



Diabetes

All About Your A1C



What has your blood sugar been up to lately? Get an A1C test to find out your average you're at risk for prediabetes or type 2 diabetes, or if you're managing diabetes.

The A1C test—also known as the hemoglobin A1C or HbA1c test—is a simple blood test that measures your average blood sugar levels over the past 3 months. It's one of the commonly used tests to diagnose [diabetes](#), and is also the main test to help you and your health care team manage your diabetes. It's linked to diabetes complications, so reaching and maintaining your individual A1C goal is important for people with diabetes.

What Does the A1C Test Measure?

When sugar enters your bloodstream, it attaches to hemoglobin, a protein in your red blood cells. The amount of sugar attached to their hemoglobin, but people with higher blood sugar levels have more sugar attached. The percentage of your red blood cells that have sugar-coated hemoglobin is called your A1C.

Who Should Get an A1C Test, and When?

Testing for diabetes or prediabetes:

Get a baseline A1C test if you're an adult over age 45—or if you're under 45, are overweight, or have other [factors](#) for prediabetes or type 2 diabetes:

- If your result is normal but you're over 45, have risk factors, or have ever had gestational diabetes, get an A1C test every 3 years.
- If your result shows you have prediabetes, talk to your doctor about taking steps now to lower your risk for type 2 diabetes. Repeat the A1C test as often as your doctor recommends.
- If you don't have [symptoms](#) but your result shows you have prediabetes or diabetes, get a second test a few days later to confirm the result.
- If your test shows you have diabetes, ask your doctor to refer you to [diabetes self-management](#) services so you can have the best start in managing your diabetes.

Managing diabetes:

If you have diabetes, get an A1C test at least twice a year, more often if your medicine changes or your health conditions. Talk to your doctor about how often is right for you.

How to Prepare for Your A1C Test

The test is done in a doctor's office or a lab using a sample of blood from a finger stick or a blood sample from a vein. You don't need to do anything special to prepare for your A1C test. However, ask your doctor if other tests are needed and if you need to prepare for them.

Your A1C Result

Diagnosing Prediabetes or Diabetes

Normal	Below 5.7%
Prediabetes	5.7% to 6.4%
Diabetes	6.5% or above

A normal A1C level is below 5.7%, a level of 5.7% to 6.4% indicates prediabetes, and a level of 6.5% or above indicates diabetes. Within the 5.7% to 6.4% prediabetes range, the higher your A1C, the greater your risk for developing type 2 diabetes.

Managing Diabetes

Your A1C result can also be reported as estimated average glucose (eAG), the same number you are seeing on your blood sugar meter:

A1C %	eAG mg/dL
7	154
8	183
9	212
10	240

What Can Affect Your A1C Result?



Get your A1C tested in addition to—not instead of—regular blood sugar self-testing if y

Several factors can falsely increase or decrease your A1C result, including:

- Kidney failure, liver disease, or severe anemia.
- A less common type of hemoglobin that people of African, Mediterranean, or Southe with certain blood disorders (such as sickle cell anemia or thalassemia) may have.
- Certain medicines, including opioids and some HIV medications.
- Blood loss or blood transfusions.
- Early or late pregnancy.

Let your doctor know if any of these factors apply to you, and ask if you need additional t

Your A1C Goal

The goal for most people with diabetes is 7% or less. However, your personal goal will dep your age and any other medical conditions. Work with your doctor to set your own indivic

Younger people have more years with diabetes ahead, so their goal may be lower to redu unless they often have hypoglycemia (low blood sugar, or a “low”). People who are older, l serious health problems may have a higher goal.

A1C: Just Part of the Toolkit

A1C is an important tool for managing diabetes, but it doesn’t replace regular blood sugar goes up and down throughout the day and night, which isn’t captured by your A1C. Two p one with steady blood sugar levels and the other with high and low swings.

If you’re reaching your A1C goal but having symptoms of highs or lows, check your blood different times of day. Keep track and share the results with your doctor so you can make if needed.

More Information

- [CDC’s Division of Diabetes Translation](#)
- [Diabetes Basics](#)
- [Blood Sugar Testing](#)
- [Diabetes Features & Spotlights](#)
- [CDC Diabetes on Facebook](#)
- [@CDCDiabetes on Twitter](#)