. Your risk generally increases as you get older. Those with high blood pressure or high cholesterol are also at higher risk.

Two symptoms that may occur early on include increased thirst and a need for frequent urination. Other symptoms may include fatigue, weight loss, blurred vision, skin problems and infections.

The real danger of diabetes is that its serious complications can be developing for many years before they become apparent. Some 16 million people in the United States are estimated to have diabetes – and half of them don't know it.

WHY THE DMA DIABETES TEAM?

Diabetes is a sinister disease. Not only can it cause serious problems for nearly every organ in the body, its complications can begin developing long before the symptoms appear.

That's why a proactive program of care by your primary care physician and clinicians specializing in its management is important. Diabetes can't be "cured" but it can be controlled – with excellent quality of life.

Led by endocrinologist James A. Goldman, MD, the DMA Diabetes Team understands the complexities of diabetes management and works closely with patients and their primary physicians for positive outcomes.

■ **Dr. Goldman, certified in both Internal Medicine and Endocrinology and Metabolism,** has specialized in caring for diabetic patients for 20 years. He has extensive experience in the use of portable infusion pumps.

■ **Nutritionist Carol Haladyna, RD, CDE,** has more than 10 years experience as a certified diabetes educator.

■ **Diabetes Nurse Practitioner Jan Hourihan, APRN-BC,** has been trained as a diabetes educator and has more than 25 years experience helping diabetic patients.

That's why glucose screening, as part of blood testing during regular physicals, is important, especially after age 45 (or sooner if you have risk factors such as a family history). Glucose is measured in units of milligrams per deciliter (mg/dl) of blood, and the normal range for people who don't have diabetes is 80 - 110. If your fasting glucose count is 126 or above, you're normally considered to have diabetes. If your glucose is between 110 and 126, you should discuss that fact with your doctor.

COMPLICATIONS OF DIABETES

Serious long-term complications threaten when excessive levels of glucose remain present in your blood over time. This can damage nearly every organ in your body. Atherosclerosis – the build-up of plaque that blocks the flow of blood through arteries – occurs at least five times more often in diabetics than in non-diabetics.

With its risks of blood vessel and nerve damage, diabetes increases your likelihood of:

- **Coronary artery blockages** that cause heart attack and carotid artery blockages that cause stroke. Two out of three people with untreated diabetes die from heart disease or stroke.
- **Damage to the delicate system of tiny blood vessels in your kidneys** that filter waste from your blood for elimination as urine. It's the leading cause of kidney failure.
- **Damage to the capillaries of the retinas in your eyes** to cause retinopathy, or deterioration of vision. Most diabetics experience only minor visual problems, but it remains one of the leading causes of vision loss in adults.
- **Leg and foot ulcers** (that is, cuts and sores that won't heal) and infections. This is a consequence of losing feeling due to nerve damage and of impaired blood flow due to arterial damage. An untreated leg infection can result in amputation.

Careful monitoring of your blood sugar is critical in managing diabetes. How often you need to monitor will depend on your situation as interpreted by your doctor. If you use insulin, it will likely be several times a day. If you don't, once a day may be sufficient.

Since a goal of managing diabetes is to avoid the need for medications as far as possible, the Diabetes Team treatment plan will begin with lifestyle changes involving eating, drinking, exercising – and quitting smoking.

There is no single “diabetes diet,” but attention to what you eat is essential to successful diabetes management. Your Diabetes Team nutritionist will work with you to develop an eating plan that includes foods you

like but emphasizes healthy eating. You may be able to control your blood sugar by eating regular meals and avoiding high-sugar foods. Or you may have to pay attention to specific foods, including a mix of fruits, vegetables and grains and perhaps less meats and fats. Portion control and consistent eating times are very important.

An exercise program also will lower your blood sugar levels. The goal is at least 30 minutes of exercise at least four days a week, more if possible. It can include walking, biking, swimming, tennis or similar activities. Consult your physician before starting a vigorous exercise program.

In addition to having their own merits, diet and exercise can help you lose excess weight, also an important lifestyle change for controlling diabetes.

If you've experienced loss of sensation in your feet, daily examination of your feet and lower legs is important. You need to check for cuts, blisters and sores so that they can receive attention before they become problems.

If lifestyle changes prove insufficient, oral medications or insulin injections may be needed. Every Type I diabetic requires insulin therapy on a daily basis to make up for the lack of insulin production by the pancreas and many Type II patients eventually need insulin supplements.

Today, a range of medications are available to control Type II diabetes. They work in a variety of ways: improving your body's ability to use its own insulin, increasing the production of insulin by the pancreas, reducing blood sugar production in the liver or reducing it by inhibiting blood sugar absorption in the intestines. In some cases, a combination of drug therapies may be appropriate.

Talk with your physician about whether it would be beneficial to have specialists working with him or her in managing your diabetes. To make an appointment with the DMA Diabetes Team, call 781-329-1414, x1308.