

Blood Sugar Monitoring: Why, When and How

Monitoring blood sugar allows people with diabetes to take charge of their condition, feel their best, and prevent long-term diabetic complications. Checking blood sugar levels and logging the results is key in the process of learning how food, activity levels, stress, medicine, and insulin can change blood sugar levels. It is especially important to check blood sugar for hypoglycemia (low) and hyperglycemia (high) blood sugar levels.

How Often Should Blood Sugar Be Checked?

Blood sugar should be monitored on a regular basis. Many people start with checking their blood sugar 2 or 3 times daily, usually before breakfast and before the evening meal. Others may have to check their blood sugar levels more than 6 times a day. Blood sugar should be checked more frequently if there has been a medication change or diet change. If activity or stress levels change or when there is illness, it is especially important to test more frequently.

Doctors will set target blood sugar ranges based on age, diabetes-related complications, general health, and the patient's ability to recognize the warning signs of low blood sugar. Follow your doctor's treatment plan regarding how often to test.

How Should Blood Sugar Be Checked?

Supplies needed to check blood sugar at home are a glucose meter, alcohol pads, sterile finger lancets, and test strips. Closely follow the directions included with the glucose meter. Steps should include:

- Wash and dry hands before testing.
- Clean area on fingertip with alcohol pad. Some meters will test in other areas such as the forearm, thigh, or the fleshy part of the hand. Follow your doctor's instructions as to which area is best.
- Use the sterile lancet to prick the skin to get a drop of blood.
- Place the drop of blood on the test strip.
- Follow the instructions for inserting the test strip into the glucose meter.
- The meter will calculate a blood sugar reading.
- Record the reading in a detailed log. Also include information about the time medication was taken, your activity level, and the amount and kind of food that has been eaten.

What Are Target Blood Sugar Levels?

It is important to work with a health professional to determine your *individual* target levels for blood sugar. Target blood sugar may change with age, pregnancy or other diabetic complications. Your physician will determine what target levels are right for you. The following are examples of target levels:

- Before meals: target range between 90 and 130 mg/dL (this is also called the "fasting blood sugar level").
- One to two hours after meals: target range is lower than 180 mg/dL.
- Before bedtime: target range is between 110 and 150 mg/dL.

What to Do About Poor Results

If blood sugar readings are consistently higher or lower than the target range outlined in the diabetic care plan, the plan may have to be revised. Doctors may recommend more daily physical activity, further changes in diet, or encourage increased watchfulness of the foods eaten. If that is not effective, the doctor may prescribe medication or an adjustment in current medication dosage.

Please see the following websites for more information:

<http://www.mayoclinic.com/health/blood-sugar/DA00007>

www.diabetes.org