

How to Improve Blood Sugar Levels and Reverse Diabetes For Good

Every 23 seconds another person is diagnosed with diabetes – one the leading causes of death in the United States.

But these people don't have to suffer. Diabetes is preventable, manageable, and reversible.

What is Diabetes? – A Quick Overview

There are two types of diabetes – type 1 and type 2.

	Type I Diabetes	Type II Diabetes
Age of Onset	Juvenile	Adult
Cause	No insulin	Insulin resistance, obesity
Prevalence	5%	95%
Symptoms	Severe	Less severe, obesity
Progression	Abrupt	Gradual
Consequences	Kidney, eyes, cardio	Kidney, eyes, cardio

This is an over-simplified chart, but it gives you a good visual of the differences and similarities between the two. Now, let's dig a little deeper into each type of diabetes.

Type 2 diabetes is characterized by high blood sugar levels and insulin resistance. Insulin resistance happens when blood sugar levels are so consistently high that the cells don't respond to insulin (a hormone that helps lower blood sugar) like they used to. When the cells aren't as sensitive to insulin, blood sugar levels raise even more. As a result, insulin levels raise and the cells become more insulin resistant. This vicious cycle is commonly caused by eating too much sugar, not moving enough, and stressing too much.

Conversely, type 1 diabetes is when the body lacks the ability to produce insulin. In some cases, this happens because the immune system attacks the cells in the pancreas that make insulin. Despite the lack of insulin, type 1 diabetics can still manage their blood sugar levels by taking exogenous insulin.

Although type 1 and type 2 diabetes are caused in completely different ways, they both lead to higher blood sugar levels that will destroy cells throughout the body and cause chronic inflammation. If we can improve blood sugar levels then we can manage and reverse diabetes – regardless of which type of diabetes it is.

The Best Treatment for Diabetes – Diet



Studies continuously show that eating less sugar and more whole foods is an effective way to manage blood sugar levels. For example, ketogenic diets – the lowest of low carbohydrate diets – were found in one study to help type 2 diabetics get off their medications completely.

The right diet may even transfer over to type 1 diabetics as well. One case study that put a type 1 diabetic on a paleolithic ketogenic diet found that it was effective in managing blood sugar levels and may even halt or reverse the disease process.

Even specific vegetables, fruits, herbs, and spices can help reverse type 1 and type 2 diabetes. For example, consuming curcumin (from turmeric) and fenugreek seeds together can be an effective way to lower blood sugar levels and improve the health of the cells in the pancreas that produce insulin.

Must Read: [Top Ten Blood Sugar Lowering Foods](#)

Related: [How to Optimize Curcumin Absorption](#)

There is one important caveat. Food isn't the only thing that impacts blood sugar levels. Even if you eat a plant-based, low-carbohydrate diet, your blood sugar levels can still be an issue.

Stress and Blood Sugar – The Missing Link

Right before we wake up in the morning, a stress hormone called cortisol is released. Cortisol raises blood sugar levels to provide you with the energy you need to wake up and get your morning started. To keep insulin from decreasing your blood sugar levels, cortisol also tells the cells to resist the seduction of insulin.

This brief period of insulin resistance is necessary for your body to maintain its blood sugar levels until you have your first meal. This is a great idea. Good job, body!

However, this same process occurs whenever you are stressed as well. Whether you are being chased by a lion or you are mad at a family member, cortisol is released so that you have enough energy to deal with that situation. The only problem is that most modern day stressors don't require extra energy. They require logical thinking and empathy – two processes in the brain that cortisol shuts down.

When every day is filled with stress, your cortisol levels will be consistently high. And you know what leads to – higher blood sugar levels, insulin resistance, and poor decision making.

This can happen regardless if you eat the healthiest food or not (although healthy food will help a lot). Reversing diabetes does not rely only on what you eat, it relies on what you do as well.

Related: [Natural Remedies for Chronic Stress](#)

The Cheapest & Most Natural Ways to Reverse Diabetes

Whether you start with food or with stress, it is still important to address both. However, if you are struggling to make ends meet, you don't have to wait to improve your health. You can help yourself right now – for free.

