

# The A1c Test to Measure Diabetes Control

## The Importance of Regular A1c Tests

The A1c is a blood test that reflects average blood glucose level over the past 2 or 3 months. Research has shown that eye, kidney and nerve damage occurring from diabetes is directly related to the A1c level.

Fingerstick blood glucose testing is very valuable for hour-to-hour or day-to-day management of your diabetes. But an A1c level gives an overall picture of your diabetes control and your risk of complications. You need both types of testing for effective diabetes management.

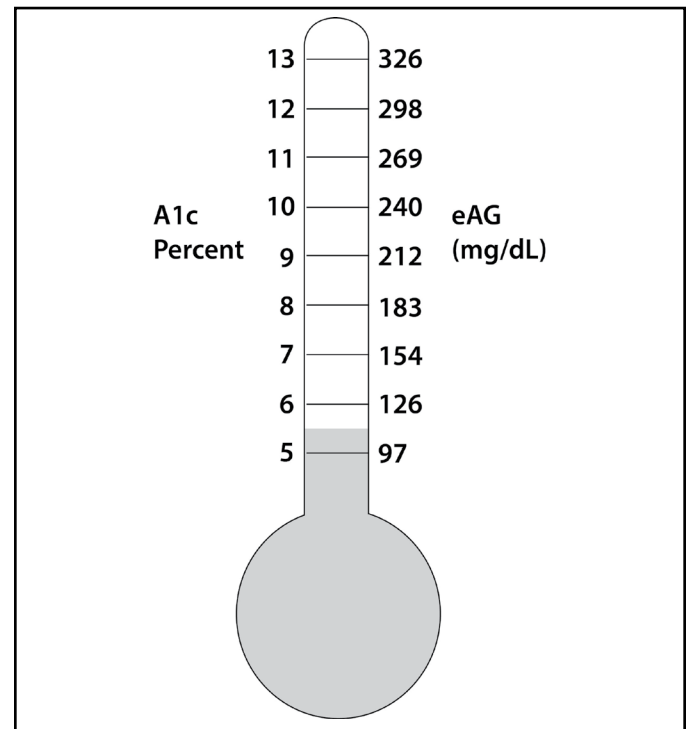
Your health care provider may give your A1c results in estimated average glucose (eAG) instead of a percentage. eAG is measured in mg/dL, which is what you are used to seeing on your meter. Use the drawing to the right to understand your A1c test results.

The Allina Health diabetes program recommends:

- an A1c test at least twice a year, more often if test results are higher than your test goal
- a test goal of less than 7 percent.

## How the Test Works

Glucose in your bloodstream attaches to hemoglobin in red blood cells and stays there. Red blood cells live for about 120 days. The higher your blood glucose is, the more glucose is attached to hemoglobin. The A1c test measures the percentage of hemoglobin with glucose attached (called altered hemoglobin).



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This drawing compares A1c results with eAG results, which are reported as mg/dL.

## High A1c Test Results

If your A1c test results are high, you and your health care provider need to work together to lower your glucose level. Your provider may recommend treatment plan changes such as:

- different medicines
- a different food plan
- more physical activity
- stress reduction training
- more frequent health care visits.

Lowering your A1c by even 1 percent can reduce your risk of diabetes complications by 30 percent.