Understanding diabetes

**Glucose enters the bloodstream**

When we eat carbohydrate foods such as bread, cereal, rice, pasta, starch vegetables, milk, yoghurt and fruit, they are broken down to glucose in the digestive tract (mouth, stomach and bowels).

**Insulin enters the bloodstream from the pancreas**

When blood glucose levels rise, the pancreas releases a hormone called insulin.

**Insulin allows glucose to enter body cells**

Glucose enters the cells of the body including muscles where it is used for energy. This lowers blood glucose levels as glucose leaves the blood to enter the body cells.

**Type 1 diabetes**

In type 1 diabetes the body does not make insulin. No glucose can enter the cells.

**Type 2 diabetes**

In type 2 diabetes the body has a reduced response to insulin. Less glucose can enter the cells.

Eventually the body may make less insulin. This causes high levels of glucose in the blood which can damage the body.

Excess fat around the waist can also reduce the body’s response to insulin.
Understanding diabetes

When you have diabetes, there is too much sugar in the blood. This sugar is called glucose. The blood glucose level is controlled by insulin. Insulin is a hormone made in the pancreas. Insulin is like a key that helps glucose enter the cells of the body where it is used for energy. Diabetes can be well controlled. Your diabetes health care team are here to help you.

Type 1 diabetes

Occurs when the body’s immune system destroys the cells in the pancreas which make insulin. People who have type 1 diabetes need to inject insulin every day.

Type 2 diabetes

Occurs when the cells in the body do not respond effectively to insulin. People with type 2 diabetes may need tablets and/or injectable therapy or insulin injections to manage their diabetes.

Risk factors for type 2 diabetes

People are at a higher risk of getting type 2 diabetes if they:
- have a family history of diabetes
- are over 55 years of age
- are over 45 years of age and are overweight or have high blood pressure
- are over 35 years of age and are of Aboriginal or Torres Strait Islander background or are from Pacific Island, Indian subcontinent or Chinese cultural background
- have given birth to a child over 4.5kgs or had gestational diabetes (GDM) when pregnant
- have Polycystic Ovarian Syndrome (PCOS).

The benefits of controlling blood glucose levels

There is no cure for diabetes although it can be managed through lifestyle modification and medication. Diabetes is progressive and needs to be managed effectively to prevent complications. These complications can include:
- heart attack and stroke
- damage to eyesight
- reduced kidney function (which can lead to dialysis and kidney failure)
- nerve damage (especially to hands and feet)
- poor circulation (which can lead to amputation)
- erectile dysfunction in men
- dental issues
- increased risk and slower recovery from infection (e.g. influenza).

For support make an appointment with your GP, Credentialled Diabetes Nurse Educator or Accredited Practising Dietitian.