Drink More Water

Hydration is important. Although there are no studies that examine the direct effect that water consumption has on blood sugar levels, one observational study found that people with the highest blood sugar levels tended to drink the least amount of water.

This correlation can be explained by the fact that the systems that control both blood sugar and body fluid levels are linked. In other words, drinking more water can indirectly improve your blood sugar levels.

Related: [What's the Best Water for Detoxifying and For Drinking?](#)

Exercise

The fastest way to lower your blood sugar levels is by exercising. But before you lace up your running shoes, it is important to consider the type of exercise.

Low-intensity exercises like walking and cycling have a minimal effect on blood sugar levels unless they last for longer than an hour. Studies suggest that the optimal exercise strategy is high-intensity interval training.

Many different variations of high-intensity interval training

can lower blood sugar levels and improve insulin sensitivity (the opposite of insulin resistance).

One of the high-intensity workouts used in many studies went like this – thirty seconds of maximal cycling efforts 4 to 6 times separated by 4 minutes of rest. That's all you need to do to lower your blood sugar levels. And if you don't have access to a bicycle or stationary bike, all you have to do is sprint.

Here is an example sprinting workout from one of the studies:

5-10 near-maximal sprints for 30 seconds each with 3-minute rest between.

By doing this, you can lower your blood sugar in less than 20 minutes (for free).

Meditate

One of the best ways to mitigate stress and reduce cortisol levels is with meditation. In one study, researchers decided to see if meditation helped lower blood sugar levels in diabetics. After one month of meditation, the eleven patients that completed the intervention had lower blood pressure and A1C levels (more about this later in the article) and less anxiety and depression.

Sleep

Sleep for at least 7 hours a night, and you can maintain healthy blood sugar levels. But if you sleep for only 4 to 5 hours a night, your fasting blood sugar levels will increase significantly.

Continue to sleep like this, and your cells become resistant to insulin. As this vicious cycle continues, your blood sugar levels continue to rise regardless of how little sugar you eat. This sounds eerily familiar to what stress does to the

body because it is.

Sleeping less is a form of stress that leads to more cortisol release than normal. The cortisol raises blood sugar levels and tells the cells to become more resistant to insulin. Keep this from happening by making sleep a priority.

Putting it all Together – The Anti-Diabetes Lifestyle

Here's is a simple weekly checklist you can follow to improve your health dramatically:

1. Drink a gallon of purified water a day.

We suggest drinking a gallon of cranberry lemonade every day to provide you with a [healthy and tasty detox drink while you hydrate yourself.](#)

2. Eat only whole foods.

Make sure you get all of your food from high-quality sources as well. Look for bio-dynamic, organic. and non-GMO produce, and source all of your animal products from animals that lived a healthy life.

3. Do 3 to 4 high-intensity exercise sessions a week.

Here's a simple workout you can try:

5-10 near-maximal sprints for 30 seconds each with 3-minute rest between.

Combining high-intensity training and resistance training is an even better idea.

4. Meditate for 15 to 30 minutes a day.

You can use an app like Headspace to guide you or check out Sam Harris's guided meditation:

5. Sleep for at least 7 hours a night.

To improve your sleep quality, turn off all electronics and lights at least 30 minutes before you want to fall asleep and meditate laying down.

Related: [*Is Diabetes Caused by Sugar or Bad Genetics?*](#)

How to Know if You Are Really Reversing Diabetes

To know if your blood sugar levels are chronically high, many doctors will check your A1C levels. A1C stands for glycated hemoglobin, which is formed when blood sugar attaches to hemoglobin (the oxygen-carrying protein in red blood cells).

A1C tests measure the percentage of your hemoglobin that has blood sugar attached to it. If blood sugar levels have been high for the past 3 months, then more hemoglobin will be glycated. Thus, A1C testing provides an accurate measurement of how high your blood sugar has been over the past two to three months.

An A1C level of 6.5 percent or higher on two separate tests indicates that you have diabetes. An A1C between 5.7 and 6.4 percent indicates pre-diabetes. Below 5.7 is considered normal.

