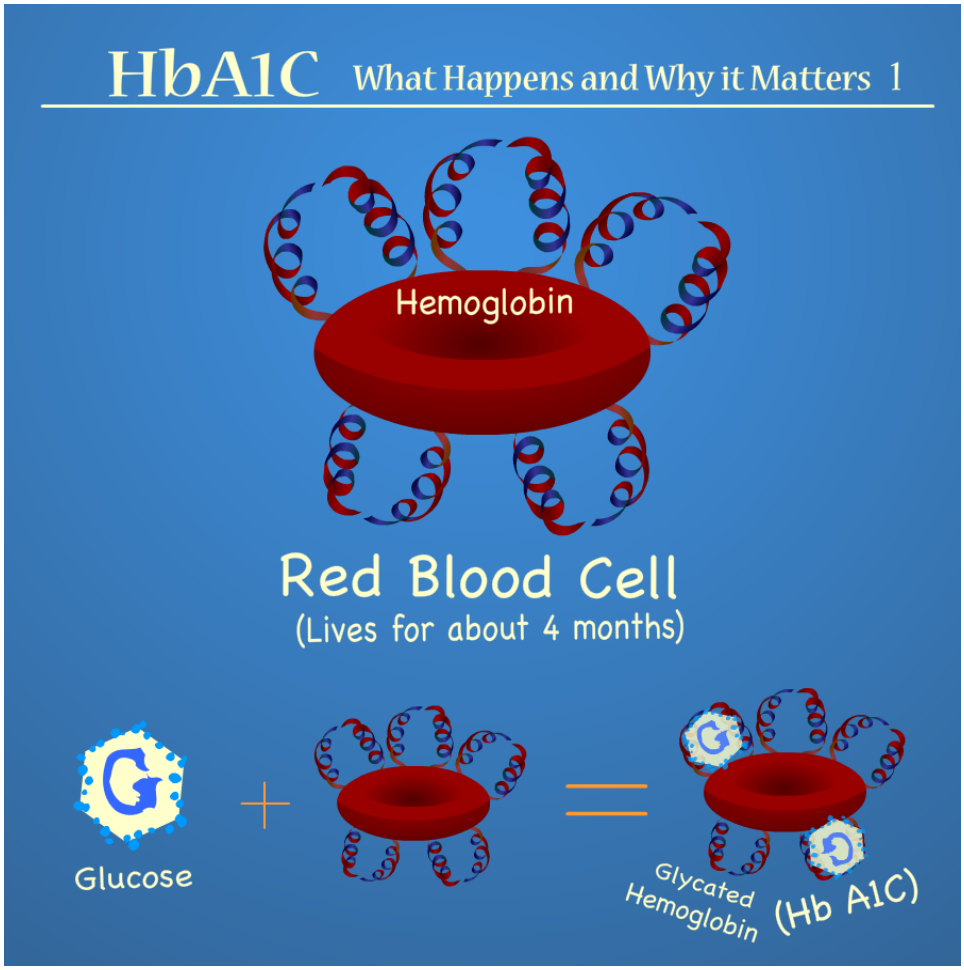
During your clinic visits, the medical team will measure your hemoglobin A1c (typically called A1c or HbA1c). A1c refers to glycated hemoglobin, and it tells you about your glucose levels over the past 90-120 days. It can be measured with a small blood sample from a finger stick.

What Happens in the Body?

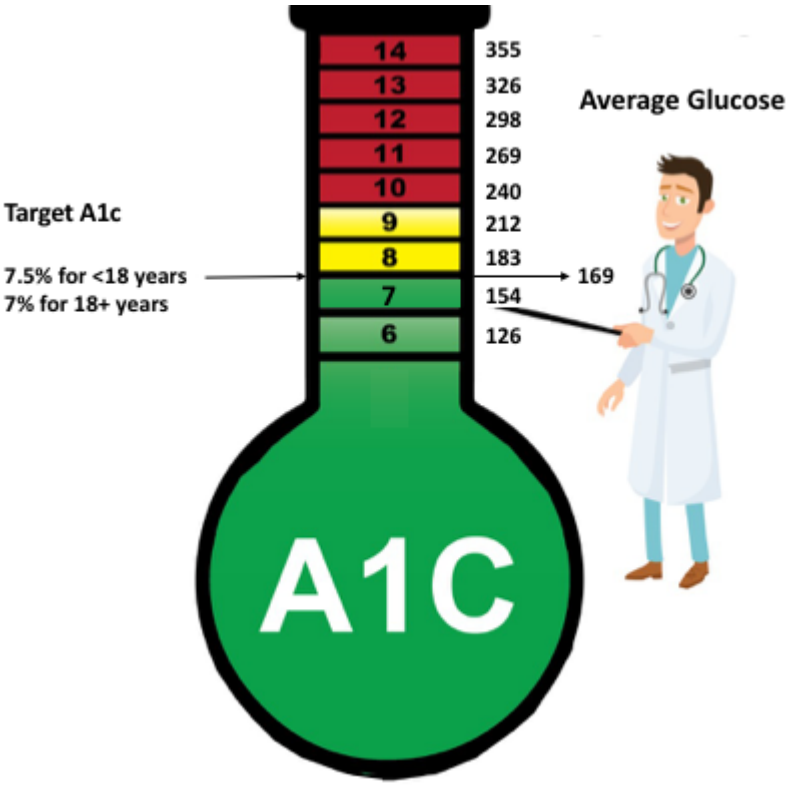


When glucose levels are high, a larger amount of sugar "sticks" to proteins in your body. This is called "glycosylation." This can be measured by testing the percentage of hemoglobin molecules in your blood which have sugar attached.

The A1c Scale

The chart below shows how your three month average glucose levels is related to your A1c. The ADA recommends that children under the age of 18 diagnosed with type 1 diabetes

strive to maintain an A1c level lower than 7.5%.



If you would like to know what your A1c might be from the average glucose data shown on your meter, you can use the [ADA's Estimated Average Glucose Calculator.] Use the following settings:

- Choose source: select "eAG to A1c"
- To: select "mg/dl"
- Source value: enter your average glucose number

High glucose levels can affect your eyes, kidneys, and the nerves in your hands, feet and other parts of your body. However, research has shown that if you keep your glucose levels close to target, the risk of the complications decreases dramatically.

Reviewed by Anastasia Albanese-O'Neill, PhD, APRN, CDCES on 11/26/25

This document is not intended to take the place of the care and attention of your personal physician or other professional medical services. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about

individual health concerns or specific treatment options should be discussed with your physician.

Recommended

Causes of Highs and Lows

Tracking and Reviewing Glucose Data

Understanding Glucose Numbers

Glucose Monitoring Options

Diabetes Complications

Sources

The A1C Test and Diabetes — NIDDK

Research Articles

Translating the A1C Assay Into Estimated Average Glucose Values — Diabetes Care

Metrics Beyond Hemoglobin A1C in Diabetes Management: Time in Range, Hypoglycemia, and Other Parameters — PubMed

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