Diabetes a hereditary disease.

Science, Genetics



Diabetes, a hereditary disease. Is diabetes a hereditary disease? For many decades, researchers have been looking for the answer to this question. Studies have shown that diabetes does run in the family. If you get diabetes as a child or later in life, you still had to have some genes that predisposed you to it. Studies have shown that even though this disease is hereditary, there are many causes of diabetes. There are two kinds of diabetes, each that is caused by different genes. Diabetes is a disease in which the body loses its ability to regulate the amount of glucose (sugar) in the blood. Glucose serves as food for the cells of your body. Without the ability to maintain a constant supply of glucose, organs, which include the brain, become deprived. The regulator of the amount of glucose in the blood is the hormone insulin. People with diabetes have to externally monitor the amount of glucose in their blood, and must daily regulate it by injecting themselves with insulin. There are two types of diabetes, one that starts when people are young and the other that starts when people are older, usually over 40. One in ten people will develop this type of diabetes at some point in their lives. There are many theories as to why people get diabetes. Unlike what some people may think, diabetes can not be caught like a cold. People can, however, inherit a tendency for the disease but no one can inherit the disease itself. A study was conducted of identical twins where it was revealed that diabetes is, in part, hereditary. If one identical twin becomes diabetic, it is more than likely that the other twin will develop this disease. Even though this is true for some twins, it must be noted that this is not true for all. This indicates that there are also non-hereditary factors involved in diabetes. For example, exposure to certain viruses may put people at higher

risk for young onset diabetes and being overweight increases the risk of older onset diabetes. Researchers have identified the genes that cause diabetes in as small percentage of people with the disease. They are currently trying to identify additional genes as well as other environmental factors that put people at risk. The hereditary factors between type I and type II diabetes are slightly different. In type I diabetes, there are several factors that can give a person a higher tendency to develop it, such as hereditary factors, immune factors, and triggering factors such as stress or viruses. If both parents have type I diabetes, the risk for developing it is less than fifty percent. If an identical twin develops type I diabetes the risk for the other person developing it is less than fifty percent. Some infections have been shown to trigger type I diabetes. There is a stronger heredity factor in developing type II diabetes. If an identical twin has type II diabetes the chance that the other twin will also develop it is ninety five percent. Certain ethnic groups, such as Hispanics, African Americans, and Native Americans have a stronger tendency in developing type II diabetes possibly because of their diet or environmental factors. There are other factors that can contribute to this disease. Obesity is a very large factor in developing type II diabetes. When a person is obese, the body has a harder time using the insulin. If a person has not inherited a tendency for type II and they become obese their body accommodates more easily and they will not develop it. But, if the person inherits a tendency for type II they have a very high risk of developing it if they become obese. Diabetes is a number of diseases that involve problems with the hormone insulin. While not everyone with type II

diabetes is overweight, obesity and lack of physical activity are two of the most common causes of this form of diabetes.