

How do blood glucose self-testing results compare with A1C test results?

Here's a chart to show you how your blood glucose testing results are likely to match up with your A1C results. As the chart shows, the higher your self-testing numbers are over a 3-month period, the higher your A1C result is going to be.

A1C Level	Blood Glucose Test Average
12	300
11	270
10	240
9	210
8	180
7	150
6	120
5	80

What other numbers do I need to know to control my diabetes?

People with diabetes are at high risk for heart attack and stroke. Be smart about your heart and take control of the ABCs of diabetes: $A_{1}C$, B_{1} lood pressure, and C_{2} holesterol.

Take Control of Your Blood Glucose

- **1.** Talk to your health care provider about your A1C and your self-testing blood glucose targets.
- **2.** Ask for an A1C test at least twice a year.
- **3.** Ask your health care team what your A1C number is, what it means, and what you need to do to reach your A1C goal.
- **4.** Check your own blood glucose as often as needed and go over the results with your doctor and other health care team members.
- **5.** To keep your blood glucose under control, eat the right foods in the right amounts, get regular physical activity, and take prescribed medicines.
- **6.** Ask your health care provider about your blood pressure and cholesterol numbers and what your target goals should be.



NATIONAL DIABETES EDUCATIONAL

The National Diabetes Education Program is a partnership of the National Institutes of Health, the Centers for Disease Control and Prevention, and over 200 private and public organizations. For more information, call 1-800-438-5383 or visit the web site at www.ndep.nih.gov on the Internet. NIH Publication No. 98-4350 (NDEP 10) revised May 2002.

If You Have Diabetes, Know Your Blood Sugar Numbers

Taking control of your diabetes can help you feel better and stay healthy. Research shows that keeping your blood glucose (blood sugar) close to normal reduces your chances of having eye, kidney, and nerve problems. To control your diabetes, you need to know your blood glucose numbers and your target goals.

There are two different tests to measure your blood glucose:

- The A1C test (pronounced A-one-C), which used to be called hemoglobin A-1-C, measures your average blood glucose level over the last 3 months. It is the best way to know your overall blood glucose control during this period of time.
- A blood glucose test you do yourself, using a drop of blood and a meter, measures your blood glucose at the time you check it.

You and your health care provider need both tests to get a complete picture of your blood glucose control.



The A1C Test: The Best Measure of Long-Term Diabetes Control

What is the A1C test?

The **A1C** test (which used to be called hemoglobin A-1-C or H-b-A-1-C) is a simple lab test that **measures** your average blood glucose level over the last 3 months. Your health care provider takes a small blood sample to test your A1C.



Why should I have an A1C test?

The A1C test is the best test for you and your health care team to know **how** well your treatment plan is working over time. The test shows if your blood glucose numbers have been close to normal or too high. The higher the amount of glucose in your blood, the higher your A1C result will be, increasing your chances for serious health problems.

What is a good A1C goal?

You and your health care team should discuss the A1C goal that's right for you. For most people with diabetes, the A1C goal is less than 7. If your A1C number is less than 7, your care plan is probably working and your blood glucose is under good control.

An A1C number higher than 8 means that you have a greater chance of eye disease, kidney disease, or nerve damage. Lowering your A1C number – by any amount – can improve your chances of staying healthy. **If your number is higher than 8, ask your health care provider about changing your treatment plan to bring your A1C number down.**

Level of Control	A1C
Normal	6 or less
Goal	7 or less
Take action	8 or more

How often do I need an A1C test?

Ask for an A1C test **at least twice a year**. Get the test more often if your blood glucose stays too high or if your treatment plan changes.

What about home testing for A1C?

Home testing for A1C is now possible and some people with diabetes may find it helpful to use this test. Be sure to do it properly and **discuss the results with your doctor.**



Checking Your Own Blood Glucose: The Best Test for Day-to-Day Glucose Control

Why should I check my blood glucose?

Checking your blood glucose with a meter helps you see how food, physical activity, and medicine affect your blood glucose. The readings you get can **help you manage your diabetes day by day or even hour by hour**. Keep a record of your test results and review it with your health care provider.

How do I test my own blood glucose?

Use a drop of blood and a meter to measure your blood glucose level. Be sure you know how to do the test properly. Also, find out whether your test strips and your meter measure blood glucose using **whole blood** or **plasma.**



What is a good self-testing blood glucose goal?

Set your goals with your health care provider. Blood glucose goals for most people with diabetes when self-testing are:

Whole Blood	Values
Before meals	80 - 120
At bedtime	100 – 140

Plasma	Values
Before meals	90 – 130
At bedtime	110 – 150

How often should I check my blood glucose?

Self-tests are usually done **before meals and/or at bedtime**. Ask your health care provider when and how often you need to check your blood glucose.

If I test my own blood glucose, do I still need the A1C test?

Yes. The results of each test help you and your health care team to manage your diabetes and get a complete picture of your diabetes control.

Does my insurance pay for self-testing supplies and education?

At least 44 states have passed laws that require insurance coverage of self-testing supplies and diabetes education. Check your coverage with your insurance plan. Medicare covers most of the cost of diabetes test strips, lancets (needles used to get a drop of blood), and blood glucose meters for people who have diabetes. Ask your health care team for details about Medicare's coverage of diabetes supplies as well as diabetes education and nutrition counseling and visit the Medicare website at www.medicare.gov.