



# Diabetes *it's in your hands*

## Complications of Diabetes

Over time, high blood glucose levels can damage the body's organs. However the **good news** is that most diabetes related complications can be prevented.

Your diabetes health care team, which includes you, your doctor, health worker, dietitian, podiatrist and eye specialist, can work together to ensure that you live well with diabetes.

### What are the most common complications of diabetes?

- Damage to **the big blood vessels** leading to heart attacks and stroke and blockage to the large vessels in the legs
- Damage to the **small blood vessels** causing problems in the eyes, kidneys, feet and nerves.

### Big blood vessel damage

#### Heart attack

Typical symptoms can include:

- squeezing or crushing chest pain going down the arm
- arm or jaw discomfort
- feeling anxious, sweaty, breathless or weak
- indigestion or nausea.

#### Stroke

Typical symptoms can include:

- feeling dizzy
- feeling confused
- loss of strength or movement of the face, arm and/or leg on one side of the body
- double or blurred vision
- finding it hard to talk or swallow.

### Blockage of the large blood vessels in the legs

Typical symptoms can include:

- pain in one or both legs when walking
- loss of hair growth, shiny skin on legs
- cold feet
- slow healing skin wounds.

*There are a number of things which can be done to reduce the risk or even prevent damage to the big blood vessels. This can help you to stay well with diabetes.*

## What **you** can do to help reduce the risk of big blood vessel damage?

- Test your blood glucose levels at least daily, or as recommended by your health care team. Aim to keep blood glucose levels between 3.5-8.0 mmol/L
- Don't smoke - ask for help (call Quitline 137 848)
- Be physically active - at least 30 minutes moderate physical activity every day
- Eat a healthy diet - talk to a dietitian or health worker
- Lose weight - losing a small amount of weight will help reduce your blood pressure, blood glucose and cholesterol levels
- Aim for a waist circumference of less than 90 cm for men and less than 80 cm for women
- Look after your feet daily and if concerned, see a podiatrist. Choose footwear which protects your feet.

## What **your diabetes team** can do to help reduce the risk of damage?

- Cholesterol - your doctor should arrange to have your cholesterol and triglycerides checked at least once a year - cholesterol goal is less than 4.0 mmol/L and triglycerides is less than 1.5 mmol/L
- Blood pressure - have your blood pressure checked every three months - aim for a reading of 130/80 mm Hg
- HbA1c - this test shows an average of your blood glucose levels over the past 3 months and should be arranged by your diabetes team at least every six months. A HbA1c of less than 7% is ideal
- Aspirin - ask your doctor if you should be taking low dose aspirin as it can help to protect you from heart attack.



## Small blood vessel damage

### The eyes

- cataract (clouding of the eye lens), glaucoma (elevated pressure in the eye) and retinopathy (damage to the small blood vessels at the back of the eye).

Typical symptoms can include:

- blurred vision
- often there are no symptoms at all until retinopathy or glaucoma are well advanced causing permanent loss of vision.

#### How to reduce the risk of eye damage:

- keep your blood glucose levels, HbA1c and blood pressure at recommended levels
- if you do notice any changes in your vision, contact your doctor or eye specialist immediately
- have your eyes checked by an optometrist or ophthalmologist (eye specialist) at diagnosis, and every 2 years or more frequently if indicated by your doctor.

### The kidneys

- increased blood glucose levels over time and elevated blood pressure can increase the risk of long term damage to the kidneys.

There may be no specific signs of diabetic kidney disease until the kidneys fail completely.

#### How to reduce the risk of kidney damage:

- keep your blood glucose levels, HbA1c and blood pressure at recommended levels
- your doctor should arrange a urine test for micro-albuminuria (tiny pieces of protein in the urine) every year and more frequently if indicated
- talk to your doctor about blood pressure medications and other medications (ACE inhibitors) which help to protect the kidneys
- blood pressure should be less than 125/75 mm Hg for people with diagnosed diabetic kidney damage
- treat any kidney or bladder infections immediately.



## The nerves

- damage can occur to nerves affecting the feet, stomach and intestines and sex organs.

Typical symptoms of nerve damage can include:

- pins and needles, tingling or pain loss of feeling (feet)
- nausea, vomiting, bloating, heartburn, feeling of fullness, constipation, diarrhoea (stomach and intestines)
- not being able to get or keep an erection long enough for sex (erectile dysfunction).

**How to reduce the risk of nerve damage:**

- keep your blood glucose and HbA1c at recommended levels
- tell your health care team about any tingling, pain or numbness in your feet or hands
- tell your doctor or health worker about any digestive problems
- look after your feet and check them every day
- have a yearly foot check with your podiatrist or health worker
- avoid alcohol or drink alcohol in moderation only.

## The teeth and gums

- people with diabetes can have a higher risk of tooth decay and gum infections when blood glucose levels are high. Tooth and gum infections can increase the risk of heart disease.

Typical signs of dental problems can include:

- red, sore, swollen or bleeding gums
- dry mouth and/or burning tongue
- white film on gums, inside cheeks or tongue.

**How to reduce the risks of dental problems:**

- sugarless gum to help increase saliva production
- regular dental check up.

## Depression and diabetes

- there are strong links between depression and diabetes.

Typical symptoms of depression can include:

- feeling sad, down or miserable most of the time
- loss of interest or pleasure in usual activities.



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**How to reduce the risks of depression:**

- talk to your doctor or health worker and tell them how you are feeling
- get involved in social activities
- learn about depression and diabetes
- get help, support and encouragement from family and friends.

***Remember, most diabetes related complications can be prevented!***