

## Hemoglobin A1c Lab Value

Glycosylated hemoglobin, A1c, (HbA1c) is a test that measures how much glucose permanently attaches to a specific area of the hemoglobin molecule. The A1c test is a commonly used blood test to measure blood glucose control over the past 2-3 months and monitor diabetes control. It measures what percentage of your hemoglobin (a protein in red blood cells that carries oxygen) is coated with sugar (glycated). The amount of hemoglobin that is glycated depends on the blood glucose level. Because glucose binds to a variety of proteins (including hemoglobin) through a process called glycosylation, the higher the blood glucose level is over time, the more glycosylated hemoglobin becomes. The red blood cell remains glycated for the life of the cell (approximately 120 days). Therefore, the A1c test provides a measurement of glycemic control over the previous 2-3 months, with increases in the A1c reflecting elevated blood glucose levels or poor control of blood sugar.



PLAY PICMONIC

### 4-6%

(4) fork to (6) sax

Those not diagnosed with diabetes can have a normal A1c level ranging between 4-5.7%. Diabetes is diagnosed when an A1c of 6.5% or higher is present. For those with diabetes, a goal of 7% or less is a common treatment target, with 6% being ideal. A1c can increase with poor diabetic control. Maintaining it at the treatment goal can help delay diabetic disease progression and resulting complications.