

Understanding Diabetes

An estimated 20 million Americans live with diabetes—that's 6 percent of the population! But what exactly is diabetes. Diabetes is a relatively common metabolic disorder that affects the way the body uses food for energy and growth. The food we consume is converted into glucose, or simple sugar, which enters the bloodstream as a source of fuel. Insulin, a hormone produced by the pancreas, helps regulate the level of glucose in the blood and how glucose is used. People with diabetes, however, experience insulin failure, resulting in elevated levels of blood sugar. This causes both the short term symptoms of diabetes—like excessive thirst—and, often, damages the body's organs in the long term. The way in which insulin fails determines how a diabetic is classified. There are three types of diabetes: Type 1, Type 2 and Gestational diabetes. Type 2 diabetes is by far the most common, making up 90 to 95 percent of new cases of diabetes. Thomas Edison may be best known for inventing the light bulb, but the Wizard of Menlo Park was also a member of the large Type 2 diabetic population. Due to insulin resistance—a condition related to excess body fat—Type 2 diabetes usually develops in obese people. This condition occurs when a normal amount of insulin no longer suffices, causing blood sugar to rise. The pancreas responds by making extra insulin to lower the sugar. Diabetes results when the pancreas can't keep up. Other times, Type 2 diabetics just stop producing enough insulin with a similar result. Type 2 diabetes usually arises in people who are at least twenty pounds overweight and over forty years old. A family history of diabetes plays a large role, as does ethnicity, with most cases occurring among Native American, Hispanic and African American descent. In contrast to the frequency of Type 2 diabetes, Type 1 diabetes makes up only 5 to 10 percent of new cases. Type 1 diabetes occurs when the body's immune system gets confused and starts to destroy the cells that produce insulin. In response, the pancreas stops making insulin altogether. People with Type 1 diabetes must take insulin daily, yet the injections don't hold them back from leading full lives. Just ask Type 1 diabetic Halle Barry, who has an Emmy, a Golden Globe and an Academy Award under her belt. Type 1 diabetes was once known as "juvenile diabetes," since it's usually diagnosed in people under twenty. Type 1 diabetics are frequently Caucasian. The third type of diabetes, gestational diabetes, occurs in 7 percent of pregnancies, probably because pregnancy hormones reduce receptiveness to insulin. Women are more likely to contract gestational diabetes if they have a family or personal history of diabetes, or if they are of non-Caucasian ethnicity. Although diabetes is currently incurable, there are a number of treatments that can allow diabetics to live healthy, normal lives. Remember, diabetes can't be self-diagnosed, so please see a doctor if you have a family history of the disease or concerns about your health.