

HbA1c

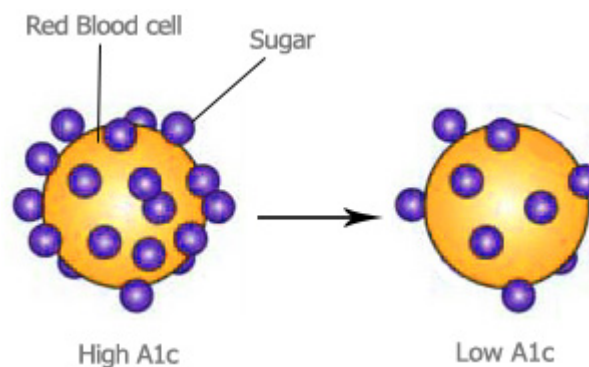
What is HbA1c?

HbA1C (Glycated Haemoglobin) is an important blood test used to indicate long term blood glucose control. It differs from a normal blood glucose test.

Haemoglobin is located in a person's red blood cells, and is responsible for transporting oxygen around the body. Glucose molecules attach to the haemoglobin, making it become "glycated".

When a person with diabetes has blood glucose levels that are generally within the target range, there will be a close to normal amount of glucose attached to their red blood cells.

When a person with diabetes generally has higher blood glucose levels, there will be more glucose molecules attached to their red blood cells. Hba1c is measured as a percentage depending on how much glucose is attached to the red blood cells.



How often?

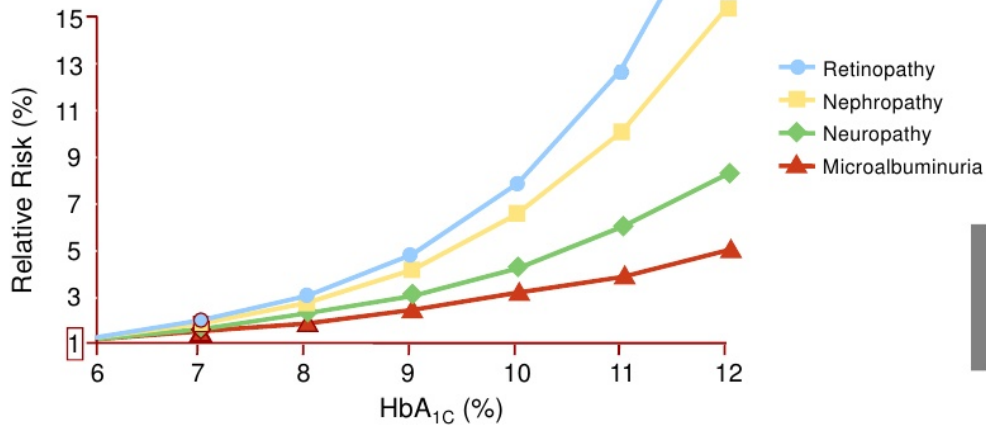
Because the body replaces its red blood cells every three months it is recommended that this test be done four times a year at clinic visits. PCH has point of care testing, meaning the Hba1c can be measured by performing a finger prick to obtain the blood sample.

Why monitor?

The Hba1c can tell us how much glucose on average has been circulating in a person's blood stream over the last 3 months. All the evidence suggests that maintaining optimal blood glucose control and having an Hba1c of **7% or below** will significantly decrease the risk of diabetes related complications.

Relationship of HbA_{1c} to Risk of Microvascular Complications

Diabetes Control and Complications Trial (DCCT)



Skyler JS. Endocrinol Metab Clin North Am. 1996;25:243-254.

The target Hba1c at PCH is $\leq 7\%$

This blood test does not replace the need for self-monitoring of blood glucose levels, which remains essential for diabetes management. It is also important to ensure blood glucose levels are in range for as much time as possible.

Contact details

For further information contact your Diabetes Nurse Educator or Doctor.



Government of **Western Australia**
Child and Adolescent Health Service

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