Staying well with type 2 diabetes





Contents

PAGE







- **3** What is type 2 diabetes?
- 4 Live well with type 2 diabetes
- **5** Symptoms
- 6 Reaching and keeping a healthy weight
- 7 Healthy food choices
- 8 Physical activity
- 9 Managing type 2 diabetes It's all about control!
- 10 More about blood glucose levels
- 11 How to treat a hypo
- 12 Smoking
- 12 Sick days
- 13 Diabetes and driving
- **14** Managing control of your diabetes
- **15** Medication
- 15 Insulin
- **16** Preventing complications
- 16 Heart disease and stroke
- **17** Eyes
- 17 Kidneys
- **17** Feet
- 19 Footcare tips
- 20 Sexual function
- **20** Teeth
- 20 Other complications
- 21 Depression
- 22 Your healthcare team
- 23 Staying well with type 2 diabetes

This pamphlet gives basic information for people with type 2 diabetes. It isn't a replacement for information from your doctor or other health professional.

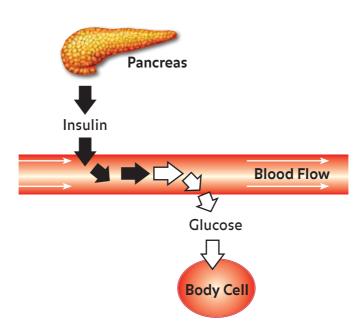
What is type 2 diabetes?

Type 2 diabetes is when there is too much glucose (sugar) in your blood. Glucose comes from food you eat, like carbohydrate (starchy) foods and sugary foods and drinks. You need to have some glucose in your blood, but high glucose levels can damage your body over time.

Insulin is a hormone made by your pancreas. It helps your body:

- 1. Move glucose from the blood into fat and muscle cells for use as energy.
- 2. Stop the liver making glucose when there's enough glucose in the blood.

If your pancreas doesn't make enough insulin, or your body becomes insensitive to insulin, your blood glucose levels will become too high. That's diabetes.



Live well with type 2 diabetes

Living well with type 2 diabetes starts with knowing how to stay healthy. The most important things are to eat well and get exercise. If you smoke, do yourself a favour and quit. If you are overweight, losing weight will make a big difference.

If your doctor prescribes medication, remember to take it as recommended. Remember to keep your medical appointments in case your doctor needs to change something.

Having diabetes doesn't mean you can't live a full and long life. Many people with type 2 diabetes have used it as the kick-start they needed to get healthy and start living the life they've always wanted!

Diabetes New Zealand is here to support you.



Symptoms

You can have diabetes for some time without realising it. Here are some common symptoms:

- Feeling tired and lacking energy.
- Feeling thirsty a lot.
- · Needing to pee often.
- Getting infections often, or getting infections that are slow to heal.
- Poor eyesight or blurred vision.
- · Often feeling hungry.

The symptoms get better when your diabetes is better controlled.

Is my family at risk of getting diabetes?

Diabetes often runs in families and is more common in some ethnic groups than others. Encourage your family to get checked if they are:

- · Overweight.
- 40 years or older (the risk increases with age).
- Māori, Pacific Island, Indian or Asian **and** 30 years or older.

Or if they have ever had:

- Diabetes during pregnancy (gestational diabetes).
- High blood pressure or raised cholesterol levels.
- A heart attack or stroke.

Reaching and keeping a healthy weight

Extra fat around your tummy makes it harder for your body to keep blood glucose levels under control. That's why losing weight makes such a difference for most people with type 2 diabetes. Even losing a little bit of weight can make a huge difference.

To lose weight:

- · Eat healthy food
- · Eat less food
- · Get at least 30 minutes of exercise each day

Ask family and friends for support. A support group may be of use to you. Visit www.diabetes.org.nz to find out if there is a group in your area.



Healthy food choices

Are you ready for some good news? If you have diabetes, you don't need to buy special food or cook separate meals! What's good for you is good your family.

