The A1c Test

The A1c test gives a good estimate of your overall blood sugar over the past 3 months. It is also called glycosylated hemoglobin, HgbA1c, HbA1c and A1c. This is how the test works.

Your red blood cells live for about 120 days or 3–4 months. As they move through your bloodstream they become coated with sugar. If there was a lot of sugar in your bloodstream over the past several weeks, the red blood cells will have a thick sugar coating and your A1c test will be above normal. On the other hand, if your average blood sugar was in the target range, the sugar coating will be less thick and your A1c test will be lower.

Some people find it helpful to picture their red blood cells as apples that get a sugar coating as they move through the bloodstream, just like a “candied apple”. The A1c simply measures the thickness of the candy coating.

Your physician will help you monitor your A1c by arranging for you to go to the lab regularly and will help you interpret the results. Even small improvements in your A1c results, will decrease your chances of complications.

An Optimal A1c result is 6% or less, if possible

- This test should be done every 3–4 months.
- In order to have an A1c of 6% or less keep blood sugar levels between 4-6 mmol/L before meals and less than 8 mmol/L, 2 hours after meals.
How Does Blood Sugar Measure in MMOL/L Translate into % of HBA1c

Average blood sugar (mmol/L) | % HBA1c
---|---
15.5-19 mmol/L | 12%
14-17 mmol/L | 11%
12.5-15 mmol/L | 10%
11-13 mmol/L | 9%
9.5-11 mmol/L | 8%
8-9 mmol/L | 7%
6.5 -7 mmol/L | 6%
5 mmol/L | 5%