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# DIABETES

Diabetes occurs when there is too much glucose, a type of sugar, in the blood. If not controlled, high blood glucose levels will eventually lead to damage to many parts of the body.

Blood-sugar levels are normally controlled by a hormone called insulin, which is made in the pancreas. High blood glucose levels may be caused by:

- insulin deficiency when the pancreas is not able to make enough insulin, or
- insulin resistance when your body is not responding to insulin as it should.

### What is insulin?

Insulin is a natural hormone that helps glucose enter the body's cells where it is used for energy. If there is not enough insulin, or it is not working well to act as a key to open the channel for glucose to enter the cells, glucose builds up in your bloodstream.

When you have diabetes, your body is not able to control your blood glucose levels and keep it in the normal range. If the blood glucose level is too low, hypoglycaemia (low blood glucose) occurs and you may feel shaky, hungry, heart racing, sweaty or unwell you need to test your blood sugars and treat if it is low by eating some quick glucose right away.

If the blood glucose level is too high, hyperglycaemia (high blood glucose) can occur. This could have symptoms such as excessive thirst, passing urine frequently, blurred vision, and numbness or tingling in the hands or feet. When you have hyperglycaemia you can sometimes have ketones in your urine and this can be detected by testing or noticing a sweet acetone smell on your breath. If this occurs you should seek medical advice immediately.

# What are the common types of diabetes?

There are three main types of diabetes and one type of prediabetes.

# Type 1 diabetes

Type 1 diabetes is an autoimmune disease and is caused by the body not producing insulin. It often starts in childhood and can appear with little warning. It is serious and needs insulin. Approximately 10% of people with diabetes have type 1 diabetes.

For more information on type 1 diabetes, visit Diabetes New Zealand here.

#### Type 2 diabetes

Type 2 diabetes is the most common type of diabetes affecting about 90% of all people with diabetes. With type 2 diabetes, the main problem is insulin resistance, although insulin deficiency can also develop. It is also impacted by lifestyle, what we eat, levels of exercise and weight. Approximately 90% of people with diabetes have type 2 diabetes.

For more information on type 2 diabetes, visit Diabetes New Zealand here.

#### **Diabetes in pregnancy**

Diabetes in pregnancy is when you get diabetes during pregnancy. It is also called gestational diabetes. It needs to be managed carefully to improve the health of mum and baby. It usually goes away after having the baby, but can progress to type 2 diabetes so regular check-ups are recommended.

#### Prediabetes

Prediabetes is when your blood glucose (sugar) level is higher than normal, but not high enough to be diagnosed as

type 2 diabetes yet. As the rates of obesity and being overweight have increased, so have the rates of prediabetes and insulin resistance. It now affects about 1 in 4 New Zealanders aged 15 or over. If lifestyle interventions are started developing diabetes can be prevented or delayed.

#### Are you at risk?

To find out if you are at risk for diabetes, take the simple survey Diabetes New Zealand here.

#### Silverstream Health Centre diabetes team

A team of nurses, led by a diabetes specialty nurse help patients with diabetes to self-manage and improve their overall health and wellbeing. Due to their expertise, they are able to care for our patients in the community, where once they would have had to attend hospital clinics.

Collaborative clinics with the diabetes specialists nurse from the hospital mean we can also manage complex patients at Silverstream Health Centre.