# Preventative Care for Diabetics

## What is Diabetes?

Diabetes Mellitus is a disease that affects the body's ability to absorb glucose (a form of sugar and a major source of energy). There are two types of diabetes.

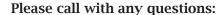
- The first type results when the insulin producing cells in the pancreas are destroyed. This means that without a regular supply of external insulin, a person cannot absorb glucose. Immediate, severe consequences result, and left untreated, a patient will die.
- The second type of diabetes occurs when the body's cells cannot properly use insulin. Insulin is produced but is ineffective for reasons that are still not understood. This results in less serious, immediate effects, and can frequently be controlled with oral medication and injected insulin is not needed.

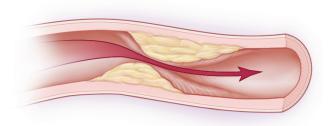
Both types of diabetes can result in high levels of glucose in the blood stream. This causes many of the known, long-term effects of diabetes which include damage to nerves (neuropathy), damage to the lining of the eyes (retinopathy), kidney damage, damage to the lining of arteries (atherosclerosis), and propensity for infections.



### **Treatment of Diabetes**

Because of the effects, it is very important to aggressively treat diabetes, in both forms to minimize the long-term damage of these effects. Careful maintenance of the blood glucose level is the primary goal of this treatment. This is accomplished by frequent glucose checks and appropriate insulin injections. Insulin pumps for selected patients may further expedite close blood glucose control. Control of dietary intake of sugar also allows for more close regulation of blood glucose. Commitment to an approved diabetic diet can be the best investment a person with diabetes can make. In addition to diet, regular exercise helps the body keep serum glucose under control. The reasons for this are unknown, but





the benefits of regular exercise for diabetics are well documented. For patients with type I diabetes (described in bullet number one above), an islet cell or pancreas transplant may provide the best control of blood glucose. This treatment is not recommended for most diabetics, but has provided benefits for carefully selected patients.



#### Diabetes and Vascular Disease

Atherosclerosis, or hardening of the arteries, is a known side-effect of long-term diabetes. When this complication manifests, it is important to control other risk factors that also contribute to atherosclerosis. In particular, diabetics who have blockages in their heart, brain, or leg arteries are at high risk for heart attacks, strokes, and amputations. This risk is reduced significantly if these patients are able to quit smoking, lower their cholesterol, take anti-platlet medications, and pursue a heart-healthy diet and exercise program.

Many recent studies show that aggressive management of blood glucose immediately following heart or vascular surgery improves outcomes in patients with diabetes. This management frequently includes a carefully monitored intravenous continuous infusion of insulin, even if the patient doesn't typically require insulin to manage their diabetes. This treatment can lower the chances of infections and other adverse events in the month following surgery.

For more information visit VascularWeb.org





# **Preventive Care**

Preventive care is a critical component of limiting lifetime complications for diabetics. Attention to diet, exercise, medications, and utilizing the best individual mode of controlling blood glucose can limit known complications of diabetes. If complications develop, aggressive management of contributing factors to atherosclerosis is also very important to managing the disease and preventing stroke, heart attack, and leg amputations.

If your primary care physician suggests you be referred to a specialist, see a vascular surgeon.

Vascular surgeons are the only physicians treating vascular disease today who can provide all the treatment options available.



Society for Vascular Surgery® members are the leaders in vascular health who provide the most comprehensive diagnosis and treatment.

Please call with any questions:

For more information visit VascularWeb.org

