

INFORMATION ABOUT DIABETES

There are three common types of diabetes.

Type I diabetes occurs when the pancreas, an organ within the abdomen just behind the stomach, cannot produce insulin. Insulin is the hormone that regulates how the body uses glucose (a type of sugar). It allows the body to use glucose to provide energy to the body's cells. When the pancreas does not produce insulin, glucose accumulates in the tissues and the bloodstream, which is what your doctor can measure if you have diabetes. Type I diabetes generally occurs in children and adolescents. Approximately 10% of people with diabetes have Type I diabetes.

Type II diabetes occurs when the body does not use the insulin it produces efficiently. In most cases, the body cannot use the insulin even though there are appropriate or even excess amounts of insulin in the body. This is sometimes known as insulin resistance. Type II diabetes is often associated with obesity and tends to appear in adulthood. Since the incidence of obesity is increasing, more and more children are being diagnosed with Type II diabetes.

Gestational diabetes is a temporary disease that occurs during pregnancy. It affects approximately 3.5% of all pregnancies. Women who develop diabetes during pregnancy have a greater risk of developing diabetes later on. Gestational diabetes can cause significant problems both to the mother and to the baby during pregnancy, and it is necessary to monitor it and treat it carefully to avoid complications.

Diabetes is also associated with many complications, most of which are related with the development of atherosclerosis, a disease in which plaque (fat deposits) is formed on the arteries. Atherosclerosis increases the risk of heart attack, stroke and peripheral vascular disease. Diabetes increases the risk of an eye disease called diabetic retinopathy and kidney disease. Nerve damage (what is known as peripheral neuropathy) is also associated with diabetes. If untreated, or if the blood sugar level is not well controlled, the risk of these complications is greater. People who have other diseases besides diabetes also have a greater risk of suffering complications. Some of the other risk factors that increase the risks of diabetes include high blood pressure, cholesterol and triglycerides, and smoking.

The first step for preventing or delaying the appearance of complications from diabetes is recognizing and treating these risk factors, besides knowing and treating the signs and symptoms of diabetes.

Risk factors for diabetes

If you are over 40 years old, you should have a diabetes detection test. You must have the test at least every three years. If you have other risk factors, you must have the test before and/or more frequently.

Other risk factors include:

- Obesity (especially if you have most of the weight concentrated in the waist area)
 - One of your parents or a sibling has diabetes
 - You gave birth to a baby that weighed over 4 kg (9 lb)
- You had gestational diabetes (diabetes during pregnancy)
- The fasting glucose or glucose tolerance is abnormal
 - You have high blood pressure
 - You have high cholesterol or other blood fats

The symptoms of diabetes include:

- A lot of thirst
- Need to urinate frequently
- Gaining or losing weight without setting out to do so
- Feeling of tiredness or weakness
- Blurry vision (especially if it changes from one day to the next)
- Frequent or recurring infections (mycotic (fungus) infections are more common in diabetics)
- Cuts and bruises that take a long time to heal
- Numbness or tingling in the feet (less commonly in the hands)
- Difficulty getting or maintaining an erection (erectile dysfunction or ED)

Many people who have Type II diabetes have no symptoms.

Diabetes prevention and treatment

There is no preventive measure to avoid developing type I diabetes.

Ingesting a healthy diet, controlling weight and doing exercise regularly are important measures for reducing the chances of developing type II diabetes.

People with diabetes need to commit themselves to controlling diabetes strongly to reduce the risk of complications due to their disease. The first step is becoming informed about diabetes and the types of lifestyle changes that are necessary to control the disease.

The lifestyle changes that are important include doing physical activity regularly, following a healthy diet and maintaining a good weight. Exercise reduces blood glucose concentrations and helps weight loss. It improves overall physical condition and increases metabolism. A healthy diet helps keep glucose within normal values. It also helps reduce cholesterol, triglycerides (other fats that there are in the blood) and helps weight loss in overweight patients.

The treatment of other risk factors may be as important as the treatment of diabetes. Lowering blood pressure is even more important in diabetic persons to reduce the risk of stroke and heart attack. It is also very important to decrease cholesterol. Some patients could reach these objectives with diet and exercise. Others, on the other hand, may need medication.

Medication: Type I diabetes is treated with insulin. The medications that are used for type II diabetes act through different mechanisms. Some medications help the pancreas produce more insulin. Others help the body use insulin more

effectively. And others, on the other hand, act on the intestines and affect the way the body absorbs and uses glucose and other sugars.

Modifying lifestyle: learning to reduce the level of stress in daily life can help diabetics better control their disease.

Blood pressure: high blood pressure increases the risk of diabetes-related heart diseases, stroke, kidney disease and ocular disease. People who have diabetes should keep their blood pressure below 130/80. Sometimes it is necessary to take medications to reach this objective. Recent studies suggest that medications called ACE inhibitors that are used to control blood pressure can in fact be beneficial for reducing complications in diabetic patients who have normal blood pressure. Your doctor will help you decide if treatment with these medications would prove beneficial in your case.

Hyperlipidemia: many patients with diabetes also have high levels of cholesterol and triglycerides (another type of fat that there is the blood). An increase in any of these fats is called hyperlipidemia. Patients with very high lipids are also at risk for heart disease. Patients who have more than one risk factor for having atherosclerosis also have a much greater risk of suffering heart attacks and strokes. Strong treatment for high cholesterol has also shown to reduce the risk of complications in diabetic patients who also have high cholesterol.

Smoking: diabetic persons must stop smoking. Cigarettes greatly increase the risk of complications from diabetes.