

Monitoring your glucose levels

Glucose levels can be tested with a drop of blood obtained by pricking the finger with a sharp needle, or as part of an oral glucose tolerance test ordered by your doctor.

Classification values for fasting blood glucose levels by pricking the finger are:

Normal blood glucose	4-6 mmol/L
Moderate blood glucose	6-7 mmol/L
High blood glucose	Above 7 mmol/L

*Based on the Diabetes Australia targets for glycaemic control.

However the symptoms of diabetes may not appear until blood glucose levels are higher. So some people may have diabetes without knowing about it!

Those most at risk of Type II diabetes

- People over 55 years of age
- People with a family history of diabetes
- Overweight individuals
- People with high blood pressure
- People with heart disease
- Women who had pregnancy-related diabetes
- People over 35 years of age who are of Aboriginal Torres Strait Island, Chinese, Indian, Maori or Pacific Island heritage.

Complications of diabetes?

Over time, untreated high blood glucose levels will cause:

- Increased risk of heart attack or stroke
- Blood vessel and nerve damage
- Eye disease or blindness
- Kidney disease
- Poor circulation (sometimes requiring limb amputations)
- Foot problems
- Poor wound healing
- Impotence in men



Diabetes and Your Health

Regulating your blood sugar level by modifying your lifestyle and eating habits, combined with regular medical check-ups can help to prevent complications from diabetes.

We aim to reduce death and disability from cardiovascular disease, diabetes and other health disorders related to obesity through research, clinical care, education and advocacy.

For more information contact Preventative Cardiology:

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The facts

The number of people with diabetes in Australia is three times higher than 25 years ago! Almost one in four Australians aged over 25 years has diabetes or are on the cusp of diabetes. Many people with diabetes don't know that they have it!

What is diabetes?

Diabetes is a condition in which the level of glucose (a sugar) in the blood is too high. This is caused by a problem with the hormone "insulin" and its role in controlling blood glucose levels.

Normal control of glucose

When the relationship between glucose and insulin is intact, the body controls glucose in the following way:

1. Glucose comes from food that contains carbohydrates (starch and sugar). After eating, blood glucose levels rise.
2. Glucose is absorbed into the blood stream and carried to the muscle and other body cells or the brain. Glucose provides the energy to perform everyday tasks, such as thinking, walking, talking and breathing.
3. Glucose can only enter the muscles with the release of insulin, which is made in the pancreas, into the blood.



There are two types of diabetes

In all diabetic cases, excess glucose remains in the blood stream resulting in higher than normal blood glucose levels.

Type I

- 🔹 Develops when the pancreas stops producing insulin, preventing glucose from entering the muscle or other body cells.
- 🔹 This is caused by the body's immune system attacking and destroying the cells.
- 🔹 Is less common than Type II diabetes and usually occurs under the age of 30.
- 🔹 Comes on quickly and can be severe and life-threatening if treatment is delayed.

Type II (called "insulin resistant")

- 🔹 Develops when the body does not respond properly to insulin. Insulin is still produced by the pancreas but there may be less of it or it may not work effectively.
- 🔹 This may be caused by genetic factors but can be triggered or made worse by being overweight and lack of exercise.
- 🔹 Is the most common type of diabetes and usually occurs in people over the age of 30 but is becoming more common in children and middle-aged adults due to the increase in obesity.
- 🔹 The onset is usually slow and sometimes difficult to recognise.

Symptoms of diabetes

Both types of diabetes show similar symptoms but the severity is usually greater in Type I diabetes. The symptoms of diabetes include:

- 🔹 Irritability
- 🔹 Tiredness/lack of energy
- 🔹 Extreme hunger
- 🔹 Blurred vision
- 🔹 Excessive thirst
- 🔹 Frequent urination
- 🔹 Skin infections (e.g. thrush) and itchiness
- 🔹 Rapid and unplanned weight loss (Type I)

Please seek medical advice if you experience or suffer any of these signs or symptoms.

How is diabetes treated?

Treatments are available for diabetes but prevention is preferred to avoid long-term complications by:

- 🔹 Managing your weight through a healthy diet and exercise.
- 🔹 Regularly monitoring your blood glucose and blood cholesterol levels.
- 🔹 Having frequent blood pressure checks.



Type I diabetes is treated with insulin replacement injections, usually several times a day. For Type II diabetes, medications and eventually insulin injections may be needed as the disease progresses and the pancreas produces less insulin.