

Diabetes: The Junk Food, Couch Potato Disease



Part 1 of 2

Sometimes society cannot help but lose through winning. Currently a worldwide epidemic effecting 100,000,000 people has attacked with a vengeance. Type II diabetes is a product of our modern lifestyle. The easy access to unhealthy food, and a mass transit system where our legs take us fewer and fewer places, has directly caused the mushrooming of this disease which effects the digestive system.

Estimates are one in three American children born today will someday suffer from diabetes. Many of the 20,000,000 Americans who currently have Type II diabetes will experience one, or more of the several problems the disease causes.

Each year 750,000 Americans are diagnosed with Type II diabetes. And even though the disease is both chronic and incurable, with changes in eating and exercise habits many diabetics will live long, active lives.

[Without Insulin the Body Will Starve](#)

Diabetes is caused by the destruction of the insulin producing Beta cells within the pancreas. Insulin is a hormone built from 51 amino acids. Its job is to open a gateway into the cell through which glucose (sugar) enters. Most cells have an insulin receptor on their surface. Insulin attaches to the receptor creating a bridge through which glucose enters into the cell.

Without insulin the cell cannot receive the glucose. It must then resort to fatty acids as an alternative fuel. If the lack of insulin continues over a long period of time the cell will become hungry, causing fatigue, dizziness and several other problems for the

person. When the pancreas cannot produce enough insulin to handle the high levels of glucose in the blood, the cells will lend a helping hand by releasing some of their fluids to the circulatory system. This washes the glucose into the kidneys, which increases urine output. But the cells suffer, for the body often becomes dehydrated as a result of giving up its fluids.

The constant production of large amounts of insulin creates an enormous burden on the Beta cells ability to operate. In time, they become damaged through the stress, and either slow down, or stop functioning all together.

Three Varieties of Diabetes

Gestational Diabetes is the least common type. It attacks pregnant women. Its effects are temporary. The symptoms show themselves as a need to urinate often, and also as an excessive thirst and hunger. In many ways this just sounds like the normal last three months of pregnancy. For this reason it often goes unnoticed, but is important to attend to, as the health of the fetus is at risk with this form of diabetes.

Type I diabetes is often referred to as Juvenile Diabetes; for it generally, but not always, attacks people under the age of 20. Type I is the most serious of all the diabetes'. Beta cells within the pancreas are destroyed by antibodies sent to the area by the immune system. The reason for this autoimmune disease response is not totally known. Research has indicated albumin, a cow's milk protein, has the same amino acids sequence as does the Beta cells in the pancreas. When a person who is allergic to milk drinks it, antibodies attack the albumin, but may also sense the Beta cells as albumin and destroy them too. Once a person has Type I diabetes they will be dependent on insulin shots for the rest of their life. Research indicates how well a person manages their Type I diabetes during the first year, the longer their survival chances will be. Symptoms of Type I diabetes are frequent need to urinate, an increased appetite and thirst, fatigue, weight loss, dehydration and even unconsciousness leading to a coma.

Type II diabetes is the form that has developed into an epidemic. Of all the forms of diabetes nearly 95% of all cases end up being Type II. With Type II diabetes a poor diet and lack of exercise is often the biggest contributors to the onslaught of the disease. When too much sugar is eaten the pancreas goes into overdrive in an effort to make enough insulin to handle the excess. Over years of similar eating habits a duo set of results begins to emerge. On one hand, the Beta cells become less able to produce the insulin needed; on the other hand, the insulin receptors within the cells become dysfunctional and refuses to take in such high quantities of glucose. This leaves the glucose in the bloodstream, building up and becoming sticky. Which in turn causes the membrane surrounding the capillaries to thicken. The build up of glucose begins to damage the body's blood circulatory system, especially the capillaries, which are the smallest vessels.

Once the blood delivery system suffers damage a plethora of ailments begin to plague the body. For example, within the eyes new blood vessels are formed in an effort to bring oxygen to the area. Often these break causing hemorrhaging within the retina. Capillary damage to the nervous system results in painful leg and feet discomfort. This leads to feet ulcers, which often turn gangrene. In the worse case scenario, amputation of the limb becomes necessary for the salvation of the body. The destruction of the capillary system will in time harm every part of the body, and may ultimately lead to death.

Diabetes, without a doubt, is a life threatening disease; but there are many things one can do to guard against the ailment, or keep it manageable. In the next newsletter many of these defenses will be explained in detail, as well as methods of implementing them.



Article written by Cat Pippin Lowe for Promolife, Inc.