

FAQs



Division of the J. Moss Foundation

General Questions

I have been diagnosed with prediabetes, now what?
Why is my prediabetes not my doctor's priority?

Questions about A1cs

- What is an A1c test?
- How does an A1c give you an average of what your blood sugar was over the last 2 to 3 months?
- How does it work?
- What is hemoglobin?
- What is abnormal hemoglobin, and how does it affect A1c results.
- Does my doctor normally give me an A1c test?
- How frequently should I have my A1c tested?
- I don't have diabetes, should I have my A1c tested?
- What are the benefits of using the AccuBase A1c™?
- How accurate is the AccuBase A1c™ test produced by Diabetes Technologies?

I have been diagnosed with prediabetes, now what?

Being diagnosed with prediabetes means you are given the opportunity to prevent diabetes. This is your last opportunity to prevent diabetes from affecting your life.

First, you need to determine if you are ready to prevent diabetes. We hope so, because we are ready to invest in YOU. Preventing diabetes requires an investment of time and energy, but the result will be a prolonged and better quality of life.

READY TO START PREVENTING DIABETES . . .

Step 1: Go to the Prediabetes Resource Center and download and review these **3 free items**:

A- Your Game Plan to Prevent Type 2 Diabetes PDF:

Learn how to start your own GAME PLAN by setting goals, and tracking your progress

B- Your Game Plan Fat and Calorie Counter PDF-

More than 1,500 foods, includes regional foods from all parts of the United States

C- Your Game Plan Food and Activity Tracker PDF

GAME PLAN is based on the lifestyle modification strategies used in the Diabetes Prevention Program (DPP), sponsored by the National Institutes of Health

Step 2: Join and participate in some of the Skinny Gene Project Events (link to events) happening in our on-line community or locally in your area.

Step 3: Determine if the information provided in Your Game Plan packets (above) are enough for you to get started. If not, consider using [our services](#) to help identify your specific nutritional needs and give you the step-by-step guidance to succeed.



Why is my prediabetes not my doctor's priority?

Although it may feel this way sometimes, it is not necessary true. Most physicians have chosen their profession because of a desire to treat and care for their patients. Unfortunately, prediabetes is an “asymptomatic” (without symptoms) condition. Without blood work, which cost you money, it is hard to detect. It is also not treated using the common medical practices. The recommendation is not to use pharmaceuticals, but to first try using lifestyle changes to control this condition. Ultimately this means the true burden is placed on you, since only you can prevent diabetes.

What is an A1c test?

An A1c test, also known as a hemoglobin A1c or glycosylated hemoglobin test, is the standard method of determining how well a person is able to control their glucose (blood sugar) over a longer period of time. Unlike the daily self-administered blood sugar reading from a glucometer, that indicates what a person's blood sugar is at that exact moment (e.g. after eating) or over the past 12 hours, a A1c gives you an idea of what your average blood sugar was over the last 2-3 months. It provides you with an overall picture of how successful you have been at managing your blood sugar.

How does an A1c give you an average of what your blood sugar was over the last 2 to 3 months?

When there is excess sugar in the blood stream, it binds to red blood cells. The red blood cells have a life span of 90-120 days. Once blood sugar has bonded to the cells, the blood sugar stays there for the entire length of the cell's life. Cells die and new cells are created daily, and the combination of these old and new cells are generally captured in a 2 to 3 month timetable.

How does it work?

A small amount of blood is retrieved from the body. Only a single drop of blood is required, which can be just a finger prick. The blood sample is examined to determine what percentage of the red blood cells is glycated (covered in sugar).

It is natural for glucose (blood sugar) to attach itself to red blood cells as they move through the blood stream. It is the amount of blood sugar that has covered the hemoglobin within the red blood cell that is of specific concern. Excess blood sugar in the blood stream leads to an increase in the amount of cells that are glycated (coated by sugar). The results of the A1c indicate the percentage of hemoglobin that is glycated.

Therefore, an A1c of 6.5 means that 6.5% of the hemoglobin is glycated. These results are not limited to just the cells retrieved in the blood sample, but signifies the total concentration of blood sugar in the blood.¹



What is hemoglobin?

