

Blood glucose monitoring

Checking your blood glucose levels (also called self-monitoring) can help you look after your diabetes. Your diabetes health professionals can help you with information and advice about blood glucose monitoring.

Regular monitoring can help you see the effects of food, exercise, medication and illness on your blood glucose levels. It can also help you identify any patterns or changes in your blood glucose levels that you should discuss with your doctor or diabetes health professionals.

As of July 1 the Australian government has changed access to subsidised blood glucose testing strips for people with type 2 diabetes who are not using insulin. For more information go to www.ndss.com.au



Why monitor?

Monitoring your blood glucose levels will help you to:

- » find out immediately if your levels are in the target range
- » see whether your diabetes medication is helping you to achieve target levels
- » better understand how your levels are affected by physical activity, food, stress, travel and illness
- » look for any patterns at different times of the day to help you identify when you have high or low blood glucose levels
- » treat low blood glucose levels (hypoglycaemia or hypos) quickly if you are using insulin or other types of blood glucose lowering medications
- » feel more confident about managing your diabetes
- » know when you need to seek support from your doctor or diabetes health professionals to adjust your medications or insulin, or for advice about meal planning or physical activity.

Your diabetes health professionals, especially your diabetes educator can:

- » help you choose a blood glucose meter that best suits you
- » give you information about how to check your blood glucose levels
- » work with you to decide how often and at what times you should check your levels
- » help you learn how to understand your readings.

Helpline 1300 136 588

ndss.com.au

How to monitor

To check your blood glucose levels, you will need a blood glucose meter, a finger pricking device with lancets, and blood glucose testing strips. There are a wide variety of blood glucose meters, and they can be purchased from your state or territory diabetes organisation, pharmacies and some diabetes centres. Your doctor or diabetes educator can help you choose one that suits your needs and show you how to use it.

The National Diabetes Services Scheme (NDSS) is an initiative of the Australian Government (managed by Diabetes Australia). The NDSS gives you access to discounted products to help you manage your diabetes, including blood glucose testing strips. Registration with the NDSS is free and open to all Australians diagnosed with diabetes.

Targets

Your diabetes health professional will recommend a blood glucose range that is suitable for you. They will consider your age, how long you have lived with diabetes, the diabetes medication you take, and any other relevant health conditions you may have.

The following ranges for blood glucose targets are a guide only. Talk to your diabetes health professionals about your individual targets.

Blood glucose targets

	Fasting/ before meals	Two hours after starting meals
Type 1 diabetes	4–8mmol/L	<10mmol/L
Type 2 diabetes	6–8mmol/L	6–10mmol/L

When to check

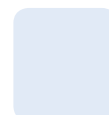
Your doctor or diabetes health professional will help you decide when and how often you should check your blood glucose levels, and the target range you should be aiming for. Ask for help to develop a monitoring routine that suits your lifestyle.

Common times for people to check blood glucose levels include:

- » before breakfast (fasting)
- » before lunch or dinner
- » two hours after a meal
- » before bed
- » before driving or exercise.

You may be advised to check more often if you are:

- » feeling sick or stressed
- » being more (or less) physically active
- » experiencing more hypos than usual
- » experiencing changes in your routine, such as travelling or starting a new job
- » changing or adjusting your diabetes medication or insulin
- » changing your eating pattern
- » experiencing night sweats or morning headaches
- » noticing frequent high blood glucose levels above your target range
- » pregnant.



What causes blood glucose levels to go up or down?

There are many reasons why your blood glucose levels may go up or down during the day. The most common causes include:

- » food (the time, type and amount of carbohydrate eaten)
- » the amount of exercise or physical activity
- » diabetes medication
- » emotional stress/excitement
- » hormonal changes
- » blood glucose monitoring techniques
- » illness and pain
- » alcohol
- » medications, such as steroids.

Who is at risk of low blood glucose?

- » Insulin and some diabetes medications increase your risk of hypoglycaemia (a hypo).
- » Hypos occur when the blood glucose level has dropped too low, under 4mmol/L.
- » Hypo symptoms can sometimes occur at higher blood glucose levels, especially in children, older people and people who have had blood glucose levels above the target range for a long time.



Are high blood glucose levels dangerous?

- » Sometimes, your blood glucose levels may be high and you may not understand why.
- » If you have type 1 diabetes and your blood glucose levels are high, or if you are sick, it's important to check for ketones in your blood or urine. If you have ketones or are unwell, it's important to seek medical attention.
- » Long-term diabetes-related complications can occur if blood glucose levels are above the target range over a long period of time. If your blood glucose levels are high on a regular basis, ask your doctor or diabetes health professionals for advice.



If your reading doesn't seem right

Sometimes, you may be surprised by the reading when you check your blood glucose level. If it doesn't seem right to you, check the following:

- » Did you wash your hands and dry them well before you did the check?
- » Have the strips expired?
- » Is the strip the correct one for the meter?
- » Was there enough blood on the strip?
- » Did you put the strip into the meter correctly?
- » Have the strips been affected by climate, heat or light?
- » Is the meter clean?
- » Is the meter too hot or cold?
- » Is the battery low or flat?

What is the HbA1c test?

The abbreviation 'HbA1c' stands for glycosylated haemoglobin. It's a blood test that reflects your average blood glucose level over the last 10 to 12 weeks.

It's recommended that you have this test done at least every 12 months, although you may be advised to have it done more often (every three to six months). The results of an HbA1c can help give you an overall picture of your blood glucose management.

The target HbA1c for most people is 53mmol/mol (7%) or less. Your doctor will advise you of the HbA1c target that is best for you.



Remember: Self-monitoring is a tool to help you manage your diabetes.

At times, the readings may not be what you expect, but it's important to remember that these readings are not a test of how well you are managing your diabetes.

Knowing – and understanding – your blood glucose levels can help you and your health professionals fine tune your diabetes management.

Your doctor or diabetes health professional will recommend a blood glucose target range that is suitable for you.

The NDSS and you

The NDSS provides a range of services to help you manage your diabetes. These include our Infoline and website for advice on diabetes management, NDSS products and a range of support programs to help you learn more about managing your diabetes.

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