

The A-1-C
blood glucose test:
what it is and how
it can help you

Oregon Diabetes Resource Bank
Handouts to help people with diabetes



I tell my patients that knowing their A1C number will help them stay healthy with diabetes. If the number is too high, we talk about what they can do to get their blood glucose down to a lower level to help protect their health.



What is the “A1C” test?

A1C is pronounced “A - one - see.” The A1C test is also called the hemoglobin A1C test.

The A1C test is a simple test for blood glucose (or “blood sugar”) that you get at your doctor’s office.


The result from the A1C blood test tells how high your average blood glucose has been during the past two to three months.



Who needs the A1C test?

Everyone who has diabetes needs to get this test, even if they test their own blood glucose at home.

Most people with diabetes should get the A1C test *at least two times a year*. Ask your doctor how often you should get the A1C test.



What is your “goal” for the result of your A1C test?


The A1C goal for many people with diabetes is below 7. You and your health care team will decide on an A1C goal that is right for you.

If your A1C number is higher than your goal, it means that your blood glucose has been staying *too high* during the last couple of months.

If your blood glucose stays too high for a long time, it can damage blood vessels throughout your body.

When high blood glucose damages your blood vessels, it can lead to *serious health problems*. These problems include:

- damage to your kidneys that can make them stop working
- eye problems that can lead to blindness
- sores and skin infections of the feet that can lead to amputation
- heart disease
- nerve damage



What can you do to stay healthy?

No one wants the health problems caused by high blood glucose, and *you don’t have to have them!* Keeping your blood glucose at a healthy level will help prevent these problems.

More on next page →



What is “blood glucose”?

Your body changes food you eat into “blood glucose.” Blood glucose is also called “blood sugar.”

Your blood vessels carry the blood glucose throughout your body to give your body energy.

In order to give your body energy, the blood glucose has to move from your blood into the rest of your body. For people who do not have diabetes, this happens easily.

But if you have diabetes, **it’s hard for the glucose to move from your blood to other parts of your body the way it should.** So too much glucose may stay in your blood instead, and this is not good for your body:

- Your blood vessels will have too much glucose, which **causes damage**.
- The rest of your body will not get as much glucose it needs, so it will be **starved for energy**.



Often there are no symptoms to warn you when your blood glucose is too high

To know for sure whether your blood glucose is at a healthy level or too high, **you have to test your blood.** That’s why it’s so important for you to get your A1C blood glucose tests.



Your A1C tests

You and your doctor can fill this in:

You should have an A1C test:

Every 6 months (2 times a year)
 Every 4 months (3 times a year)
 Every 3 months (4 times a year)
 Other: _____

Your A1C goal is _____

Your A1C numbers are:

Date	A1C =
Date	A1C =
Date	A1C =

For many people with diabetes, **the goal is an A1C below 7.**

When your A1C number is *higher than your goal*, this means that *your blood glucose is staying too high.*

- When your blood glucose is staying too high, you have a greater chance of getting serious health problems.
- The next page has tips on how to get your blood glucose down to a healthier level. →

What should you do if your A1C test shows that your *blood glucose* is too high?

- **Talk with your doctor** and other members of your health care team about what to do. They can suggest changes that will help you bring your blood glucose down to a healthier level.

Here is a place for you to write down changes you plan to make:

- **Eat the *right foods* in the *right amounts* at the *right times*.**
 - Different foods affect your blood glucose level in different ways.
 - To learn more about how eating affects your blood glucose, talk with your health care team. Ask how you can get help from a nutritionist.
- **Stay active.** Exercise is a great way to get better control over your blood glucose. Get regular physical activity as advised by your health care team.
- **Take your diabetes medicines** if any have been prescribed for you.

Testing your own blood



Everyone with diabetes needs to have an A1C test at least two times a year. *But to help manage their blood glucose from day to day, many people with diabetes also test their own blood at home. You can use a blood glucose kit or meter and you will get the results right away.*

Ask your doctor about whether you should test your blood at home and how often you should do it.

Testing your blood will show you how your blood glucose can change from day to day or hour to hour, depending on such things as what you eat and how much you exercise. This helps you know what lifestyle changes you could make to reach a healthy level of blood glucose.

Keep working toward your goal for a healthy A1C number

The closer you can get to your goal A1C number, the better your chance of preventing or delaying health problems that can happen when you have diabetes.

Research studies show that if your A1C number goes down by just one point, this can mean that your risk of long-term complications of diabetes goes down by as much as 40%.

[Source: U.S. Department of Health and Human Services' National Diabetes Education Program]