



Pharmaceutical
Society of Australia



Diabetes

Type 2

Diabetes causes high blood glucose levels and serious changes in metabolism. Type 2 diabetes results from problems with the way the body produces or responds to insulin, the hormone that enables body cells to use glucose (a type of sugar) for energy.

Glucose (from our food) is our bodies' main fuel. In type 2 diabetes, body cells cannot metabolise glucose properly, because they are resistant to insulin and/or the pancreas does not produce enough insulin for the body's needs. This leads to an abnormally high blood glucose level.

Type 2 diabetes used to be called 'non-insulin dependent diabetes mellitus' or 'mature-onset' diabetes. It is the most common form of diabetes. A family history of type 2 diabetes and an unhealthy lifestyle put people at an increased risk of developing the disorder. It often occurs together with high blood pressure, high blood cholesterol and excess body weight, especially around the waist.

Diabetes Risk Test

If you can tick one or more boxes you are at risk of diabetes. Take this card to your doctor and ask for a diabetes test.

- I have/had a family member with diabetes.
- I am over 45 and have high blood pressure.
- I am over 45 and am overweight.
- I am over 55.
- I have heart disease or have had a heart attack or stroke.
- I had high blood sugar levels while I was pregnant.
- I have had a borderline high blood sugar test.
- I have polycystic ovarian syndrome.
- I am over 35 and have an Aboriginal, Torres Strait Islander, Pacific Island, Indian subcontinent or Chinese family background.

Signs and symptoms

Symptoms usually develop gradually. They are due to high blood glucose levels (hyperglycaemia) and changes in metabolism and include:

- Feeling excessively thirsty
- Passing more urine
- Tiredness
- Excessive hunger
- Blurred vision
- Frequent infections (e.g., thrush, cystitis).

Blood glucose levels may be raised for a long time before causing symptoms.

Long term effects

Over time diabetes can damage blood vessels and nerves, leading to complications including:

- Eye damage – diabetic retinopathy can cause vision impairment and blindness
- Kidney damage
- Heart disease
- Stroke
- Nerve pain or numbness (neuropathy)
- Slow healing wounds (e.g., leg and foot ulcers)
- Erectile dysfunction (male impotence).

Early and strict control of blood glucose levels can limit these complications.

Treatment

Treatment aims to improve glucose metabolism and keep blood glucose levels as close to normal as possible (4-8 mmol/L). It involves healthy eating, physical activity and medicines.

There are several different types of diabetes tablets that work in different ways to improve glucose metabolism and lower blood glucose. Some people need to take more than one type of tablet and some people eventually need insulin injections.

It is usually recommended that people with type 2 diabetes test their blood glucose level regularly, using a home blood glucose monitor.

Hypoglycaemia

Hypoglycaemia means low blood glucose, which may occur if doses of diabetes tablets or insulin are not balanced to food intake and physical activity. The symptoms of hypoglycaemia (a 'hypo') are different for different people. They include:

- Shaking, weakness, dizziness
- Hunger
- Sweating
- Fast heart beat
- Numbness or tingling around lips
- Unusual behaviour (e.g., irritability, drowsiness, confusion)
- Blurred vision
- Headache
- Slurred speech
- Loss of consciousness.

A 'hypo' needs immediate treatment. If hypoglycaemic, a diabetic needs to have:

- quick-acting carbohydrate (glucose) (e.g., ½ glass soft drink/fruit juice, 3 teaspoons sugar/honey, 6-7 jelly beans), then
- longer acting carbohydrate within 20 minutes (e.g., a meal, fruit, yoghurt, milk).

Note: If a diabetic with hypoglycaemia is unable to swallow, do not give them anything by mouth. Follow first aid procedures and phone 000 for an ambulance.

The National Diabetes Services Scheme (NDSS)

The NDSS is an Australian Government initiative administered by Diabetes Australia that provides diabetic equipment at subsidised prices. Diabetics must be registered with NDSS by their doctor or a credentialed Diabetes Educator (CDE). Some pharmacies act as NDSS agents and stock the subsidised equipment.

Self care

A healthy lifestyle can delay or prevent type 2 diabetes and help treat it.

- Eat regular, healthy meals, including fruit, vegetables and wholegrains. Limit foods high in fat, sugar or salt.

- Exercise at a moderate level for at least 30 minutes on all or most days of the week.
- Keep to a healthy body weight.
- Limit alcohol and eat carbohydrate foods when drinking.
- Don't smoke – it contributes to diabetic complications.
- Monitor your blood glucose levels regularly.
- Follow the use and maintenance instructions for your home blood glucose monitor.
- Follow the instructions for your diabetes medicines.
- Have regular checks for blood pressure, cholesterol, eyes and kidneys.
- Take extra care of your feet and have them checked regularly by a doctor or podiatrist.
- Always have some quick-acting carbohydrate (glucose) with you.
- Teach your friends, family and co-workers how to recognise and treat a 'hypo'.
- Develop a 'sick day plan' with your doctor and follow it when unwell.
- Link up with the diabetes team in your area. Diabetic teams include doctors, diabetic educators, dietitians, podiatrists and pharmacists.
- Join Diabetes Australia and the NDSS.
- Wear identification that says you have diabetes.

Related fact cards

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- *Exercise and the Heart*
- *Fat and Cholesterol*
- *High Blood Pressure*
- *Oral Health*
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- *Diabetes Type 1*
- *Vision Impairment*
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For more information

Baker IDI Heart and Diabetes Institute – www.bakeridi.edu.au

Diabetes Australia – phone 1300 136 588 or website www.diabetesaustralia.com.au

HEALTHInsite – website www.healthinsite.gov.au

Consumer Medicine Information (CMI) leaflets – your pharmacist can advise on availability.

NPS Medicines Line – phone 1300 888 763 Monday to Friday, 9am to 6pm EST.

The Poisons Information Centre – in case of poisoning phone 131 126 from anywhere in Australia.

Pharmacists are medicines experts. Ask a pharmacist for advice when choosing a medicine.

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