



Healthy Families. Healthy Community.

Diabetes Mellitus Type 2

The number of people (adults and children) in the United States with diabetes is approximately 20 million. Out of that 20 million, 6.2 million go undiagnosed. In addition, 54 million adults and children in the U.S. have what is called “pre-diabetes”.

The number of individuals with diabetes is on the rise, and most troubling is that the number of young children developing diabetes related to childhood obesity has also risen.

The most common form of diabetes is type 2. This is when the body does not produce enough insulin or does not respond normally to the insulin that is made. Insulin is made in the body’s pancreas, and helps the body either use or store the sugars (glucose) broken down from food. When this system is not functioning properly, then glucose levels begin to rise in the blood and are not available for the body’s cells to use for energy. This may eventually lead to cell damage that affects the heart, kidneys, eyes, and nerves.

Diabetes is diagnosed by a blood test. This test is usually done when a person has been fasting (nothing to eat for 8 to 12 hours). If the fasting glucose is more than 126 mg/dl, then that individual has diabetes. If the fasting glucose is between 100 mg/dl and 125 mg/dl, then that individual has “pre-diabetes”.

Testing for diabetes type 2 should be done for all individuals age 45 or above, especially for those individuals whose body mass index is 25 or greater. (Body mass index is calculated based on a person’s weight and height). Repeat testing should be done every three years at a minimum if the results are normal and other risk factors have remained the same. Testing should also be done earlier or more frequently in individuals who are overweight (body mass index 25 or greater), and have additional risk factors for diabetes, such as sedentary lifestyle, family history of diabetes, member of high risk ethnic group, have had diabetes during pregnancy, hypertension, abnormal cholesterol, polycystic ovary disease, history of vascular disease, and signs of insulin resistance.

The recommendation for screening children for diabetes type 2 begins at age 10, or at the onset of puberty if it occurs younger than age 10, for those children who fit into a high risk category. The criteria includes weight greater than 85th percentile for age and sex, or weight greater than 120% of ideal weight, plus two of the following additional risk factors: family history of type II diabetes; Race/Ethnicity; maternal history of diabetes during pregnancy; and physical signs of insulin resistance (darkening of the skin noted at the neck or skin folds).

Once the diagnosis of pre-diabetes or diabetes has been made by a physician, then a treatment plan can be devised. Treatment sometimes includes medication, but always requires changes in diet and physical activity. If an individual is overweight, then realistic weight loss of approximately 20% of current weight over six month period is recommended. The goal of treatment is to bring blood glucose as close to normal levels as possible. Additionally, other medical problems will need to be evaluated and treated, such as high blood pressure and elevated cholesterol. It is important to control blood sugars, cholesterol levels, and blood pressure to prevent complications from diabetes, such as heart, kidney, eye, and nerve damage.

Screening for diabetes is a simple blood test that can be done by your physician at a reasonable cost. Oftentimes, health fairs offer free screening. However one finds out about their diabetes, the sooner it is treated then the easier it is to prevent long term complications.