



Diabetes

Diabetes often arises when there has been a change from a more traditional lifestyle towards a more 'western' one. In the Pacific, the last few decades have seen a big increase in the number of people with diabetes. Diabetes is now one of the top five causes of death in more than half of the Pacific Island countries and territories.

Risk factors for diabetes

There are a number of risk factors that have been identified:

- ⚡ *Hereditary factors* – diabetes 'runs' in families. It is also more common in certain ethnic groups e.g. Pacific Islanders.
- ⚡ *Overweight* – obesity increases the risk of getting diabetes a lot, particularly if weight is gained rapidly.
- ⚡ *Age* – most cases of diabetes are found in people over 40 years of age.
- ⚡ *Pregnancy* – some women will develop 'gestational diabetes' during their pregnancy. This will normally go away when the baby is born, but the woman will be more likely to develop diabetes later. This problem is more common in women who are overweight.

What is diabetes?

Diabetes (also known as 'adult-onset' diabetes, 'maturity-onset' diabetes, or 'type 2' diabetes) is a condition where the body can no longer control the level of sugar in the blood. Type 2 is the most common type found in the Pacific. Diabetes is usually diagnosed by testing the blood for sugar levels. (Urine tests are not very accurate.) Everyone has sugar (glucose) in his or her blood.

The blood transports this sugar to the muscles. Muscles need sugar for energy.

How does the body usually control the level of blood sugar?

When we eat foods containing sugars, the sugar is absorbed (taken from the food into the body) and goes into the blood.

Starchy foods have to be broken down (reduced to small pieces) in order to release sugar into the blood – this takes time.

As sugar moves into the bloodstream, the level of sugar in the blood starts to rise. As blood sugar rises, the pancreas (an organ) responds by releasing a hormone called insulin into the blood. Insulin lowers blood sugar – helping to keep levels correct. Insulin is only released when blood sugar rises. In diabetes, the insulin produced doesn't work properly, so the blood sugar level keeps on rising.

Effects of diabetes

Many people with diabetes are not aware that they have this disease, as they feel fine.

In the short term (often before diagnosis) people may notice: excess thirst, needing to urinate a lot (this is because some of the sugar in the blood is 'spilling over' into the urine), feeling tired, blurred vision and sometimes weight loss.

Unfortunately the lack of symptoms is misleading, since the high blood sugar levels are damaging different parts of the body.

- ⚡ *Nerves* – the damage causes a loss of feeling. This can mean people injure themselves without knowing (e.g. they may pick up a very hot

object, feel no pain and so burn their skin).

- ⚡ *Eyes* – vision becomes cloudy. It can eventually cause eye disease and permanent blindness.
- ⚡ *Kidney* – the damage can lead, in the long-term, to kidney failure.
- ⚡ *Heart muscle* – the damage caused by the blood sugar leads to an increased risk of heart disease.
- ⚡ *Immunity* – resistance to infection is reduced. The higher blood sugar levels also encourage more bacterial growth.
- ⚡ *Wound healing* – speed of recovery is slower.
- ⚡ *Pregnancy* – a pregnant woman with diabetes has an increased risk of developing problems during the pregnancy. The baby is also at increased risk.

All of these complications develop when the blood sugar level is high. If the level of blood sugar can be kept close to normal, very little damage will occur to the body.

Treatment of diabetes

There is no cure for diabetes. Once somebody has become diabetic, they will be diabetic for life. It can, however, be managed. The blood sugar levels must be kept close to normal, using a combination of diet, healthy lifestyle and medications. For most people, a combination of good diet and healthy lifestyle can control their diabetes, and so help to prevent complications.

Lifestyle

- ⚡ Activity is extremely important – regular exercise and activity can reduce blood sugar levels, lower blood pressure and help to control weight.
- ⚡ Some alcohol is fine, but too much is a problem (more than two measures per day). Alcohol can also lead to weight gain.
- ⚡ Weight loss – losing just 10 per cent of body weight can help to control diabetes.

Dietary change

Diet is very important in controlling diabetes. Even those taking medication must be careful with their diet.

The right diet is important in two ways – controlling blood sugar, and reducing the long-term risk of high blood pressure, stroke and heart disease.

- ⚡ Avoid eating sugar/sugary foods – this includes hidden sugar such as is found in biscuits, cakes, candies, chocolates, and desserts. A small amount is fine, occasionally.
- ⚡ Eat regularly – do not miss meals. Aim to have three meals per day.
- ⚡ Eat fewer fatty foods such as fried foods, canned meats, or butter.
- ⚡ Use less salt, and eat fewer salty foods such as soy sauce, ramen, or salty snacks.
- ⚡ Eat a healthy balanced diet with plenty of variety.

Medications

The majority of people with diabetes will not need to take any drugs to help them to control their blood sugar level. For those that do, the doctor may recommend tablets or, less often, insulin injections.

Medical care

It is important to have blood sugar levels checked regularly to make sure that the amount of sugar in the blood is being controlled. It is very difficult for anyone to tell what his or her blood sugar level is – without a test. Regular checks of eyes and feet for complications are also advisable. A diabetes check-up once per year is recommended.

Note: This summary refers to type 2 diabetes only. There is another type of diabetes (type 1), which appears in young children. Its causes and treatment are different from those in type 2 diabetes, and it is rare in the Pacific.