

What is type 2 diabetes?

Diabetes is a condition where the body is unable to control the level of glucose in the blood. Type 2 diabetes is the most common type of diabetes. In type 2 diabetes, the glucose level is managed by eating well, physical activity and medication.

What causes type 2 diabetes?

Insulin is made in your body by the pancreas. Insulin is needed to assist glucose in the bloodstream to enter the body cells and be used for energy.

People with type 2 diabetes have 'insulin resistance'. This means that the pancreas is making insulin but the action of the insulin has become less effective.

The pancreas makes more insulin to try to fix this problem but, over time, it tires and cannot make enough. This is called 'insulin deficiency'.

'Insulin resistance' and 'insulin deficiency' results in high blood glucose levels and type 2 diabetes.

As yet there is no cure, but you can manage type 2 diabetes. There is active research into better and easier ways to reduce the risk of getting type 2 diabetes and managing type 2 diabetes.

Who is most likely to develop type 2 diabetes?

Risk factors for type 2 diabetes are;

- > age (eg the risk increases with ageing)
- > having a family history of diabetes
- > being above your healthy weight
- > being inactive
- > having polycystic ovarian syndrome
- > having gestational diabetes during pregnancy
- > having heart disease
- > using some medications (eg antipsychotic)
- > an Aboriginal, Torres Strait Islander, Pacific Islander or come from a Southern European or Asian background.

Darkening skin pigment (acanthosis nigricans), skin tags, menstrual irregularities and excessive facial and body hair (hirsutism) may also increase risk.

Why is glucose and insulin important?

Your body needs glucose for energy. Glucose comes from the carbohydrate foods we eat (eg breads and cereals, fruit and starchy vegetables, milk and yoghurt) and sugar (eg table sugar) which is added to foods and drinks.

Your body needs insulin to use the glucose. Insulin is a natural hormone produced by the pancreas. As glucose enters the blood, the pancreas normally releases just the right amount of insulin. In type 2 diabetes, insulin resistance or insulin deficiency stops the glucose balance from being just right and blood glucose levels rise above the normal range.

How do I know I have type 2 diabetes?

Some people with risk factors for type 2 diabetes will have their blood tested each year by their doctor. Others may develop symptoms that trigger the doctor to test. Symptoms are;

- > passing large amounts of urine often
- > being extra thirsty
- > feeling extra tired and lacking energy
- > blurred vision
- > skin rashes or infections that do not heal.

The only way to know if you have type 2 diabetes is to have a blood test that checks the blood glucose level. Type 2 diabetes is diagnosed by using one or more of the following blood tests:

- > fasting glucose level is higher than 7.0mmol/L or
- > random glucose is higher than 11.0mmol/L or
- > HbA1c is higher than 6.5% (more than 48mmol/mol) or
- > oral glucose tolerance test (if result is unclear).

How is it managed?

Type 2 diabetes is managed by improving lifestyle and with medication. Lifestyle modification includes eating well, being as close to your healthy weight as possible, regular physical activity, and reducing other risk factors such as smoking, blood pressure and cholesterol.

Over time, people with type 2 diabetes will need help from tablets and/or injectable medication.

There are also self-care activities that people with type 2 diabetes will need to learn. Some of these include:

- > testing blood glucose levels
- > managing medication (eg tablets or injectables)
- > what to do if the blood glucose goes too high (Sick Day Action Plan)
- > what to do if the blood glucose level goes too low (Hypo Action Plan if on tablets or insulin)
- > what to do if unwell (Sick Day Action Plan).

Who can be part of your health care team?

- > A local doctor who provides medical advice and helps you navigate the health system.
- > A credentialled diabetes educator and dietitian with training in type 2 diabetes will assist with self-care education and day to day management.
- > An endocrinologist or physician to provide specialist medical advice may be required.
- > Specialists such as ophthalmologist, podiatrist, exercise physiologist, dentist or psychologist.

Questions to ask my health care professional

Key points to remember

- > Risk factors for developing type 2 diabetes are common.
- > Get tested if at risk or if you have any symptoms.
- > There are services and support for you, ask your doctor for a referral to your local diabetes education service.
- > Improving lifestyle may delay the need for tablets and/or insulin. Most patients with type 2 diabetes will need tablets and/or insulin at some point. This is not because they have failed, it is because type 2 diabetes progresses as you get older.
- > By improving your lifestyle and taking diabetes medication as soon as it is needed, you can reduce the risk of developing complications.

Where can I go for more information?

Diabetes Australia	www.diabetesaustralia.com.au
Diabetes SA	www.diabetessa.com.au
Dietitians Association of Australia	www.daa.asn.au

For more information

CHSA Diabetes Service
Country Health SA LHN
PO Box 287, Rundle Mall
ADELAIDE SA 5000
Telephone: (08) 8226 7168
www.chsa-diabetes.org.au