

Changes To The HbA1c Reporting And What That Means To You.

What is changing in Glycated haemoglobin or HbA1c measurement?

Glycated haemoglobin or HbA1c is a measurement of average blood glucose levels for a period of time (usually previous 2-3 months) and is widely used to assess diabetes control. At present, HbA1c is reported as a percentage (%) of the total haemoglobin. In a position statement published in the Medical Journal of Australia, the Australian Diabetes Society together with three other important working parties have recommended that laboratories in Australia should also report HbA1c in the Systeme International (SI) units of mmol/mol from 1st July 2011 in line with the rest of the world. The reporting of HbA1c in SI units has thus far been adopted in New Zealand, the United Kingdom and various European countries.

The Australian recommendation is for laboratories to report HbA1c in both % and mmol/mol for a two-year period so that health care professionals and patients become accustomed to the new SI unit. For example, a result of HbA1c of 7% will also be reported as 53 mmol/mol. You can see some examples of this in the conversion table below:

%	New SI or IFCC mmol/mol
4.0	31
5.0	42
6.0	48
7.0	53
8.0	64
9.0	75
10.0	86
11.0	97
12.0	108

HbA1c conversion chart

The reporting of HbA1c as both % and in mmol/mol has been recommended because of concerns that an immediate introduction of the mmol/mol reporting might confuse health professionals and people with diabetes, and may adversely affect blood glucose control in the short term. It is important to understand that laboratories have not changed either their method of measuring HbA1c or the interpretation of blood glucose control. The % HbA1c still refers to the risk of developing complications from diabetes as seen in the Diabetes Control and Complications Trial (DCCT). The only change is the additional reporting of HbA1c in mmol/mol as well as the familiar % unit.

Why are these changes being made?

These changes came about when the International Federation of Clinical Chemistry (IFCC) standardised the method used to set HbA1c levels around the world. When a person with diabetes has his/her HbA1c measured in one laboratory, the result should now be similar if the blood was analysed in any other laboratory in the world. This standardisation has also improved the accuracy of HbA1c result. As a result of standardisation and improved accuracy, in two years time HbA1c will be reported exclusively in the new SI units of mmol/mol. There is a "master equation" which laboratories use to convert the HbA1c in SI units to the familiar and clinically validated %.

It is important that you understand these changes and we recommend you consult with your health care representative for more information.

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