

Blood glucose monitoring in type 2 diabetes

Blood glucose goes up and down during the day depending on carbohydrate intake, medications, activity, time of day and general wellness. They tend to be lower before meals and higher after meals.

Monitoring helps you see what is happening with your blood glucose levels and guide your self-care. The first step in blood glucose monitoring is knowing your blood glucose target. Talk to your doctor and diabetes educator about the best targets for you.

Glucose targets

Please talk to your doctor or diabetes educator about your individual targets (page 2).

Blood glucose values		
	Before meals	After meals (2 hours)
*Most people	between 4-6 mmol/L	between 4-8 mmol/L
^Some people	between 6-8 mmol/L	between 6-10 mmol/L
High	more than 8 mmol/L	more than 10 mmol/L
Low blood glucose (hypo) below 4 mmol/L		

* For most people it is recommended that blood glucose be as close to normal (fasting 4-6) as possible to reduce the risk of long term complications.

^ For some people eg with cardiovascular disease, hypo unawareness, older frail, or other co morbidities, blood glucose levels will need to be modified.

How to monitor blood glucose

Blood glucose monitoring involves putting a special strip into a small meter and placing a drop of blood from a finger prick on the strip. The result is displayed on the screen. Important points for accurate blood glucose monitoring are:

- > wash hand before testing
- > calibrate meter to each new packet or bottle of strips (some meters)
- > check expiry date of strips and don't use if out of date
- > store the strips and meter away from direct sun and moisture.

Supplies and equipment

If you are registered with the National Diabetes Services Scheme (NDSS) you can access subsidised strips from most pharmacies and Diabetes Australia outlets. Meters are available from some pharmacies, diabetes centres and from Diabetes Australia outlets.

Sharps containers can be purchased from pharmacies, some councils and health services. Services for disposal of sharps containers may also be available from the purchase/pick up location. Please check with your Diabetes Australia office, local council or health service.



Testing guide for type 2 diabetes managed with diet or tablets

Basic testing includes testing before breakfast and before either the evening meal or at bedtime. The fasting level before breakfast tells you how well your diabetes is controlled overnight. The pre evening meal or before bedtime level tells you how well your diabetes is controlled during the day.

Testing guide for type 2 diabetes managed with insulin

Test blood glucose before breakfast, and then alternating between before lunch, before the evening meal and before bed while your medication is being adjusted. How often and at what time will depend on the type of insulin being used. The number of tests in a day can be reduced once blood glucose has settled. Some people may benefit from advanced blood glucose testing which includes testing after meals. If you choose to test 2 hours after a meal you will need to do a pre meal test as well. Specific education is available from a diabetes educator to develop a plan for high or low readings including testing when unwell.

You may need to test more often when you:

- > are newly diagnosed with diabetes
- > have unstable blood glucose levels or are unwell
- > before driving or using machinery.

When you have stable blood glucose readings, you may not need to test as often.

HbA1c

This test is different to the finger prick as it checks long term diabetes blood glucose by measuring how much glucose is circulating in the blood over the last 8-12 weeks. The target for HbA1c is less than 7% (53mmol/mol). This test is usually done 2-4 times a year by your doctor.

Key points to remember

- > Know your blood glucose target and write it down.
- > **Have a plan for testing, and if you have persistent high or low readings consult your doctor.**
- > Dispose of sharps safely.
- > Have a system for recording your results.

Where can I go for more information?

National Diabetes Services Scheme www.ndss.com.au

Diabetes Australia www.diabetesaustralia.com.au

My targets

Fasting _____ Pre-meal _____ 2 hrs after-meal _____

My usual testing schedule. _____

What to do if out of target. _____

For more information

**Diabetes Outreach
Country Health SA**
8 Woodville Rd
Woodville South SA 5011
Telephone: (08) 8222 6775
www.diabetesoutreach.org.au

