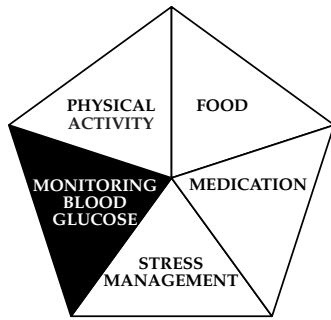


Chapter 2: Monitoring Blood Glucose



Testing your blood glucose levels will help you manage your diabetes. Regular testing will tell you how your food, physical activity and medicines are working. Regular testing will also let you and your health care provider know when changes should be made.

Easy-to-use equipment is available for testing your blood glucose levels. Talk with your diabetes educator about equipment that would be best for you.

When to Test

How often you check your blood glucose is affected by:

- the type of diabetes you have
- how much your blood glucose changes during the day
- your diabetes medicine: type, amount and how often you take it
- food
- stress and illness
- physical activity.

American Diabetes Association Recommended Blood Glucose Levels*

- before meals: between 80 to 130 mg/dL
- 2 hours after meals: less than 160 to 180 mg/dL
- at bedtime: 100 to 140 mg/dL

*Talk with your health care provider or diabetes educator about safe levels for you.

Good blood glucose levels for you

- before meals _____
- after meals (2 hours) _____
- before bedtime _____

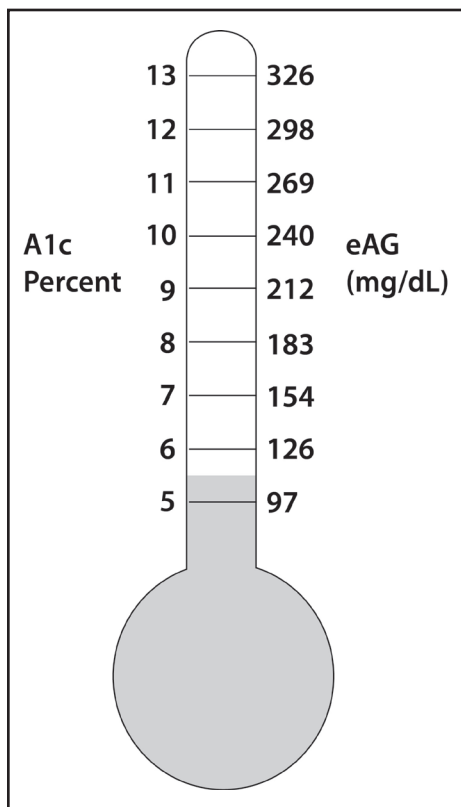
Testing Schedule

Check your blood glucose at the times marked below. Write the number and the time of your test in your blood glucose record book. **Important:** Bring your blood glucose record book to all of your appointments with your health care provider and diabetes educators. Ask your diabetes educator for a record book.

Check your blood glucose:

- before breakfast after breakfast
- before lunch after lunch
- before dinner after dinner
- at bedtime other _____

The Importance of Regular A1c Tests



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This drawing compares A1c results with eAG results, which are reported as mg/dL.

The A1c is a blood test that reflects average blood glucose level over the past 2 or 3 months. Research has shown that eye, kidney and nerve damage from diabetes is directly related to the A1c level. You do not need to fast for the A1c test.

Fingerstick blood glucose testing is valuable for hour-to-hour or day-to-day management of your diabetes. But an A1c level gives an overall picture of your diabetes control and your risk of problems (complications). You need both types of testing to manage your diabetes well.

Your health care provider may give your A1c results in estimated average glucose (eAG) instead of a percentage. eAG is measured in mg/dL, which is what you are used to seeing on your meter. Use the drawing at left to understand your A1c test results.

The Allina Health diabetes program recommends:

- an A1c test at least twice a year, more often if test results are higher than your test goal
- a test goal of less than 7 percent.

Your A1c Test Results

The normal range for this test at your lab is:

_____ (usually 4 to 5.6 percent).

The recommended range for your A1c is:

Your most recent A1c result was:

How the test works

Glucose in your bloodstream attaches to hemoglobin in red blood cells and stays there. Red blood cells live for about 120 days. The higher your blood glucose is, the more glucose is attached to hemoglobin. The A1c test measures the percentage of hemoglobin with glucose attached (called altered hemoglobin).

High A1c test results

If your A1c test results are high, you and your health care provider need to work together to lower your glucose level. Your provider may recommend treatment plan changes such as:

- different medicines
- a different food plan
- more physical activity
- a plan to manage stress
- more frequent health care visits.

Lowering your A1c by even 1 percent can reduce your risk of diabetes problems (complications) by 30 percent.