But Dr. Chris Masterjohn suggests that you shouldn't only look at A1C levels. This is because high A1C levels do not directly cause diabetes, and people with diabetes can have low A1C levels (if they have faster blood cell turnover than the

average person). In other words, A1C testing provides an indirect measurement of blood sugar levels so it isn't always a reliable indicator for diabetes.

For example, if you are obese and your fasting blood sugar is consistently above 100 mg/dl (pre-diabetic), but your A1C levels are low, then you should still be considered as a pre-diabetic that needs to implement dietary and lifestyle changes to lower your blood sugar.

This is why it is important to consider fasting blood glucose levels, blood sugar levels after a meal, and other measurements like weight and waist circumference to develop a clearer picture of what is going on inside of the body.

While you are implementing the steps to the anti-diabetes lifestyle, it is important to pay attention to multiple measurements. Fat loss, lower blood sugar levels, lower A1C levels, and decreased waist size are all indicators that you are on the right track.

Recommend Reading:

- [*Healthy Alternative Sugars and More*](#)
- [*Holistic Guide to Healing the Endocrine System and Balancing Our*](#)
- [*The Way We Used To Eat – The Real Paleo Diet*](#)
- [*Are Low-Carbohydrate Diets Healthy?*](#)
- [*Detox Cheap and Easy Without Fasting – Recipes Included*](#)

Sources:

- [*Diabetes – CDC*](#)
- [*The impact of brief high-intensity exercise on blood glucose levels – NCBI*](#)
- [*Influence of physical training on the fuel-hormone response to prolonged low intensity exercise – Science Direct*](#)
- [*MINDFULNESS-BASED STRESS REDUCTION IS ASSOCIATED WITH*](#)

[IMPROVED GLYCEMIC CONTROL IN TYPE 2 DIABETES MELLITUS: A PILOT STUDY – ProQuest](#)

- [Recent Developments in Delivery, Bioavailability, Absorption and Metabolism of Curcumin: the Golden Pigment from Golden Spice – NCBI](#)
- [Effect of fenugreek seeds on blood glucose and serum lipids in Type 1 diabetes – Indian Council of Medical Research](#)
- [Effect of ginger \(Zingiber officinale Rosc.\) and fenugreek \(Trigonella foenumgraecum L.\) on blood lipids, blood sugar and platelet aggregation in patients with coronary artery disease – Science Direct](#)
- [Curcumin and Diabetes: A Systematic Review – Hindawi](#)
- [Low-Glycemic Index Diets in the Management of Diabetes – American Diabetes Association](#)
- [Systematic review and meta-analysis of dietary carbohydrate restriction in patients with type 2 diabetes – BMJ](#)
- [The effect of a low-carbohydrate, ketogenic diet versus a low-glycemic index diet on glycemic control in type 2 diabetes mellitus – Nutrition & Metabolism](#)
- [Type 1 diabetes mellitus successfully managed with the paleolithic ketogenic diet – Edorium Journals](#)
- [Beneficial effects of ketogenic diet in obese diabetic subjects – Springer Link](#)
- [A low-carbohydrate, ketogenic diet to treat type 2 diabetes – Nutrition & Metabolism](#)
- [The effect of a low-carbohydrate, ketogenic diet versus a low-glycemic index diet on glycemic control in type 2 diabetes mellitus – Nutrition & Metabolism](#)
- [Role of Sleep Duration and Quality in the Risk and Severity of Type 2 Diabetes Mellitus – The JAMA Network](#)
- [Cortisol-Induced Insulin Resistance in Man: Impaired Suppression of Glucose Production and Stimulation of Glucose Utilization due to a Postreceptor Defect of Insulin Action – Oxford Academic](#)
- [Systematic review and meta-analysis of dietary](#)

carbohydrate restriction in patients with type 2 diabetes – BMJ

- *American Diabetes Association Releases 2016 Standards of Medical Care in Diabetes – Diabetes*
- *Low water intake and risk for new-onset hyperglycemia. – NCBI*
- *Plasma copeptin and the risk of diabetes mellitus. – NCBI*
- *Mastering Nutrition Episode 012: What Is Measuring Our Hba1c REALLY Telling Us About Our Blood Glucose and Diabetes Risk? – Chris Masterjohn PhD*