- Drink lots of water. Avoid fruit juice and sugary drinks.
- Eat breakfast, lunch and dinner every day.
- Eat some carbohydrate food at each meal, but not too much.
- Choose food that's low in sugar and saturated fat.
- Base your meals around the Diabetes New Zealand Healthy Plate model shown here.



For an ideal eating plan, talk to a New Zealand registered dietitian. See our pamphlet *Diabetes and Healthy Food Choices* and *Te Mate Huka me ngā Kōwhiringa Kai Taiora* or visit diabetes.org.nz for more information.

Physical activity

Regular exercise helps to keep your blood glucose within a healthy range and helps your body respond to insulin. It also helps you to burn fat. You may need to test your blood glucose levels before you exercise and carry a quickacting carbohydrate in case you have a hypo (low blood sugar).

Do an activity you enjoy and do it as often as you can. Walking, swimming, biking, gardening, dancing, bowling, Tai Chi or team sports like netball, kapa haka, cricket and kilikiti are all great. If you have trouble staying on your feet, chair exercises and resistance exercises are good choices.

Aim for 30 minutes a day, but it doesn't have to be all at once. 10-minute bursts are good too! Use every opportunity – take the stairs instead of the lift or get off the bus one stop earlier. Even doing the vacuuming is a chance to get moving.

Ask your doctor for a green prescription.

This is a good way to get started with a fun regular activity.

Regular physical activity is a fantastic way to stay well and enjoy life!



Managing type 2 diabetes - it's all about control!

Uncontrolled diabetes can damage your eyes, kidneys, nerves, heart, feet, sexual function and even your teeth. That's why control is so important.

Good control means you're much more likely to stay well and live a long life. The things to control are your blood glucose, blood pressure, cholesterol levels and weight.

Even if you don't have diabetes, blood pressure, cholesterol levels and weight are important. So, managing diabetes isn't a lot different from just living a healthy lifestyle!

Uncontrolled diabetes can lead to high blood glucose, hyperglycaemia (pronounced *hi-per-gly-see-me-ah*) or hypoglycaemia (hi-po-gly-see-me-ah).

Things that can cause high blood glucose

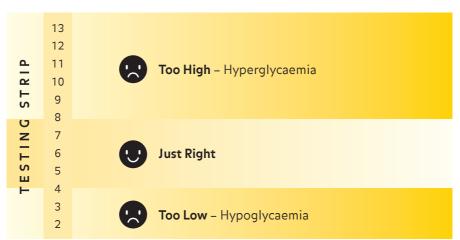
- · Eating too much.
- Eating the wrong type of food.
- Not getting enough physical activity.
- Not taking your medication.
- Sickness.
- Stress.
- Your medication needs adjusting.

Avoid high blood glucose by:

- Eating only what you need.
- Eating healthy foods.
- Getting exercise each day.
- Taking your medication.
- · Losing weight if you are overweight.

More about blood glucose levels

Most people with diabetes need to check their blood sugar levels regularly. To do this, you prick your finger with a small, sharp needle and put a drop of blood on a test strip. Then you put the test strip into a meter that shows your blood sugar level.



What the numbers mean

People without diabetes usually have a blood sugar level between 4 and 8. Above 8 is too high, and below 4 is too low. Below 4 is called hypoglycaemia, or "hypo" for short.

If you take insulin and Glipizide or Gliclazide tablets you may have a hypo sometimes. It can happen suddenly, and you need to know what to do if it does.

Here are the warning signs	Causes of low blood glucose
Feeling hungry	Missing a meal or snack
Feeling light-headed or dizzy	Not eating enough carbohydrate
Sweaty skin	More exercise than usual
Blurred eyesight	Taking too many diabetes pills or too much
Confused, anxious or irritable	insulin
Headache	Drinking too much alcohol
Trembling or weak hands and knees	
Pins and needles around the lips and tongue	
Thumping heart	

How to treat a hypo

How to treat a hypo

Step One

Eat or drink one serving of a quick-acting carbohydrate.

