

What You Should Know About Diabetes Tests if You Have Sick Cell Trait



If you have sickle cell trait (SCT), the hemoglobin A1C test used to test and monitor diabetes (a potentially lifelong disease in which you have high levels of sugar in your blood) may give false results which can affect the care you receive from your healthcare provider. The good news is that there are A1C tests that are accurate for people with SCT. Knowing that you have SCT and letting your doctor know will help your doctor choose the right A1C test for you.

What is an A1C test?

A1C is a blood test used to:

- provide information about a person's average level of blood sugar, called blood glucose, over the past 3 months.
- help diagnose type 2 diabetes, the most common type of diabetes.
- help diagnose prediabetes, a condition when your blood sugar is higher than normal but not high enough to be called diabetes.
- monitor your condition if you have diabetes.

How are the results of the A1C test affected by SCT?

If you have SCT, the A1C test might give false results, depending on the A1C test method used. These false results could lead to you being undertreated or overtreated for diabetes.

What should I do if I have SCT and an abnormal A1C test?

If you have SCT, make sure your doctor is aware of your trait status and knows that it might affect your A1C test results. Your doctor can perform other tests or arrange for your A1C test to be done by a method that gives accurate results.



Where can someone get more information on SCT, diabetes and abnormal A1C?

Centers for Disease Control and Prevention (CDC) <http://www.cdc.gov/diabetes/basics/index.html> and <http://www.cdc.gov/ncbddd/sicklecell/traits.html>

Sickle Cell Disease Association of America (SCDAA) <http://www.sicklecelldisease.org/>

American Society of Hematology (ASH) <http://www.hematology.org/Patients/Anemia/Sickle-Cell-Trait.aspx>

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) <http://www2.niddk.nih.gov/>

American Diabetes Association (ADA) <http://www.diabetes.org/>



Centers for Disease Control and Prevention
National Center on Birth Defects and Developmental Disabilities