Hemoglobin is the main component of red blood cells. There are about 25 million hemoglobin proteins per cell and are responsible for giving the cell its red color. Hemoglobin's main purpose is to transport oxygen and carbon dioxide. It picks up oxygen in the lungs and delivers it to other peripheral tissues to maintain the viability of cells.²

What is abnormal hemoglobin, and how does it affect A1c results?

Hemoglobin, like every other protein, is composed of elements from DNA. The genetic coding for hemoglobin is the same for everybody, but once in a while one of the genes is "altered" slightly (i.e. mutation). Since genes are inherited, if a person has a mutated gene that caused an abnormal hemoglobin, that abnormal hemoglobin will most likely be passed down to his or her own children.²

There are hundreds of different types of abnormal hemoglobin. Each one can cause an inaccurate A1c reading, and may incorrectly produce a result that does not accurately portray how well a person may be controlling their blood sugar. To ensure a person is receiving an accurate A1c reading, a test should first be ran to detect abnormal/silent hemoglobin variants.³

The A1c provided by the J. Moss Foundation/Skinny Gene Project, known as the AccuBase A1c™, will detect more than 850 different abnormal and/or silent hemoglobin variables.

Does my doctor normally give me an A1c test?

No. Unless you have been diagnosed with diabetes, or have specifically requested an A1c from your physician, you probably have not had an A1c test. They are not part of a routine physical. One statistic shows that only 25% of physicians give routine A1c tests to their patients diagnosed with diabetes.

¹ Site: <http://www.diabetes.org/type-1-diabetes/a1c-test.jsp>

² site: <http://sickle.bwh.harvard.edu/hemoglobin.html>

³ *Clinical Diabetes* 22:141-143, 2004



How frequently should I have my A1c tested?

The standard recommendation is that people with diabetes have their A1c tested every 3 months, or twice a year if blood sugar is stabilized or near normal. People with pre-diabetes should have their A1c tested twice a year.

I don't have diabetes, should I have my A1c tested?

A1c tests are not limited to those who have already been diagnosed with diabetes or pre-diabetes. In fact, if you have a family history of diabetes, have a BMI over 25, answered “yes” on 2 or more questions on the at-risk evaluation, are 40 years of age or older, or are African American, Hispanic American/Latino, Native American, or Pacific Islander descent or are just interested in being proactive in your healthcare, you should take an A1c test.

What are the benefits of using the AccuBase A1c™?

The J. Moss Foundation provides the AccuBase A1c™ Test Kit at a fraction of the price of other lab-based A1c tests. The AccuBase A1c™ is a FDA approved over-the-counter diagnostic test kit developed for monitoring long-term blood glucose levels in individuals with diabetes or are at risk of developing diabetes.

This test does not require a prescription from a physician, and it allows individuals to test their A1c levels in the comfort and convenience of their own home. An individual collects a non-fasting, finger stick blood sample at-home, and then mails it to a designated testing laboratory for analysis. The results will be sent to the address of your choice (your home and/or your physician). The J. Moss Foundation will then follow-up with you, to answer and help guide you through any needed next steps.

How accurate is the AccuBase A1c™ test produced by Diabetes Technologies?

In 1993, Diabetes Technologies, Inc. (DTI) was the *first* clinical lab to be certified by the National Glycohemoglobin Standardization Program (NGSP) as being a Level 1 laboratory. DTI received the highest possible ranking because of its accuracy in A1c testing, and because it is the **ONLY** lab that provides a multi-method, interference free, procedure in running A1c tests. This means, it may be the most accurate A1c test on the market.

The impeccable accuracy of the AccuBase A1c™ stems from its patented 3-step approach to analyzing the data. First, DTI checks the red blood cell count to make sure it is neither

too high nor too low, because an abnormally high or low number could alter the results of the test. Second, DTI screens the sample to see if the person has any one of 850 or more abnormal hemoglobins (a process only done by DTI). The presence of any one of these abnormal hemoglobins may cause a person to be incorrectly diagnosed as having pre-diabetes or diabetes. Only after the first two steps have been taken will the third step occur, which is to determine the actual A1c level.

