BLOOD SUGAR TESTING AND FIXING IS NOT JUST FOR DIABETICS

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Feel fat or sluggish? It may not be YOU; it may be your glucose level and how it interacts with a hormone called insulin. When the relationship is off, you will have high insulin levels, followed by high glucose levels, and your cells will become numb to insulin. That is called insulin resistance, and it makes you feel fat and foggy, even if you don’t meet the diagnostic criteria for type 2 diabetes.

I find that measuring my fasting glucose is an incredibly helpful metric. When I was a chunky monkey and stress-crazed working mom in my thirties, I discovered that my fasting glucose was 110. I was stunned because I was heading toward diabetes. I turned my problem with glucose around in 72 hours, and you can too.

There are many ways to reset your insulin, and I wrote extensively about it in my New York Times bestselling book, *The Hormone Reset Diet*.

When you reset insulin so you are sensitive to it again, you create hormonal harmony. Estrogen and progesterone work better. Testosterone is back on your side. Leptin and your sense of satiety may return to normal. Your waist gets slimmer. Yay!

To your best fasting glucose!

Dr. Sara Gottfried MD
Turn Your Insulin into Jillian Michaels (Part 1):
Test Your Blood Sugar

I think of insulin as the “Jillian Michaels” hormone. When it’s in the target zone, it’s a wondrous model of human engineering.

But the rest of us have the non-Jillian Michael’s version. The rest of us have a little... um, let’s call it sluggishness when it comes to insulin. Insulin knocks on the door of our cells, and we can’t be bothered to deal. But as Jillian says: “The past does not define you; the present does.” It’s time to redefine your dance with glucose and insulin.

Is Your Pancreas the Biggest Loser?

Most of us have heard of insulin and blood sugar, but don’t really understand how they work.

Think of them this way. Your pancreas produces insulin, the hard-working/Jillian Michaels hormone that seeks out glucose and turns it into useful energy. Glucose is sugar, floating around in your bloodstream... but any glucose that doesn't get used up by insulin eventually gets stored as fat for “later.” While your pancreas tries to match your insulin levels with your glucose, sometimes it can’t keep up.

Your insulin-producing pancreas is all business, rather like Jillian Michaels: harnessing the sluggish and over-sugared, and turning us into lean, energy-filled machines. The problem is that when we have chronically high blood sugar, even the toughest little fireball of a pancreas can’t produce enough insulin to bring glucose levels down. And even if it can, after months and years of flooding your system with insulin it goes numb, leading to insulin resistance... and then high blood sugar once again.

Blood...But Not Sweat and Tears

The good news? You can bring down your blood sugar levels and reverse insulin resistance. All it takes is a little lifestyle tweaking and a little insight from the oh-so-handy tool: the glucometer. Seeing your elevated blood sugar levels on the screen may be all the motivation you need to cut out some carbs and add some exercise.

Testing your blood sugar, especially your fasting blood sugar (first thing in the morning before you eat breakfast), provides insight into your insulin sensitivity and your blood glucose levels. Since both are great indicators of overall health, I’m going to explain how you can administer this simple test test yourself.
Gear up!

You can pick up a glucometer at any pharmacy – Target, CVS, Walgreens, or online – without a prescription. OneTouch is a popular, reliable brand that sells their compact OneTouch Ultra Mini for under $20 on Amazon. That’s what I use each morning.

Along with a glucometer (sometimes simply called a “meter”), you’ll also need a lancing device (almost all glucometers come with their own), lancets, and test strips.

Some glucometers come with a small supply of test strips, but you’ll probably want to buy more so you can collect blood sugar data for at least a few weeks. Make sure that the test strips you buy are compatible with your glucometer! For example: If you buy a OneTouch glucometer, you’ll want to pick up some OneTouch Test Strips too. You’ll also need lancets to go inside your lancing device (again, most meters come with a small introductory supply).

In review, here’s what you need:

• Glucometer
• Test strips
• Lancing device
• Lancets
• Control solution (optional)

Set Up Your Meter

If it’s your first time using your meter, you’ll need to set it up. This may include the following:

• Setting date and time
• Matching the test strip number to the meter’s settings (not necessary for all meters). Once you insert a test strip into the meter, simply make sure the number on the screen matches the number on the vial of strips. Use the meter’s buttons to adjust if necessary.
• Calibrating the meter using a test strip and control solution (again, not always a required step)

Look, I ain’t on no ra-ra shit. You don’t wanna test how far Miss get. — Chinese Man, Miss Chang
Test Your Blood Sugar
The fun part!

Step 1. Wash your hands
Some doctors recommend using an alcohol swab, but it’s been shown that the alcohol on your finger tips can throw off the test results. Soap and water works perfectly fine.

Step 2: Insert a test strip
Put a test strip in your meter; one end of the test strip fits into a slot in the meter, and the other will have a narrow channel on it for the blood sample. After you’ve inserted it, watch the screen for the icon that signals it is ready for testing.

Step 3: Prick your finger
Most meters use a drop of blood from your fingertip, although some are approved for palm or forearm use. See the instructions included with your meter.

