

Glucose Monitoring Type 1 Diabetes

There are different ways of measuring a blood glucose level (BGL):

Blood glucose monitoring is a measurement of glucose in the blood from a finger prick capillary sample that is measured by a glucose meter.

Continuous glucose monitoring (CGM) systems are available and are described in the CGM section.

Blood glucose monitoring is essential to manage your diabetes.

Some of the reasons include:

- Observe patterns and trends of your glucose levels.
- To adjust your insulin dose.
- To recognise hypoglycaemia (hypo) and hyperglycaemia (high levels).
- During sports or activity
- When eating different foods
- On days when your child is sick with a cold, flu, nausea or vomiting.

Steps to remember when checking your BGL

- Always wash and dry your hands as food can alter the BGL reading.
- Prepare your glucose monitor, strips and lancet. Remember to set the gauge depth on your lancet device to your chosen level.
- Change your lancet daily.
- Always use the side of your finger tip and rotate your fingers daily.
- Touch test strip to the blood until it has absorbed enough allowing the meter to count down and show the result.

Information for patients, families and carers

Target Range

4-8mmol/L pre meals & 4-10mmol/L 2 hours post meals

- BGLs will continually fluctuate and it can be difficult to always keep them within this range.
- If many readings are outside this target range, then it may mean that changes are required around insulin, exercise or activity levels and food.

We recommend people with Type 1 diabetes monitor their BGL:

- Before Breakfast
- Before Lunch
- Before Dinner
- Before Bed (9.30pm-10pm)

BGLs will also need to be tested:

- When the child/adolescent suspects a low BGL or hypo
- If your child feels unwell
- Before sport/exercise
- Before driving
- Overnight (2.00am)

When should I test my BGL overnight (2.00am)?

- At diagnosis (for 1 to 2 weeks) or as directed by diabetes team
- If your BGL is low at bedtime (< 4mmol/L)
- During times of increased activity
- Unwell- nausea, vomiting or decreased appetite
- Incorrect dose of insulin given
- Hypo on waking in the morning

For information



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