Introduction

Diabetes is a big health problem in Australia. There are around 700,000 people with diabetes, and at least half of them are unaware they have it. Some people have type 1 diabetes, but most (85-90%) have type 2 diabetes [1].

Two causes of type 2 diabetes are:

• Being overweight/fat
• Not doing enough exercise

The rate of diabetes among Indigenous Australians is around 2-4 times higher than for the general population. Some reasons for this will be explained later [2].

What is diabetes?

Diabetes is a sickness that happens when the body does not produce enough insulin (a hormone which controls the amount of sugar in our blood).

When food and drink go into the stomach, some of it is broken down into sugar - the sugar then goes into the blood. This is when the insulin is needed (a body part, called the pancreas, makes insulin). Insulin is like a key that unlocks the body cells so that the sugar can move into muscles and give you energy. Without the insulin key, the sugar stays in the blood and causes you to feel tired because you are not getting enough energy. So when you have diabetes you don't have enough insulin and you may feel tired. Diabetes causes other problems too, which will be explained later [3].

More detailed information about diabetes in Indigenous people can be found at:

http://www.healthinfonet.ecu.edu.au/diabetes_review
Types of diabetes

There are three main types of diabetes:

- Type 1 diabetes
- Type 2 diabetes
- Gestational diabetes (diabetes in pregnancy)

Type 1 diabetes is most common among children and young adults. It is more serious than type 2 diabetes and requires regular injections of insulin. It is not caused by eating bad tucker or not doing enough exercise. No one is really sure why people get this sickness, but some possible reasons are given later [1].

Type 2 diabetes is much more common, and usually it is people over the age of forty who get this sickness. As stated above, it can be caused by eating too much rubbish food and not moving around or exercising enough. Some people have the sickness for many years before realising it. Once people know they have diabetes they can start eating better food and exercising more. This can lessen the sickness and in some cases cure it [4].

Gestational diabetes is the kind of diabetes that women having a baby sometimes get. The diabetes is likely to go away after she has had her baby. But it can make a woman more likely to get diabetes again later in life. Women who have had this type of diabetes need to eat good tucker and keep active, so the sickness won’t return [5, 6].

How can people tell that they have diabetes?

When people have diabetes their blood sugar level is too high.

The normal blood sugar level (the amount of sugar in your blood) is between 4 and 7 millimoles per litre. If a person has a level above 7.8 they have diabetes. This level is measured by a special machine at your clinic [3].

Signs that a person may have diabetes:

- Sores and boils that won’t heal
- Going to the toilet a lot
- Feeling thirsty all the time
- Feeling tired and weak
- Blurry vision
- Leg cramps and itching [7]

How does a person get diabetes?

Type 1 diabetes

As stated above, it is not known what makes people get type 1 diabetes. Babies who are very small at birth are more likely to get this sickness. More than 80% of people with type 1 diabetes have no one in their family who has had the disease.

You could also get this sickness from:

- Viruses
- Some toxic chemicals
- Not getting good food [2, 8, 9]

Type 2 diabetes

You can get type 2 diabetes from the way you live and also from things you can’t change.

Things you can’t change

Things you can’t change that could make you get type 2 diabetes are:

- if someone in your family has/had diabetes
- being Indigenous
- Getting older [1, 5]

If someone in your family has/had diabetes

If someone in your family had type 2 diabetes there is a high chance that you could get it too. This is because you have similar genes. Genes are instructions passed from parent to child that decide the make-up of the body and mind [2].

Being Indigenous

Indigenous Australians are 2-4 times more likely than the general population to get type 2 diabetes [1, 2, 10-12].

If you are over 40 you are more likely to get diabetes

As you get older, your body stops working as well as it did when you were younger. The older people get, the more likely they are to get type 2 diabetes [13].
Things you can change

Things you can change that might stop you getting type 2 diabetes:
• Lose weight (if you are overweight)
• Eat less rubbish food (fatty and sweet things)
• Do more exercise
• Reduce your blood pressure (do more exercise, don’t smoke, drink very little alcohol) [1, 5]

Being overweight

When too much food (energy) is eaten, our bodies store it as fat. Over time, the build-up of fat will make you overweight or obese (very over weight). Being overweight may be the most important factor in causing you to get type 2 diabetes. You are even more likely to get type 2 diabetes if most of your fat is around your middle (belly). Around 40% of adults in Australia are overweight or obese [14].

Eating too much rubbish food

Eating rubbish food leads to obesity as well as high blood pressure, which can make you more likely to get diabetes.

A healthy diet should include:
• lots of different fruit and vegetables
• low fat milk foods (e.g. yoghurt)
• less salt
• less sugary foods
• less fatty foods

A bad diet usually includes foods that have:
• lots of salt (e.g. chips, 2-minute noodles)
• lots of sugar (e.g. lollies, coke)
• lots of fat (e.g. bacon)
• not very much fibre (fibre can help you eat less because it makes you feel full) [15-19]

Not getting enough exercise

Not doing very much exercise (activity) means that you do not use very much energy and this can make you put on weight (get fat) [13].

High blood pressure

High blood pressure is when there is too much pressure placed on the walls of blood vessels that carry the blood around the body. This can cause damage to the heart and other parts of the body such as the kidneys, as well as help you to get diabetes [19].

What can happen to a person who has diabetes?

If you have diabetes for a long time it can cause damage to your body. The longer you have diabetes, the more likely it is that damage will happen [1].

Having diabetes can lead to:
• heart attack
• stroke
• nerve damage (loss of feeling)
• feet problems
• loss of muscle strength (feeling weak)
• gut problems
• sex problems
• unable to control going to the toilet
• damage to kidneys (renal failure)
• damage to eyes (blurry vision, blindness) [1, 2, 20-26]
References


The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to ‘closing the gap’ in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet’s work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet’s work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www.healthinfonet.ecu.edu.au) is free and available to everyone.