

Diabetes mellitus (commonly known as diabetes or sugar disease) and is one of two major forms of diabetes (Diabetes Mellitus and Diabetes Insipidus). Diabetes Mellitus is the most common type of diabetes and is caused when the pancreas cells are unable to produce enough insulin necessary to keep your blood glucose / sugar levels within normal fasting ranges (3.9 - 5.5mmol/L). Fasting levels between 6-7 are known as prediabetic or insulin resistant and a fasting level over 7 or 8 normally indicates diabetes. However, a blood test alone does not make a diagnosis, your doctor will make a diagnosis based on a full clinical assessment.

Glucose (sugar) mainly comes from carbohydrates in your food and drinks. It's your body's go-to source of energy. Your blood carries glucose to all your body's cells to use for energy. When glucose is in your bloodstream, it peaks after meals and needs help to move into the cells to be used when your blood sugar levels fall. This help comes in the form of insulin which is a hormone in your body. If your pancreas isn't making enough insulin or your body isn't using it correctly, glucose builds up in your bloodstream, causing high blood sugar (hyperglycaemia). Most forms of diabetes are chronic but can be managed with lifestyle changes and medications if necessary.

There are different types of diabetes mellitus:

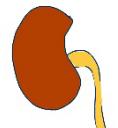
- **Type 1 diabetes** (previously called "juvenile diabetes") which is an autoimmune disorder, in which the insulin producing beta cells found in the pancreas are destroyed by the body's immune system. This means that the immune system, starts to attack its own body resulting in the pancreas not being able to produce insulin, the hormone that allows glucose to enter and fuel the cells. To survive, individuals with type 1 diabetes must take insulin every day.
- **Type 2 diabetes** (previously called "adult-onset diabetes") is the most common type of diabetes, accounting for 90-95% of all diabetes. In type 2 diabetes, the body does not produce enough insulin and/or the body's cells become resistant to insulin. While there is a strong genetic component to developing this form of diabetes, there are other risk factors - the most significant of which is **obesity**. There is a direct relationship between the degree of obesity and the risk of developing type 2 diabetes, and this holds true in children as well as adults. It is estimated that the chance to develop diabetes doubles for every 20% increase over desirable body weight. Although many of these patients are on insulin or glucose lowering tablets, with weight loss and good diet modifications, some patients can come off medication

completely. This needs to be guided and closely monitored by your doctor with the assistance of a dietician.

- **Gestational diabetes** occurs in some women who have high blood glucose levels during pregnancy but have never had diabetes. It affects about 4% of all pregnant women and they have an increased risk (20-50% chance) of developing type 2 diabetes in the following five to ten years.
- **Prediabetes** is a condition that occurs when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes. Following a strict diet and possibly losing weight while increasing exercise may prevent prediabetes from converting to diabetes.

Diabetes is linked to several vascular diseases:

- Retinopathy, which is an abnormal growth of blood vessels in your retina which could lead to blindness
- Nephropathy, a disease that damages the tiny filtering units of the kidney which may lead to kidney failure
 - Neuropathy, a condition causing a loss of sensation in the feet and toes which may result to increased sores, infection, burns and gangrene of your toes and feet
 - Coronary Artery Disease (CAD) which causes blockages in your heart vessels and may lead to chest pain with exercise (angina) or heart attack.
- Stroke, exhibited by the sudden onset of numbness or weakness usually on one side of the body (face, arm and / or leg), confusion, trouble speaking, or difficulty understanding speech. Sudden trouble seeing in one or both eyes and or sudden trouble walking, dizziness, loss of balance, or lack of coordination are other possible symptoms of stroke.
- Peripheral Artery Disease (PAD) which causes blockages in your blood vessels and may lead to difficulty walking (claudication), gangrene and amputation.



Diabetes can truly be the deadly disease. Please consult your doctor if you have any initial signs which include:

- Excessive thirst and hunger.
- Frequent urination, particularly at night.
- Weight loss or gain
- Fatigue or irritability.
- Abdominal pain and or nausea

DIABETES THE DEADLY DISEASE
BY SR ANNETTE ANDERSON (M.CUR)

- Blurred vision, tingling, pain or numbness in your hand and or feet and
- Slow-healing wounds.

Should you be diagnosed with diabetes, remember that maintaining good control of your diabetes and working together with your doctor and dietitian can make a huge difference.

For a free diabetic recipe book from the Diabetes Association of South Africa, please click this picture below.

