

How to Lower Your A1C Levels

There are many variables to managing your blood glucose, some of which are often beyond your control. Lowering your A1C does not have to be one of those uncontrollable variables. Here are some tips to help you get your numbers into a better range.

What is an A1C?

An A1C is a laboratory test that measures average blood glucose, or blood sugar, control over a period of approximately two to three months. Red blood cells are made of a molecule – hemoglobin – that picks up oxygen in the blood and gives the blood its color. Glucose sticks to the hemoglobin to make a 'glycosylated hemoglobin' molecule, called hemoglobin A1C. In addition to your A1C test results, your doctor may now be reporting your Estimated Average Glucose, or EAG.

The American Diabetes Association A1C goal is less than 7%. The American Association of Clinical Endocrinologists (AACE) says to work toward a goal of 6.5% or less. However, these are just recommendations. Your individual goal may not be the same. This should be assessed by you and your healthcare provider according to your particular health conditions. According to the Diabetes Control and Complications Trial (DCCT) conducted from 1983 to 1993 and the follow-up study, Epidemiology of Diabetes Interventions and Complications (EDIC), for every point you lower your A1C levels, you lower your risk of developing a variety of complications:

- Eye disease risk is reduced by 76%
- Kidney disease risk is reduced by 50%
- Nerve disease risk is reduced by 60%
- Any cardiovascular disease event risk is reduced by 42%
- Nonfatal heart attack, stroke, or risk of death from cardiovascular causes is reduced by 57%

Why Does the A1C Matter?

The effects of prolonged high blood sugar levels are not always immediately noticeable, but the signs of continued neglect can show themselves at any time. Potential complications include:

- Eye disease
- Heart disease
- Kidney disease
- Nerve damage
- Stroke
- Lower brain function

(NEXT)

How Long Does it Take to Lower Your A1C Levels?

Red blood cells and the hemoglobin they contain have an average life span of 120 days during which glucose molecules are exposed to the red blood cells and form glycated hemoglobin. Therefore, in theory, changes in your A1C levels won't be apparent for at least the 120 days it takes for the affected red blood cells to complete a life cycle.

The amount of time it takes to lower your A1C depends on how big of a change you are trying to achieve. If your A1C is in the double digits, it may take a matter of 2 or 3 months to see a significant change if your diabetes management is consistent and tight. If your A1C is a point or two away from ADA/AACE recommendations, getting to goal may take a little longer.

"Lowering your HbA1c from a [high] number to an 8.0 or 7.5 is much easier than lowering it from a 7.5 to 6.5," said dLife Expert CDE Claire Blum in response to a question about lowering A1C levels. "Tightening of control that occurs at the lower numbers takes a lot of fine tuning. Our bodies also require some time to adapt to the change of improved [levels]."

Lowering A1C: Blood Sugar Testing

Regular testing will show you how food, exercise, medications, and other of life's daily situations impact your blood glucose levels. It also will allow you to detect highs more often and treat them earlier. This will help to lower A1C levels.

The ADA recommends testing three or more times daily for people taking multiple insulin injections or using insulin pump therapy, such as those with type 1 diabetes, some pregnant women with diabetes, and people with type 2 diabetes who take multiple injections of insulin daily.

For people with type 2 diabetes who are on oral medications or who control their diabetes through diet and exercise only, there is no official testing recommendation. However, the ADA does state self-monitoring of blood glucose may be appropriate in order to achieve blood glucose targets.

For some, monitoring blood glucose levels can also be effectively managed by use of the continuous glucose monitoring system. A CGMS tests your blood glucose levels every 5 – 7 minutes throughout the day. The CGMS can be used by people with type 1 or type 2 diabetes. While a CGMS does not replace traditional blood glucose meters, it can inform the user of trends and help avoid dangerous lows.

To find out the effects of a specific activity on your blood glucose, try testing in pairs, which is consistent testing of the blood sugar before and after the specific activity you are monitoring for a period of at least seven days.

(NEXT)

Lowering A1C: Insulin and Medications

If you are type 1, insulin can be your best friend.

"Research has shown that missing as few as one or two meal boluses or injections a week can have significant impact on A1C, so the first and most critical thing for you to do is to make sure you get all your meal time and correction insulin dosages," Blum said.

Insulin can be administered via daily injections. Some people have found that insulin pump therapy offers tighter control and even more flexibility in accordance with their lifestyle. They are able to quickly and easily control the continuous flow of insulin in response to their body's needs.

Initial treatment for people with type 2 diabetes or gestational diabetes is often diet and exercise. Following this treatment as closely as recommended is one way to achieved A1C goals. However, there are times when oral medication is needed in order to continue effective management of diabetes or even to improve it. And when oral medications are no longer as effective, insulin is also a viable choice for people with type 2 as a step forward to good diabetes management and lower A1C levels.

Lowering A1C: Meal Planning

No matter what diabetes type you are or how long you have had it, good nutrition is part of good diabetes management, which is necessary if you want to have a low A1C. An RD/CDE is a great place to start. A registered dietitian (RD) has met academic and professional experience requirements established by a commission of the Academy of Nutrition and Dietetics. They are trained to look all aspects of your lifestyle to come up with a plan specific to your needs. If the RD is also a Certified Diabetes Educator (CDE), they will be able to incorporate the various aspects of diabetes into your meal plan.

Talk to your doctor about locating an RD/CDE and about the type of help available for those who cannot afford one.

Beyond professional help, learning about nutrition topics such as carb counting, the glycemic index, even dietary supplements will go a long way toward helping you make wise food choices.

Lowering A1C: Exercise

Exercise is important in a number of ways that can benefit a person with diabetes:

- Control blood sugar levels
- Weight loss
- Increased energy levels
- Improved heart health
- Emotional well-being

(NEXT)

Aerobic exercise, such as running or walking, can lower your blood sugar levels when you expend energy. Anaerobic exercise, such as weight training or power sports like baseball, may have the opposite effect, temporarily raising blood sugar levels due to a delayed release of glucose. However, the overall effect is increased insulin action over a longer period, with a net effect of lowered blood sugar.

Lowering A1C: Doctor Visits

As you work to bring your A1C levels down, don't forget to check in regularly with your doctor to monitor your progress. Regular visits will help you keep tabs on your blood glucose trends, blood pressure, cholesterol, and potential complications like nerve damage. Your doctor can also help fine-tune your medications as well as help you to orchestrate how all these elements work together.

Lowering A1C: What Else May Help?

In addition to traditional medical treatment, alternative treatments may prove beneficial, although all forms of treatment should be discussed with your doctor before implementing them in your diabetes regimen. Managing stress is also an important part of keeping your blood sugar under control, thus lowering your A1C levels. So if you do not already have a source of support, try to find a local group with whom you can share your diabetes concerns as well as triumphs. You can even look for support online with groups such as the dLife Forum.

