# **Know Your Blood Sugar Numbers**









If you have diabetes, keeping your blood glucose (sugar) numbers in your target range can help you feel good today and stay healthy in the future.

## There are two ways to measure blood glucose.

- The A1C is a lab test that measures your average blood glucose level over the last 2 to 3 months. It shows whether your blood glucose stayed close to your target range most of the time, or was too high or too low.
- 2 Self-tests are the blood glucose checks you do yourself. They show what your blood glucose is at the time you test.

Both ways help you and your health care team to get a picture of how your diabetes care plan is working.

## About the A1C test

**Why should I have an A1C test?** The A1C tells you and your health care team how well your diabetes care plan worked over the last 2 to 3 months. It also helps decide the type and amount of diabetes medicine you need.

What is a good A1C target for me? For many people with diabetes, the A1C target is below 7. You and your health care team will decide on an A1C target that is right for you. If your A1C stays too high, it may increase your chances of having eye, kidney, nerve, and heart problems.

**How often do I need an A1C?** You need an A1C at least twice a year. You need it more often if it is too high, if your diabetes treatment changes, or if you plan to become pregnant.

What if I plan to become pregnant? Talk with your doctor before you get pregnant. Your doctor can help you reach an A1C target that allows a healthy baby to develop. If you are already pregnant, see your doctor right away.

# **About self-tests for blood glucose**

**Why should I do self-tests?** Self-tests can help you learn how being active, having stress, taking medicine and eating food can make your blood glucose go up or down. They give you the facts you need to make wise choices as you go through the day.

Keep a record of your results. Look for times when your blood glucose is often too high or too low. Talk about your results with your health care team at each visit. Ask what you can do when your glucose is out of your target range.

**How do I check my blood glucose?** Blood glucose meters use a small drop of blood to tell you how much glucose is in your blood at that moment. Ask your health care team how to get the supplies you need. They will also show you how to use them.



"I bring my self-test record when I visit my doctor. We talk about what makes my blood glucose go up or down and what to do about it." "I drink water instead of soda to help keep my blood glucose in my target range."



### What is a good target range for my self-tests?

Many people with diabetes aim to keep their blood glucose between 70 and 130 before meals. About 2 hours after a meal starts, they aim for less than 180. Talk with your health care team about the best target range for you.

Can my blood glucose get too low? Yes it can. If you feel shaky, sweaty, or hungry, do a check to see if it is below your target range. Carry something sweet with you at all times, such as 4 hard candies or glucose tablets. If your blood glucose is too low, eat the candy or glucose tablets right away. Let your health care team know if this happens often. Ask how you can prevent it.

#### How often should I check my blood glucose?

Self-tests are often done before meals, after meals, and at bedtime. People who take insulin need to check more than those who do not take insulin. Test whenever you want to know your blood glucose.

#### Are there other numbers I need to know?

Yes, you need tests of your blood pressure and cholesterol (a blood fat). You and your health care team need to decide the best targets for these too. Keeping them in your target range can help lower your chances for having a heart attack or stroke.

**How do I pay for these tests?** Medicare and most insurance pay for the A1C, cholesterol, and some self blood test supplies. Check with your insurance plan or ask your health care team for help. For more on Medicare visit www.medicare.gov/health/diabetes.asp.

What is in it for me? Finding the time to check your blood glucose can be a struggle. It is also hard when your glucose levels do not seem to match your efforts to manage your diabetes. Keep in mind that your self-test and A1C results are numbers to help you, not to judge you.

Many people find that self-testing and using the results to manage their diabetes pays off. They are more able to take charge of their diabetes so that they can feel good today and stay healthy in the future.

## John visits his health care team

John and his health care team use all of his test results to get a picture of how his diabetes care plan is working.

At each visit, John and his team:

- Look at his A1C, self blood glucose test record, cholesterol, and blood pressure results.
- Check to see if he is reaching all his targets.

At his visit today, John's A1C is too high. He and his health care team talk about what he can do to get closer to his target A1C.

Together they decide that John will:

- Increase his walking time to 30 minutes every day before dinner.
- Self-test after dinner to see if being more active lowers his blood glucose.

Call his doctor in 1 month for a change in medicine if his self-tests are still out of his target range.

For more information:

1-888-693-NDEP (1-888-639-6337) TTY: 1-866-569-1162 www.YourDiabetesInfo.org





HHS' NDEP is jointly sponsored by NIH and CDC with the support of more than 200 partner organizations.

Martha M. Funnell, M.S., R.N., C.D.E., Michigan Diabetes Research and Training Center, Ann Arbor, MI, reviewed this material for technical accuracy.

The NDEP prints on recycled paper with bio-based ink.

**Revised February 2011** 

NIH Publication No. 11-4350

NDEP-10

