

Checking Blood Glucose

Checking your blood glucose (blood sugar) is important. You can use the results to make decisions about food, physical activity, and medication. These decisions can help you feel better day to day and delay or prevent diabetes complications such as heart attack, stroke, or blindness.

Before you were diagnosed with diabetes, no matter what you ate or how active you were, your blood glucose levels automatically stayed within a narrow range. But with diabetes, this is no longer true. Your blood glucose level can be higher or lower. These changes are common and can take place quickly.

HOW DO I CHECK MY BLOOD GLUCOSE?

Many people use a blood glucose meter to check their blood glucose several times a day. A meter is a small device that tests a tiny drop of blood and then displays your blood glucose level at that moment. A lancet is a device used to prick the skin to get the drop of blood. The results are used to make decisions about food, physical activity, and medications.

WHAT ARE THE BLOOD GLUCOSE TARGETS FOR PEOPLE WITH DIABETES?

The general targets recommended by the American Diabetes Association are listed below. Talk with your health care team about whether these targets are right for you.

Association targets

- When I wake up and before meals: 80 to 130 mg/dl
- 2 hours after starting a meal: below 180 mg/dl

WHEN ARE THE BEST TIMES OF DAY TO CHECK BLOOD GLUCOSE?

Many people check blood glucose first thing in the morning before they eat (called “fasting”) as well as before other meals. You also may want to check after a meal (called “postprandial”) when your blood glucose is likely to be higher.

Other times to check include:

- when you’re having symptoms of high or low blood glucose
- when you’re ill, especially if you’re throwing up or dehydrated
- before, during, and after physical activity
- before you drive
- before you go to sleep

HOW OFTEN DO I NEED TO CHECK?

If you’re using your blood glucose results to decide how much insulin to take, you’ll need to check several times a day. Otherwise, you may be able to check less often. When you make changes in your medication, activity, or meal plan, or when you are pregnant, you should probably check more often. Talk it over with your health care team.

ARE THERE WAYS TO GET A BLOOD SAMPLE WITHOUT STICKING MY FINGER?

Some glucose meters can check blood samples from areas other than the fingertips. This can be the fleshy parts of the hand, the forearm, the outer thigh, the calf, or the abdomen. Sometimes, to get the most accurate results, experts recommend that you use your fingertips instead of these sites.

These times include when:

- your blood glucose is low or likely to be low
- you have trouble realizing that your blood glucose is low
- it's less than 2 hours after starting a meal
- you've been physically active

If you're seeking ways to keep your fingertips from getting sore, or you can't get blood from alternative sites, talk with your health care team about different types of lancets or other techniques that can help.

HOW CAN I MAKE SURE THAT MY METER PROVIDES ACCURATE RESULTS?

Follow your meter's instructions for the most accurate results.

This includes:

- keeping your meter clean
- making sure your test strips haven't passed their expiration date
- storing your strips as recommended
- coding (setting up) your meter for your strips if necessary and using the control solution as recommended
- making sure your blood sample is big enough

Review how you use your meter with your doctor or diabetes educator once a year. You can also compare the results of a meter check to results of a blood glucose check done at the lab. Your health care team can provide more information on how to do this type of comparison. If your meter isn't working at all, it may need new batteries. Check the back of your meter for the meter manufacturer's phone number in case questions arise.