



Complications of diabetes

Untreated or uncontrolled diabetes leads to serious complications.

Diabetes can affect the blood vessels and the heart – causing heart disease, stroke and problems due to poor blood circulation. A persistently high blood glucose level damages the small vessels in the body, particularly in the eyes, kidneys and nerves.

Diabetes can therefore cause blindness, kidney disease, loss of sensation in the hands and feet, and impotence. Such people with diabetes often injure themselves without realising it and the wounds or infection take a longer time to heal.

Good diabetes control will reduce the risk or delay the onset of these complications.



NHG Diabetes Workgroup



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A Patient Education Guide to
Understanding Diabetes Mellitus



Adding years of healthy life

What is Diabetes Mellitus?

Diabetes Mellitus is a disease where there is too much glucose in the blood. During digestion, the body changes food into a simple sugar called glucose. The glucose is absorbed into the blood and the body uses it for energy. In a normal person, a hormone called insulin helps glucose in the blood to enter the body cells where it is turned into energy or stored for future use. Insulin is made by the pancreas, a gland found behind the stomach.

In a person with diabetes, the insulin released is either inadequate or not able to do its work of absorbing the glucose from the blood into the cells. As a result, glucose cannot enter the body cells and it remains in the blood, giving rise to a high glucose level in the blood.

Who gets diabetes?

The 1998 National Health Survey showed that 9% of adult Singaporeans have diabetes. People who are over 40 years of age, have a family history of diabetes and who are overweight, are at higher risk of getting diabetes.



Types of diabetes

There are two main types of diabetes: Type 1 diabetes (insulin-dependent) and Type 2 diabetes (non-insulin-dependent). Extra demands on the pancreas cause some women to develop diabetes during pregnancy, known as gestational diabetes.

Type 1 diabetes (insulin-dependent)

People with type 1 diabetes have high blood glucose levels because the pancreas is not able to produce enough insulin. This type of diabetes usually begins at a young age often with dramatic symptoms. People with type 1 diabetes must be given insulin injections everyday. In order to control their blood glucose levels, they have to learn how to balance the foods they eat and the activities they do with the insulin they take.

Type 2 diabetes (non-insulin-dependent)

This is the most common type of diabetes. It is estimated that more than 90% of people with diabetes have this type of diabetes. People with type 2 diabetes are able to produce some insulin but this may not be effective in keeping the blood glucose level normal. Type 2 diabetes usually comes on later in life, often after age 40. The symptoms start gradually, so many people may not realise that they have diabetes. Type 2 diabetes can be controlled by diet, exercise and oral medications. If these fail to provide good control, insulin injections may be needed.

Gestational diabetes

Gestational diabetes occurs in pregnancy and significantly increases the risk of complications. The blood glucose levels have to be carefully controlled during pregnancy to avoid problems in both mother and child. Gestational diabetes also increases the woman's risk of developing type 2 diabetes later in life.

Signs of diabetes

You may have the following signs and symptoms:

- Frequent passing of urine.
- Increased thirst.
- Weight loss despite good appetite.
- Hunger.
- General weakness and fatigue.
- Blurred vision.
- Reduced feelings in hands or feet.
- Itchy skin, especially in the genital areas.
- Slow healing of cuts and wounds.

However, symptoms are sometimes mild and many people with diabetes also do not experience any of the symptoms until the disease is at a late stage. Hence, anyone who is at risk of diabetes should go for regular checks of their blood glucose levels.

