

Diabetes type 2

Diabetes is a condition where there is too much glucose, a type of sugar, in the blood. There are two main types of diabetes – type 1 and type 2.

Type 2 diabetes is sometimes described as a 'lifestyle disease' because it is more common in people who do insufficient physical activity and are overweight or obese. It is strongly associated with high blood pressure, high cholesterol and an 'apple' body shape, where excess weight is carried around the waist.

Type 2 diabetes, the most common form of diabetes, affects 85 to 90 per cent of all people with diabetes. While it usually affects mature adults, younger people are also now being diagnosed in greater numbers as rates of overweight and obesity increase. Type 2 diabetes used to be called non-insulin dependent diabetes or mature onset diabetes.

The causes of type 2 diabetes are known and in some cases it can be prevented. However there is no cure for type 2 diabetes.

Symptoms

Type 2 diabetes often has no symptoms. About half of those who have type 2 diabetes have not yet been diagnosed. Even if symptoms are present, they are often not recognised or are attributed to other reasons such as being busy or 'getting older'.

In many cases blood glucose levels can be very high by the time symptoms are noticed and medical treatment is sought. Common symptoms include:

- Being more thirsty than usual
- Passing more urine
- Feeling tired and lethargic
- Slow-healing wounds
- Itching and skin infections
- Blurred vision
- Mood swings.

Glucose metabolism explained

The body uses glucose as its main source of energy. Glucose comes from foods that contain carbohydrates such as potatoes, bread, pasta and rice, fruit and milk. After food is digested, the glucose is released and absorbed into the bloodstream.

The glucose in the bloodstream needs to move into body tissues so that cells can use it for energy. Excess glucose is also stored in the liver or converted to fat and stored in other body tissues.

Insulin is a hormone made by the pancreas, which is a gland located just below the stomach. Insulin opens the doors (the glucose channels) that let glucose move from the blood into the body cells. This is part of a process known as glucose metabolism.

In diabetes, one of two things occurs.

- The pancreas can't make insulin (type 1 diabetes), or
- The cells don't respond to the insulin properly (insulin resistance) and the pancreas produces inadequate insulin for the body's increased needs (type 2 diabetes).

If the insulin can't do its job, the glucose channels can't open properly and glucose builds up in the blood. High blood glucose levels cause the health problems linked to diabetes, often referred to as complications.

Risk factors for type 2 diabetes

While there is no single cause of type 2 diabetes, there are well-known risk factors.

Those most at risk of developing type 2 diabetes include:

- People with pre-diabetes.
- Aboriginal and Torres Strait Islander people aged 35 and over.
- People aged 35 and over who are Pacific Islanders, Maori, Asian (including the Indian subcontinent, or of Chinese origin) Middle Eastern, North African or Southern European.
- People aged 45 and over who are obese or overweight, have high blood pressure or have a first-degree relative with type 2 diabetes.
- All people with cardiovascular disease such as heart attack, angina, stroke, or narrowed blood vessels.
- Women with polycystic ovarian syndrome who are overweight.
- Women who have had gestational diabetes.
- People aged 55 or over.
- People with a first degree relative with type 2 diabetes
- People taking certain antipsychotic medications
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Lifestyle factors that increase the risk of developing type 2 diabetes include:

- Being overweight or obese, especially around the waist.
- Low levels of physical activity.
- Unhealthy eating habits, such as regularly choosing high fat, high sugar, high salt or low fibre foods.
- Cigarette smoking.

People at risk need to have a laboratory blood glucose test (not using a portable blood glucose meter) performed by their doctor to check if they have diabetes. This test is preferably done after fasting. It is important not to wait for symptoms to develop as these may not appear until the blood glucose is quite high.

Pre-diabetes

Pre-diabetes is a condition in which the blood glucose level is higher than normal but not high enough to be called diabetes. Pre-diabetic conditions include impaired fasting glucose and impaired glucose tolerance. It is important that people with these conditions reduce their risk of developing diabetes by increasing their physical activity and seeing a dietitian to develop a healthy eating plan and assist them to lose weight.

Gestational diabetes

Gestational diabetes is diabetes that occurs in, and is diagnosed during, pregnancy. It usually goes away after the baby is born, but the mother and child are at increased risk of type 2 diabetes later in life.

Type 2 diabetes management options

The aim of diabetes treatment is to maintain blood glucose levels within the normal range, which is between 3.5 and 6 mmol/L before meals and 3.5 and 8mmol/L two hours after meals. This will help prevent possible long-term problems that can affect the heart, blood vessels, eyes, kidneys and nerves.

Keeping your blood pressure and cholesterol within the recommended range is very important to help prevent these long-term problems. Healthy eating, achieving and maintaining a healthy weight and doing regular physical activity can help you do this. Sometimes tablets and then insulin may also be needed.

Your healthcare team

A lifelong condition like diabetes is best managed with the support of a diabetes healthcare team. You are the most important member of your diabetes team. Other members are your doctor, diabetes educator, dietitian and podiatrist. Depending on your needs, the team may also include medical specialists, exercise physiologists and counsellors.

Self-care basics

Suggestions to manage your diabetes include:

- Link up with the diabetes team in your area. Your doctor may need to refer you, but this isn't always necessary. Call Diabetes Australia – Vic to find health professionals in your local area.
- Test your blood glucose levels regularly.
- Use any medication strictly as prescribed.
- Be physically active as often as you can.
- Have a healthy eating plan.
- Keep a positive mental attitude and seek advice if anxious or depressed.
- Seek medical advice if unwell.
- Consider joining a support group.

Where to get help

- Your doctor
- Diabetes educator
- An accredited practising dietitian, contact the Dietitians Association of Australia
- Podiatrist
- Diabetes Australia Victoria Tel. 13 RISK (13 7475)
- Baker IDI Heart and Diabetes Institute Tel. (03) 9258 5000

Things to remember

- Type 2 diabetes is strongly associated with being overweight and physically inactive.
- Type 2 diabetes may be prevented but it cannot be cured.
- Lifelong management should include regular exercise, healthy eating, loss of excess body weight and, where appropriate, use of prescribed medications.

This page has been produced in consultation with, and approved by:

Diabetes Australia Victoria

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