Put a new lancet in your lancing device and put the cap back on. If you have sensitive fingertips, set the lancing depth to a low number (1-2). If you have callused fingertips, you will need to set the number a bit higher in order to get a drop of blood to appear.

Cock the lancing device and hold the cap of the lancing device against the side of your finger. Squeeze the trigger and the lancet will pierce your skin. If needed, squeeze your fingertip until a small drop of blood appears. You don’t need much, and it won’t hurt too much. As Jillian says...

Step 4: Add your blood sample to the test strip

Holding the meter and strip at a right angle to you finger, gently hold the strip against the drop of blood. The blood should easily fill the length of the channel while your meter waits.

Most meters can sense when the strip makes contact with blood. If the blood doesn’t make it to the end of the channel for any reason, you will get an error message on the screen and will have to start over with a new test strip. It happens to all of us.

Step 5: Get results
Once the blood sample has filled the test strip channel, your meter will need a few seconds to process. Next, your blood glucose level will display on the screen. You did it!
Most new meters have a large memory and the ability to import the data into your computer using a USB cord. Feel free to go full biohacker and track your blood glucose highs and lows over weeks and months! Charts! Logs! I love it!

Step 6: Clean up.
Dispose of your used lancet and test strip in a biohazard container or a thick plastic jug with a lid, like an old juice container.

Ideally, you want your fasting blood sugar to be between 70-85 mg/dL (3.9-4.7 mmol/L). Also consider testing your post-prandial blood sugar two hours after a meal, which you want to be between 70-99 mg/dL (3.9-5.5 mmol/L).

Turn Your Insulin into Jillian Michaels (Part 2): Fix Your Blood Sugar

Measuring your blood sugar, especially your fasting blood sugar, gives you valuable insight into your insulin resistance and your overall health. If, like most of us, your blood sugar is a little high (the optimal range is ), then it’s time to start addressing the root cause. You’ve taken an important first step when it comes to managing your weight, cortisol, and insulin sensitivity...

But it’s time to take the next step.

Now it’s time to actively change your diet, your exercise habits and your supplement strategy.

Here’s how:

Cortisol Control

Cortisol regulates your blood sugar, your immune function and your blood pressure. The problem is, most of us don’t regulate our cortisol. Cortisol works by releasing a quick burst of glucose into your system. This is important when you need to wake up in the morning or, say, run away from a tiger, but it’s not very helpful when it comes to an busy job or financial worries. Chronically-high cortisol leads to chronically-high blood sugar. Here are some of my favorite ways to keep cortisol at healthy levels:

- Take fish oil
- Cut down on caffeine
- Chanting and deep breathing (great for an in-the-car relaxation session!)
- Reduce alcohol to 2-3 servings per week
- Eat dark chocolate (Doctor’s orders)
- Add Vitamin B5 or Vitamin C to your daily routine
**Excellent Exercise**

Exercise is one of the best ways to lower your blood sugar and increase your insulin sensitivity. What most people don’t know is that certain types of high-impact exercise (like running) actually increase cortisol, and as a result, blood sugar. The following are some of my favorite ways to burn some calories and beat blood sugar.

- Yoga
- Pilates
- Power walking (just add girlfriends for an added boost of oxytocin)
- Burst or high-intensity interval training

**Fabulous Food**

Diet may be the most obvious – and the most effective – way you can positively affect your blood sugar levels. You have to eat to live, but choosing your foods based on your body’s needs can help you live a lot longer. Below are the best ways to adjust your diet in a way that keeps your blood sugar low and steady.

- Don’t drink your calories: commercial juices and coffee shop drinks are serious sugar bombs.
- Cut out sugar wherever possible, including artificial sweeteners.
- Add fiber. Not only will fiber keep you fuller longer, but it will also help flush toxins out of your body.
- Become a whole foodist. Adding lots of fruits and vegetables to your diet doesn’t just add vitamins and minerals – it keeps your carbohydrate count low and your fiber high.

**Low Sugar Habits = High Quality Life**

Regularly measuring your blood sugar as well as following the guidelines above will help you keep your glucose levels steady as well as maintain your insulin sensitivity. Eating the SAD (Standard American Diet), exercising every now and then, and suffering chronic stress can lead to hard-to-lose belly fat, low energy and even Type 2 diabetes. Managing your blood sugar and you’ll be rocking your mission into your golden years and beyond.

To learn more about Dr. Sara Gottfried, visit her website, [SaraGottfriedMD.com](http://SaraGottfriedMD.com). Check out her delicious, hormone resetting shakes and other products at [RESET360.com](http://RESET360.com).
About Dr. Sara
Sara Gottfried, MD is the New York Times bestselling author of *The Hormone Cure* and *The Hormone Reset Diet*. After graduating from Harvard Medical School and MIT, Dr. Gottfried completed her residency at the University of California at San Francisco. She is a board-certified gynecologist who teaches natural hormone balancing in her novel online programs so that women can lose weight, detoxify, and slow down aging. Dr. Gottfried lives in Berkeley, CA with her husband and two daughters.

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