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.

The A1C test *(pronounced A-one-C)*
reflects 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. This test used to be called hemoglobin A-1-C or H-b-A-1-C.
The blood glucose test you do yourself uses a drop of blood and a meter that measures the level of glucose in your blood at the time you do the test. This is called self monitoring of blood glucose (SMBG).

If you have diabetes…
know your blood sugar numbers!

You and your health care team need to use both the A1C and SMBG tests to get a complete picture of your blood glucose control.

What is the A1C test?
The A1C test is a simple lab test that reflects your average blood glucose level over the last 3 months.

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 levels have been close to normal or too high. The higher the amount of glucose in your blood, the higher your A1C result will be. A high A1C result will increase your chances for serious health problems.

What is a good A1C goal?
You and your health care team should discuss the A1C goal that is right for you. For most people with diabetes, the A1C goal is less than 7. An A1C higher than 7 means that you have a greater chance of eye disease, kidney disease, or nerve damage. Lowering your A1C—by any amount— can improve your chances of staying healthy.

If your number is 7 ormore, or above your goal, ask your health care team about changing your treatment plan to bring your A1C number down.

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.

The Best Measure of Long-Term Diabetes Control is the Level of A1C

Control Number
Normal = 6 or less
Goal = less than 7
Take action if 7 or more

1. Talk to your health care team about your A1C goals and your SMBG goals.
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, what it should be, 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 at each visit with your doctor and health care team.
5. To keep your blood glucose under control, eat the right foods in the rightamounts. Get regular physical activity as advised by your health care team. Take medicines that have been prescribed for you.
6. Ask your health care team about your blood pressure and cholesterol numbers and what your goals should be.

For more information, visit the Medicare website at www.medicare.gov.

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

Here is a chart from the American Diabetes Association 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.

What other numbers do I need to know to control my diabetes?
People with diabetes are at high risk for heart attack and stroke. That is why people with diabetes need to control their blood pressure and cholesterol levels as well as their blood glucose levels.
Be smart about your heart and take control of the **ABCs of diabetes:**
A1C,
Blood pressure,
Cholesterol.

A1C Average self-test Level glucose numbers (plasma)
12 = 345
11 = 310
10 = 275
9 = 240
8 = 205
7 = 170
6= 135

Why should I check my blood glucose?
Self monitoring of blood glucose, or SMBG, with a meter helps you see how food, physical activity, and medicine affect your blood glucose levels.
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 at each visit with your health care team.

How do I test my own blood glucose?

To do SMBG, you use a tiny drop of blood and a meter to measure your blood glucose level. Be sure you know how to do the test the correct way. Also, ask your health care team whether your meter gives the results as plasma or whole blood glucose. Most new meters provide the results as plasma glucose.

What is a good self-testing blood glucose goal?

Set your goals with your health care team. Blood glucose goals for most people with diabetes when selftesting are on these charts.

How often shouldI check my blood glucose?

Self-tests are usually done before meals, after meals, and/or at bedtime. People who take insulin usually need to test more often than those who do not take insulin. Ask your health care team when and how often you need to check your blood glucose.

If I test my own blood glucose, do I still need theA1C test?

Yes. The results of both SMBG and A1C tests 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 the A1C test, self-testing supplies, and education?

Most states have passed laws that require insurance coverage of SMBG 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 the A1C

The Best Test for Day-to-Day Diabetes Control

Whole Blood Values

Before meals 80 – 120
1 to 2 hours
after meals less than 170

1-800-438-5383
www.ndep.nih.gov

The U.S. Department of Health and Human Services' National Diabetes Education Program (NDEP) is jointly sponsored by the National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC) with the support of more than 200 partner organizations.
NIH Publication No. 98-4350 Revised July 2005