



Lancetcares



**DIABETES**





### WHAT IS DIABETES?

Diabetes is a lifelong disease in which the body cannot process sugar properly. Diabetes is also called diabetes mellitus or sugar diabetes. When people who have diabetes eat glucose, which is found in foods such as breads, potatoes and sweets, it can't be converted into energy. Instead of being converted into energy, the glucose stays in the blood. This is why people who have diabetes have blood sugar (glucose) that is too high.

Your blood needs to always contain sugar as available energy. But too much sugar is not good for your health as it may damage your heart, kidneys, eyes, nerves, teeth and gums.

### THE TWO COMMON TYPES OF DIABETES

#### Type 1 diabetes

This is commonly diagnosed in children, teenagers and young adults. People with this type of diabetes do not produce insulin and therefore need to take insulin injections every day.

#### Type 2 diabetes

This is the most common type of diabetes. People with this type of diabetes cannot use insulin well and therefore need to take tablets or insulin. People who are overweight and inactive have increased risk of developing type 2 diabetes.



### ARE YOU AT RISK FOR DIABETES?

The likelihood of developing diabetes is much higher if you:

- are 40 years or older
- are overweight
- are Black or Indian
- have a parent, sister or brother with diabetes
- have high blood pressure (above 140/90)
- have low HDL (good cholesterol) and high levels of other lipids (fats)
- have had diabetes during pregnancy and delivered a large baby (4kg or more)

### HOW DO I KNOW IF I HAVE DIABETES?

You may have one or more of the symptoms below or there may be no symptoms at all. It is advisable to visit your doctor so that he/she can decide on the appropriate test for testing your blood sugar.

#### The symptoms of high blood sugar are:

- being very thirsty
- passing urine more often, even at night
- feeling hungry or tired more often
- losing weight without trying to
- having sores that heal very slowly
- having dry and itchy skin
- losing feeling in your feet or feeling a tingling sensation in your feet



- having blurry vision

### TESTS DONE FOR DIABETES

#### Blood sugar (glucose)

Your blood sugar can be tested following an overnight fast (the blood is tested first thing in the morning before eating and drinking anything). Your doctor may however choose to test a random blood sugar level that can be drawn anytime without prior fasting.

#### Glucose tolerance test (GTT)

This is also known as a glucose loading test. For this test you need to fast overnight and have the test done before you eat anything in the morning. A blood sugar sample is taken first, before you are given a solution mixed with 75g sugar to drink. You need to stay seated for the duration of the test. A second blood sugar sample is drawn at the end of a two hour period after you ingested the solution.

#### HbA1c

You do not have to fast to do this test. This test may be used for both diagnosis as well as monitoring of diabetes. This test represents time-averaged highs and lows of your blood sugar over a period of three to four months.





#### Urine micro-albumin

This test is done in the urine. It is the earliest way of testing for the presence of complications caused by diabetes i.e. end-organ damage like kidney disease. This test is also used to estimate the severity of renal disease as a complication of diabetes.

#### Lipogram

Total cholesterol, LDL-cholesterol, HDL-cholesterol and triglycerides form part of a standard lipogram. These lipids are used to estimate the risk of heart disease (heart attack).

#### WHAT CAN YOU DO TO PREVENT OR MANAGE DIABETES?

##### Managing diabetes means that you need to:

- eat healthy foods every day
- be physically active
- where applicable, take your diabetes medication as prescribed
- test your blood sugar levels

**NB: You need to work with your healthcare provider to create a plan for managing your health.**

#### EATING PLAN FOR TYPE 2 DIABETES

- Eat three balanced meals a day, not more than six hours apart. Limit added sugars and sweets.
- Eat a variety of vegetables and fruit each day.
- Eat your fruit rather than drinking it as juice.
- Include whole-grain starchy foods at each meal.
- Choose low-GI foods.
- Drink water instead of a fizzy or fruit drink.
- Always choose lean protein at each meal.
- Make low-fat choices and cut down on added on fat, particularly saturated fats (butter, margarine and cheese).
- Include beans and lentils in your diet.
- If you choose to drink alcohol, do so only in moderation.
- Reduce your salt intake.
- Move your body for at least 30 minutes every day, for example, by walking.
- If you are overweight, aim to lose five to 10 percent of your present weight.

#### HEAD OFFICE

Lancet Corner, Ground Floor, Cnr Menton and Stanley Roads, Richmond, Johannesburg, South-Africa  
(011) 358 0800  
24-hour emergency service

#### PRETORIA MAIN LABORATORY

1st Floor Penciaardia Building, 509 Pretorius Street, Arcadia, South-Africa  
(012) 483 0100

#### DURBAN MAIN LABORATORY

102 Lancet Medical Centre, 102 Ismail Meer Street, Durban, South Africa  
(031) 308 6500

Follow us on twitter

[www.lancet.co.za](http://www.lancet.co.za)



@LancetLab