

# What is diabetes?

Diabetes mellitus is a condition in which the body is unable to control the levels of blood glucose.

Normally the body maintains blood glucose levels between 3-8mmol/L.

The body needs a certain amount of blood glucose. This glucose is made from the carbohydrate foods we eat such as breads and cereals, fruits and starchy vegetables, and also from sugars such as table sugar and honey which are added to the food at the table or in cooking.

Glucose is carried around the body in the blood stream. The levels of blood glucose are controlled by insulin. Insulin is a hormone produced by the pancreas. As glucose enters the blood the pancreas releases more insulin.

## How do you manage diabetes?

Diabetes can be managed with:

- > a healthy diet
- > weight control
- > regular exercise
- > healthy lifestyle
- > tablets or insulin if needed.

## What does insulin do?

Insulin is needed to allow glucose to enter the cells. The body is made up of millions of cells which are the building blocks of the body, and each of these cells needs glucose for energy.

If there is not enough insulin activity the blood glucose level rises. A person with untreated diabetes has high blood glucose levels. High blood glucose levels can severely affect both short and long term health.

Approximately 3.8% of Australians have diabetes. It is also claimed that there are another 3.8% who are as yet undiagnosed.

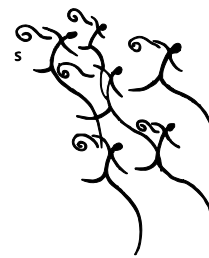
**Insulin is responsible for the uptake, storage and use of glucose by the body cells.**



**food** is broken down by digestive juices



**starch** is broken down into glucose which makes the pancreas release insulin



**insulin** controls glucose which makes energy. Insulin enables the body cells to use glucose for energy



## What are the symptoms?

Elevated blood glucose levels may cause the body to develop symptoms

These include:

- > passing large amounts of urine, especially at night
- > being abnormally thirsty
- > being tired, drowsy, or lacking in energy
- > losing weight but with increased hunger
- > blurred vision
- > skin disorders, rashes and infections

Not everyone has symptoms and some just have one or two.

## How is it diagnosed?

If you have any of these symptoms, your doctor will do a simple blood test to check for raised blood glucose levels. Your doctor may arrange a glucose tolerance test.

The glucose tolerance test will take two hours and you will need to fast before the test. You will be given a solution of glucose to drink and your blood will then be tested at regular intervals.

## The two main types of diabetes

### Type 1 diabetes

Usually develops in young people. This was previously known as insulin dependent diabetes

#### Who is affected?

Usually children and people under 30. Often there is no family history of diabetes

#### What goes wrong?

No insulin is produced by the pancreas

#### Onset

Symptoms occur suddenly and severely (days to weeks)

#### Treatment

Insulin injections as well as healthy nutrition, exercise and a healthy lifestyle.

### Type 2 diabetes

Usually develops in older people and was known as non insulin dependent diabetes

#### Who is affected?

Usually over 40 years of age. A family history of diabetes is common. Often overweight people.

#### What goes wrong?

Some insulin is produced but is not effective or only partially effective

#### Onset

Symptoms occur more gradually (weeks to months, even years)

#### Treatment

Often controlled by healthy nutrition, exercise and a healthy lifestyle. May need tablets or insulin in some cases.

*Another type of diabetes is gestational diabetes which may occur during pregnancy (see pamphlet on gestational diabetes in this series.)*



## Can diabetes be cured?

As yet there is no cure, but you can manage diabetes. There is active research into a cure and at present the future seems brighter for people with type 1 diabetes. Every year there are major new advances in all types of diabetes.

## Where to get more information.

Your local doctor, hospital or community health care centre and Diabetes Australia, South Australia. Telephone 1800 634 253

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## For more information

**Diabetes Outreach**  
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