Choose one serving from this list

Other Examples:

Three Dextro Energy tablets = one serving
Six Fruit Mentos = one serving
Six Jellybeans = one serving

You can buy glucose powder, and Dextro Energy and Vita Glucose tablets from your supermarket or pharmacy.

Quick-acting carbohydrate

- 3 teaspoons of glucose powder in water
- 3 Dextro Energy tablets
- 3 Vita Glucose tablets
- 6 Fruit Mentos
- 3 teaspoons of jam, honey or sugar
- 150ml (small glass) of ordinary lemonade or cordial
- or 6 Jellybeans

Step Two

After 10 minutes, test your blood glucose again. If it is still less than four, eat another serving of quick-acting carbohydrate.

Step Three

Once your blood sugar is above four, if it is your mealtime, eat your meal. Otherwise eat or drink one of the following:

- a slice of bread
- a glass of milk and two plain biscuits
- a pottle of yoghurt
- two or three crackers.

Make sure your whānau and friends know the signs of a hypo so they can help you treat it. When you have treated your hypo, work out what you need to do to stop it from occurring again - for example, take less insulin (consult your doctor), eat sooner.

You should not be having hypos. If you can't find a cause or they keep happening, see your healthcare team.

Smoking

If you have diabetes and smoke too, you are more likely to get complications from diabetes. Quitting will be good for you and your family – including the little ones who will no longer be exposed to harmful secondhand smoke.

Call Quitline about becoming smokefree.

Phone 0800 778 778

Blood pressure

High blood pressure (sometimes called hypertension) damages the heart, kidneys, other organs and blood vessels. Your blood pressure is good when it is 130/80 or below. Get your blood pressure checked each time you see your doctor.

Sick days

When you're sick, it can be harder to control your diabetes. Keep taking your diabetes medication or insulin, drink plenty of fluids and check your blood sugars regularly.

Metformin should not be taken if you're vomiting or have severe diarrhoea. If you are unsure, phone your healthcare team.

The Flu vaccination is free for New Zealanders with diabetes.

Diabetes and driving

Low blood glucose levels are dangerous for drivers with diabetes.

- If your diabetes is well controlled, you can drive a car safely.
- Don't drive if your blood sugars are too low or too high.
- On longer trips, make sure you eat at your usual times and have snacks with you in case your trip takes longer than you expect.



When driving:

- Always have meals when they are due before and during long journeys
- Take regular short breaks from driving
- Test your blood glucose levels regularly. If you feel you have low blood glucose stop driving and follow the steps on page 10 for treatment of hypos. Wait until your blood glucose is above 6 and your hypo symptoms have gone before driving off again. If you have another driver with you ask them to drive if possible.
- If you get hypoglycaemia unawareness (hypos without warning signs) you should not drive. Discuss this with your healthcare team as your medication dose will need to be changed.
- Remember changing a tyre or pushing a car could result in low blood glucose levels. Always keep quick-acting carbohydrate and follow up snacks in your glove compartment in case of hypos.
- Have healthy snacks with you in case your meal is delayed, or journey takes longer than expected.

Managing the control of your diabetes

Blood glucose levels go up and down during the day. Your healthcare team will show you how to check your blood glucose and give you a book to record your results in.

Recording your results will help you to see how your blood glucose levels are affected by food, exercise, stress, illness and medication.

A good idea is to test your blood sugar level just before you eat a meal and again two hours after you've eaten. This will tell you a lot about how your body responds to different foods.

Ask yourself:

Am I regularly too high or too low at a certain time of the day?

Your doctor may order a lab check called an HbA1c (Glycosylated haemoglobin). This test measures your blood glucose levels over the past eight to twelve weeks and shows how well your diet, exercise and medication are working.

Remember to take your blood glucose record book when you see any health professional.

Regularly testing your blood glucose is important if you are on insulin. If you are not taking insulin you may not need to test so often, or at all.

Your doctor or nurse will help you decide what is best for you.

Medication – pills, tablets, insulin

Your doctor will prescribe any medication you need. It will not control your diabetes on its own – it is still important you eat healthy foods and get plenty of exercise.

