

Blood glucose tests

The difference between finger stick blood glucose and hemoglobin A1c

Finger stick blood glucose test

The finger stick blood glucose test is a test people with diabetes use to measure the amount of glucose (sugar) in the blood at that specific time. It is easy to perform and gives instant results. This form of self-testing is how most people with diabetes monitor their blood glucose levels at home.

A finger stick is performed by poking your finger with a lancet (a small device used to prick the skin) to obtain a drop of blood. The blood drop is put on a testing strip and read by a machine, called a glucometer, which measures the amount of glucose in the blood. Your health care provider can tell you how often and when to perform finger stick tests.

It is a good idea to write down your blood glucose readings in a notebook or journal. Your blood glucose readings can be used to find patterns in your blood glucose levels related to different foods you eat, your physical activity, and stress. Take your blood glucose readings to your health care provider at each diabetes visit. They may be used to make changes to your medication and/or testing schedule.

Hemoglobin A1c test

Hemoglobin A1c (also referred to as HbA1c, glycated hemoglobin test, or glycohemoglobin) is a test used to measure your average blood glucose control over the previous 2 to 3 months. This test is done in a lab and you will have your blood drawn. Fasting (not eating) before the test is not required.

Depending on the results of your hemoglobin A1c test, your health care provider may make changes in your treatment schedule or suggest other lifestyle changes. Ask your health care provider when you should have a hemoglobin A1c test done and how often.

What does the hemoglobin A1c test measure?

When your blood glucose is high there is extra sugar in your blood. This extra sugar attaches to a protein in red blood cells called hemoglobin. When this attachment occurs the hemoglobin is then said to be “glycated”. The more extra sugar in your blood, the more glycated hemoglobin there is. Once the hemoglobin is glycated it stays that way for the rest of the life of the red blood cell. (Red blood cells live about 120 days.) The hemoglobin A1c test measures the percentage of red blood cells that have glycated hemoglobin.

August 2016