

Diabetes Control

Why is good diabetes control needed?

Keeping Blood Glucose Levels (BGL'S) as close to normal can be a lifesaver. Too much glucose in the blood stream for a long time causes diabetes related complications. High BGLs damage many parts of the body, such as the heart, blood vessels, eyes and kidneys. Heart and blood vessel disease can lead to heart attacks and strokes. By keeping BGLs between 3.5 and 8 mmol/L (most of the time), the risk of early onset of complications is reduced.

Keeping a written record of your young person's BGL's is an essential part of good control. Young people, particularly teenagers don't like to write down their blood glucose levels (BGLs). Many excuses are given, such as:

- 'being too busy and not having the time'
- 'can remember the results, so don't need to write them down'
- 'can't find the blood glucose recording book'
- 'can't find a pen'

Whatever the reason, not recording BGLs means the child or young person does not have to think about what the numbers mean. Writing the BGLs down gives the child/ young person and family the opportunity to discuss and see if there are any patterns in the levels and if any changes in insulin dose are needed. For example, BGLs may be consistently high in the mornings, or consistently low around dinnertime.

If these patterns are not recognised, required changes to insulin doses are not made and poor control continues.

What is HbA1c?

An HbA1c test shows the average amount of glucose that has been in the bloodstream during the past three months. This test is usually done every three months and gives valuable information about diabetes control. Most hospital and community health clinics have a machine that can test the HbA1c from a finger prick blood test. This will give a result in just a few minutes.

The result used to be given as a percentage. e.g 9%. HbA1c tests are now reported as a number measuring mmol/mol. As noted in the table below.

What should my HbA1c result be?

The aim is a HbA1c of 53 mmol/mol (7%) or lower. Keeping the HbA1C as close to the target range as possible reduces the chance of having complications at a younger age.

Table 1: What your HbA1c results mean

| HbA1c result (%) | HbA1c result (mmol/mol) | Average blood glucose level from finger prick (mmol/L) |
|------------------|-------------------------|--|
| 4 | 20 | 2.6 |
| 5 | 31 | 4.7 |
| 6 | 42 | 6.3 |
| 7 | 53 | 8.2 |
| 8 | 64 | 10.0 |
| 9 | 75 | 11.9 |
| 10 | 86 | 13.7 |
| 11 | 97 | 15.6 |
| 12 | 108 | 17.4 |
| 13 | 119 | 19.3 |
| 14 | 130 | 21.1 |

More information

For more information on diabetes control, visit the following websites:

<http://www.australiandiabetescouncil.com/>

<http://www.diabetes.co.uk/what-is-hba1c.html>