Useful tips:

- Write down the names of your medications and what they do.
- Know how many tablets to take and what time of the day to take them.
- Ask about any side effects.
- Don't borrow anyone else's medication.
- If your medication makes you feel unwell, talk to your doctor.
- Don't wait until you run out before you get another prescription from your doctor. Make sure you have emergency supplies of all your medication.
- If you often forget to take your medication, ask your pharmacist about prepacked medication.

It is important you take all the medications as prescribed by your doctor.

Insulin

If tablets don't keep your blood glucose levels within a healthy range, your doctor may start you on insulin. This doesn't mean you have failed. With type 2 diabetes the pancreas makes less insulin over time. Everyone with type 2 diabetes will need insulin if they live long enough! Insulin can improve your health and give you much better control of your diabetes.



You can reduce the risks of long-term damage from diabetes by:

- Keeping good control of your blood glucose levels.
- Controlling high blood pressure and high blood cholesterol.
- Keeping all appointments with your healthcare team.
- Talking to your doctor about anything you're concerned about.
- Following a healthy lifestyle.

Your doctor or nurse will check your diabetes every year to make sure you aren't developing complications.

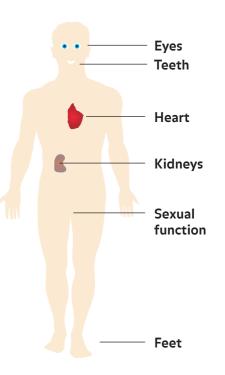
Your annual check-up should include:

- Blood pressure.
- HbA1c blood test.
- Blood cholesterol.
- Kidneys (blood and urine test).
- Eyes.
- Feet (pulses and sensation).

Heart disease and stroke

People with diabetes are at greater risk of having a heart attack or stroke. You can help yourself by:

- · Not smoking.
- Eating healthy food.
- Exercising regularly.
- Keeping your blood pressure under control.
- Taking your medication.
- · Losing weight, if you are overweight.



Diabetes can also affect your cholesterol levels. Get your blood cholesterol levels checked regularly.

Eyes

Damage to the small blood vessels in the back of the eye can lead to blindness if it is not treated. Damage can happen before you notice any change to your eyesight. Early damage can be treated with painless laser therapy. It is important to get your eyes checked by a specialist every two years. If you notice any changes in your vision, tell your doctor immediately.

If you are pregnant, you may need eye examinations more often.

Kidneys

Diabetes can damage your kidneys and lead to renal (kidney) failure if untreated. Even if you don't have symptoms, your doctor may regularly check your kidneys through a blood and urine test.

Feet

Diabetes can lead to nerve damage and numbness in your feet. This can increase the risk of damage and foot ulcers. So, it's important to take good care of your feet and protect them from injury.

Diabetes can cause two main problems with the feet:

- 1. Nerve damage (neuropathy). Early signs include burning sensation, pins and needles, numbness or shooting pains.
- 2. Blood vessel disease (peripheral vascular disease). This may result in wounds taking longer to heal and getting infected more easily. Symptoms include feet cool to touch, calf pain during exercise, or thin or dry skin on feet and legs.

If you have numb feet, check your feet and toenails every day, and look for broken skin, cuts, cracks, blisters, redness, swelling or signs of infection. If you can't see your feet easily, put a mirror on the floor. See your doctor or nurse about any injury that isn't healing.



FOOTCARE TIPS:

- Wash and dry your feet carefully between the toes.
- Apply a moisturising cream to dry skin but not between toes.
- · Check your shoes for foreign objects before you put them on.
- Keep your toenails short and cut them straight. A correctly cut toenail has the same shape as the end of the toe.
- See a podiatrist about corns, calluses and ingrown toenails. Do not treat these yourself.
- Always wear good footwear. Shoes must fit well, be comfortable and not cause blisters.
- Wear socks that are not too tight and avoid ones with seams that dig into your feet.
- Never go barefoot, even indoors, in case you have numb patches on your soles and tread on something that causes injury.



Sexual function

Diabetes can damage the blood vessels of the penis, making it difficult to get an erection. Ask your GP about medications to help this.

