

Diabetes Mellitus

Diabetes affects over 16 million people in the United States. It is believed that diabetes is not only caused by genetics but lifestyle. Two of the lifestyle problems are obesity and lack of exercise. Diabetes is categorized into type 1 and type 2. Type 1 diabetes is referred to as juvenile diabetes because it is usually diagnosed early in life. Type 1 diabetes means the pancreas cannot make insulin. The insulin producing cells in the pancreas have been destroyed by the body's immune system. This insulin is needed to allow cells in the body to process sugar into energy. Type 2 diabetes is also referred to as adult-onset diabetes which is usually diagnosed at age 30 or older. Type 2 is when the cells in the body are unable to use the insulin being produced and is sometimes coupled with an insulin production deficiency. While diabetes can cause circulatory problems which may result in heart disease or stroke, high blood pressure, blindness, kidney disease, nervous system disease, and amputation, it is manageable.

There are many signs and symptoms that can be attributed to diabetes. As sugar levels rise in the bloodstream the kidneys are stimulated to increase their filtering ability. Since the kidneys are filtering more, there is more urine produced, thus the need to urinate increases. Frequent urination is a major complaint of an undiagnosed diabetic. Since the sugar is in a lot of ways trapped in the blood, the cells that need the sugar for energy are essentially starving. When the body realizes this, hunger and thirst mechanisms kick in. A diabetic will have excessive hunger and thirst as the body tries to get more glucose into the cells that need it. Being unusually tired as well as experiencing abnormal weight loss goes hand in hand with this disease also. Since the concentration of sugar in the blood is so high, blurred vision is common in diabetics. The sugar particles no longer dissolve completely thus causing a haze in eyesight. Those who experience any of these symptoms should seek medical assistance

immediately.

When it comes to diabetes, treatment can be divided into three categories: drugs, insulin, and diet; it all depends on what kind of diabetes one has. If one has type 1 diabetes, or insulin-dependent diabetes mellitus (IDDM), daily insulin injections anywhere from 2-4 times would be needed. Injecting the insulin is the only effective way of getting it into the bloodstream. Insulin cannot be swallowed because it will be destroyed by digestive juices and rendered ineffective. Insulin can be injected in several different places such as the upper arm, abdomen, buttocks, and both the front and back of the upper thigh. Many beginners may experience slight pain when they first start injecting, but with practice patients should find that injections are totally painless and do not leave a mark.

If one has type 2 diabetes, or non-insulin-dependent diabetes mellitus (NIDDM) a strict diet and exercise plan may be enough to help control glucose levels. Patients should eat regularly, cut down on fat intake, include starchy foods or carbohydrates with each meal, limit sugar intake and keep an ideal body weight by exercising as much as possible. Medication may help control the disorder for people with type 2 diabetes. There are five main kinds of medication, sulfonylureas, benzoic acid derivatives, biguanides, acarbose, and thiazolidinediones. Most people find that one or more of these medications, with a healthy diet and exercise plan, keeps their diabetes under control.

There is no known prevention for type 1 diabetes, but there are many studies underway so one day there may be a cure or prevention method. To prevent complications of type 1 diabetes it is important to have regular checkups and to keep blood sugar levels within normal range. Type 2 diabetes studies have shown that people with pre diabetes can prevent getting the disease with starting a moderate exercise program and eating a well balanced diet. As a preventative measure, at the age of thirty-five everyone should begin yearly screening for type 2 diabetes.