Dr. Crutchfield, there has been a lot of discussion in the news lately about diabetes. What is diabetes?

Diabetes, also known as diabetes mellitus, is a group of diseases in which there are high levels of sugar in the blood over an extended period of time. Diabetes is considered a metabolic disease. Over 30 million people in the U.S. have diabetes. The health complications of diabetes can be both devastating and deadly.

High blood sugar levels, over time, are very damaging to blood vessels. As a result, uncontrolled diabetes can cause serious and life-threatening complications including heart disease, stroke, kidney failure, non-healing skin and foot ulcers, recurrent infections, nerve damage, eye damage and coma. Symptoms of high blood sugar levels may include frequent urination, fatigue and increased thirst, and increased hunger.

The molecule that controls sugar levels is called insulin. It is produced by the pancreas. It is simply thought of as an “usher” gently showing sugar in the blood where to go into certain areas like the liver, muscle and fat.

Diabetes can be caused by the pancreas not producing enough insulin, or the cells of the body not responding properly to the insulin that is present. There are three main types of diabetes mellitus (DM):

- Type 1 DM results from the body’s failure to produce enough insulin
- Type 2 DM begins with insulin resistance, a condition in which cells fail to respond to the insulin that is present properly. As the disease progresses, one may also lose the ability to produce insulin. The primary cause is excessive body weight and lack of exercise. Ninety percent of cases of diabetes are type 2.
- Gestational diabetes is the third main form and occurs when pregnant women without a previous history of diabetes develop high levels of glucose in the blood.

For the rest of this column, I will focus on type 2 diabetes.

Prevention

The five things that can help prevent diabetes type 2 are:
Prediabetes
Prediabetes is a condition when a person’s blood sugar (glucose) levels are higher than normal but not high enough for a diagnosis of type 2 DM. Many people destined to develop type 2 DM spend many years in a state of prediabetes. This is a critical stage in which weight reduction can play a significant role in the prevention of true diabetes. Additionally, medications may be started at this point to prevent the development of diabetes.

Diagnosis
Diagnosis is established by measuring the levels of sugar in the blood. This can be done after fasting and after eating. Your doctor can review with you the exact glucose numbers needed to make the diagnosis of prediabetes and diabetes.

In general, a fasting glucose of under 100 is desirable. A fasting glucose of between 100 and 125 is considered prediabetic. Several glucose readings of levels over 125 are diagnostic of diabetes.

Also, measuring the amount of sugar on your red blood cells gives a long-term picture of diabetes. This is called the A1c test. For people without diabetes, the normal range for the hemoglobin A1c test is between four percent and 5.6 percent. Hemoglobin A1c levels between 5.7 percent and 6.4 percent demonstrate an increased risk of diabetes, and levels of 6.5 percent or higher demonstrate diabetes.

The objective for people with diabetes is to have a hemoglobin A1c less than 7 percent. The higher the hemoglobin A1c, the higher the risks of developing complications related to diabetes.

Treatment of diabetes type 2
Treatment may include:
- Constant monitoring of blood sugar levels
- Medications
- Insulin injections
- Weight reduction strategies
- Bariatric (weight) surgery
- Regular medical exams
Regular meetings with diabetes nurse educators and nutritionists

Because the long term complications can be so devastating, it is important to start working closely with your doctor as soon as the condition of prediabetes is established. This will involve developing an overall diabetes plan including a medicinal treatment plan, exercise program, and ongoing medical evaluations. In preventing or treating type 2 diabetes, weight reduction is the most important factor for success.

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magazine and one of the top 21 African American physicians in the U.S. by the Atlanta Post. Dr. Crutchfield is an active member of the Minnesota Association of Black Physicians, MABP.org.

One Response to “Uncontrolled diabetes can have devastating consequences”
Thank you for the break down regarding diabetes. I was recently diagnosed with diabetes which stimulated my interest and encouragement to others to maintain good healthy habits. The best advise comes when a trained professional extends it. I make an effort and take the time to ready healthy advise. Thank you for extending your knowledge and concerns. I hope others take it and never have to hear that their A1c is higher than 7.