Women with diabetes have an increased chance of getting vaginal thrush.

Teeth

People with diabetes are more likely to have problems with their teeth and gums. Brush and floss your teeth twice a day and visit your dentist at least once a year.

Other complications

Nerve damage can cause problems such as pain in the legs, disturbance of function in the stomach and bowel, and poor bladder control. See your healthcare team if these problems occur.

Taking charge of your diabetes lowers your risk of complications!

This information on complications is not a complete guide. For more details, please see your healthcare team.







Depression

Living with diabetes can be a challenge. You don't have to deal with your diabetes alone. With the support of whānau and friends, your healthcare team and your community, you can take charge.

Explain about diabetes to your whānau and friends. Suggest ways that they can support you.

If a low mood persists, you may have depression. People who have diabetes are twice as likely to experience depression as those who don't. You may even experience something called Diabetes Distress, when you feel constant worry about your condition and how to manage it. Diabetes Distress can also affect your whānau.

If you think you have depression, professional help is close by.

What can I do if I am depressed?

- Call the depression support line on 0800 111 757.
- Or check out https://www.healthnavigator.org.nz/support/d/ depression/ for other good places to go to for support.
- · Tell your healthcare team.
- Talk to your whanau and friends about how you're feeling.
- Join a diabetes support group, where people can talk about their diabetes and share how they deal with it.
- Eat healthy foods and keep away from alcohol.
- Have regular physical activity.







Your healthcare team

Your healthcare team will help you take control of your diabetes. They will work with you to set goals that are right for you.

Always take your blood glucose record book to appointments and a list of questions or concerns. You may like to take a support person with you.

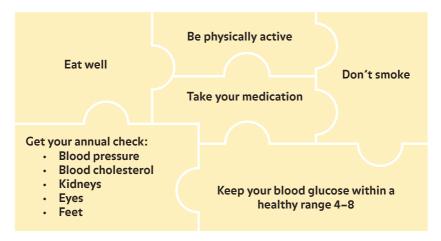
Because diabetes affects many parts of your body and your life, you will receive care from a number of health professionals. They may include:

Doctor	Name	Phone
Practice Nurse	Name	Phone
Diabetes Nurse	Name	Phone
Dietitian	Name	Phone
Podiatrist	Name	Phone
Eye specialist	Name	Phone
Dentist	Name	Phone
Other	Name	Phone

For support and information on useful services in your area, phone Diabetes New Zealand on 0800 342 238.

Staying well with type 2 diabetes

Don't worry if you're not doing all of these. Choose one area to start with, make whatever changes you need, then move onto the next. Celebrate every gain you make – it might be a walk before breakfast, or not eating that cake at lunchtime.



Goals

	Your goal	What you can do to reach it
HbAlc		
Blood glucose		
Blood pressure		
Weight		
Keeping healthy		
Cholesterol: total HDL LDL Tryglycerides		

Staying well with type 2 diabetes is produced by Diabetes New Zealand.

To learn more about diabetes:

- talk to your doctor or practice nurse
- visit www.diabetes.org.nz

To order a copy of *Staying well with type 2 diabetes* or any of the Diabetes New Zealand information booklets, visit www.diabetes.org.nz

Diabetes New Zealand supports people affected by diabetes and health professionals throughout New Zealand. We act for people affected by diabetes by:

- · providing local support
- acting as an advocate
- raising awareness of diabetes, especially interventions that will prevent type 2 diabetes or reduce diabetes complications
- educating and informing people about diabetes, its treatment, management and control
- supporting research into the treatment and cure of diabetes.

You'll find helpful information for people affected by diabetes in our pamphlets and on our website at www.diabetes.org.nz.

Take the right steps and stay healthy - Connect with Diabetes New Zealand:

Visit www.diabetes.org.nz

Email info@diabetes.org.nz

Phone 0800 DIABETES (0800 342 238)

Follow us on social media **[f** @DiabetesNZ **©** @Diabetes_NZ

Diabetes New Zealand PO Box 12441, Wellington 6144

