



Know the Facts: **What is a Hemoglobin A1c or 'HbA1c' test?**

Glycohemoglobin, Glycosylated Hemoglobin, or a Hemoglobin A1c (HbA1c) is a special test that shows your average blood sugar over the past 2-3 months. An HbA1c test gives a good picture of how well controlled your diabetes is.

Why is an HbA1c test important?

An HbA1c measures the number of red blood cells that have a glucose molecule attached to them. For people with diabetes, more of their red blood cells have a glucose molecule attached than in people who don't have diabetes.

The HbA1c helps your healthcare provider see how well your current diabetes plan is working and if your medication, diet and exercise plan, or another aspect of your treatment needs to be changed.

What is a normal HbA1c?

The results of your HbA1c are a percentage of hemoglobin attached to a glucose molecule. According to the American Diabetes Association people with diabetes should have an HbA1c of **7% or lower**.

- If your HbA1c is 6%, your average blood sugar level over the past 2-3 months is 135.
- An HbA1c of 7% means that your average blood sugar level over the past 2-3 months is 170.
- A level of 8% shows that your diabetes is not well controlled and your average blood sugar over the past 2-3 months is 205.

What does a higher than normal HbA1c mean?

A high HbA1c means your blood sugar average is higher than normal. Uncontrolled diabetes causes high blood glucose levels. Over time, these high levels damage your body's tissue, including the heart and kidneys.

Good control of blood sugar can reduce damage to your eyes, nerves, and kidneys, and most importantly, reduce your risk for cardiovascular disease including heart attack, angina, and stroke.

While different people have different "normal" HbA1c values, a move of more than 1% point may indicate that your blood glucose levels are not well controlled.

How will I know what my HbA1c is?

The test for HbA1c is simple. A technician draws a sample of your blood from one of your veins and sends it in an air-tight vial or syringe to a laboratory for analysis. A bandage is applied to the puncture site if there is any bleeding.

You do not need to prepare for the test; you do not need to fast or stop eating.



According to the American Diabetes Association (ADA), people with diabetes should have an HbA1c of 7% or lower.

How do I control my blood glucose levels?

To make sure your diabetes is controlled, it is recommended that you have your HbA1c checked at least once every three months. Talk with your healthcare provider about how often he/she would like you to be tested.

Your blood glucose levels change throughout the day depending on what you eat, how active you are and when you take your medication.

To keep your HbA1c as near to normal as possible:

- Work closely with your healthcare provider on a treatment plan.
- Monitor your blood glucose as often as recommended by your health care provider. Self-monitoring of blood sugar is very important to allow you to control your blood glucose levels on a daily basis.
- Take your insulin as ordered.
- Follow a dietary plan outlined by a registered dietician.
- Perform regular physical activity.

Sources:

USDHHS

NIH

National Institute of Diabetes and Digestive and Kidney Diseases

American Diabetes Association - *Diabetes Control and Complications Trial*. <http://www.diabetes.org/uedocuments/DC-CTCVD.pdf>

Call **1-866-464-7147** to speak to a nurse 24-hours a day
or visit www.MOHealthandWellness.com

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