9 High Blood Sugar Causes to Be Aware Of

by COLLEEN KELLY

Understanding Hyperglycemia

As a certified diabetes educator (CDE), when patients come to see me, they fear several things. One, of course, is high blood sugar; the other is low blood sugar. So, let's talk about the difference between the two – and what can cause high blood sugar.

What You Need to Know About Blood Sugars

Hyperglycemia is the medical term for elevated blood sugar (or blood glucose). This is typically the result of too little insulin in the body, or when the body is unable to use insulin appropriately.

Hypoglycemia is the medical term for low blood sugars – typically less than 70 mg/dL. When you are suffering from hypoglycemia, you must act in order to bring it back to a normal level. There are many causes for hypoglycemia.

If hyperglycemia is high blood sugar, and hypoglycemia is low blood sugar, what is *normal* blood sugar?**Euglycemia** is the medical term for normal blood sugar.

Glucose Target Ranges

For someone without diabetes, normal glucose values are as follows:

- Fasting: less than 100 mg/dL.
- Before meals: less than 110 mg/dL.
- Two hours after a meal: less than 140 mg/dL.
- At bedtime: less than 120 mg/dL.

For someone with diabetes, target glucose values are as follows:

- Fasting and before meals: 70-130 mg/dL.
- Two hours after a meal: less than 180 mg/dL.
- At bedtime: 90-150 mg/dL.

Symptoms of Hyperglycemia

Sometimes, people do not realize they have hyperglycemia until they have symptoms. Once hyperglycemia symptoms develop, glucose levels are often dangerously high.

Hyperglycemia symptoms are as follows:

- Polydipsia (increased thirst).
- Polyuria (increased urination).
- Polyphagia (increased hunger).
- Blurred vision.
- Difficulty concentrating.
- Fatigue.
- Weight loss.

What Causes Hyperglycemia?

If you've recently been diagnosed with type 1 or type 2 diabetes and have just begun treatment, you may have hyperglycemia for the simple fact that your glucose levels have yet to respond to treatment, or your providers are still trying to determine an appropriate treatment plan.

Of course, if you're having the symptoms listed above and have yet to be diagnosed with diabetes, you should seek medical treatment.

Otherwise, what could be causing hyperglycemia? There are a variety of reasons!

If you are a person with diabetes who requires insulin, here are some ideas:

- You may have forgotten to take an insulin dose.
- You may have consumed too many carbohydrates for the amount of insulin that you injected.
- Your insulin dosing may be inaccurate.

Not on insulin? Here are some ideas:

- You may have forgotten to take your glucose-lowering medication.
- You may not be following your carbohydrate-controlled diet as recommended.
- Your treatment plan may need to be "tweaked" by your medical provider.

For anyone with diabetes, regardless of treatment plan:

- You may be ill – illness is known to increase glucose levels.
- You may be stressed – stress is also known to increase glucose levels (even good stress – such as going on a vacation or starting a new job!).
- You may be less active than usual.

So what should you do in these circumstances? You should think critically about your high blood sugar.

- If it is the result of an omission of insulin or medication, you may need to check with your provider to see if it is too late to take the missed dosage.
- If it is from inaccurate insulin dosing, you should contact your provider to assess your routine.
- If your diet needs "tweaking" – stick to your plan! However, if you need a "refresher," you may want to call your provider for a referral to a registered dietitian (RD) so that you can discuss a plan that works for you.
- If you're taking your medications as prescribed and your blood sugars are *still* running high – call your provider! It may be time for some type of medication adjustment.
- If you were previously very active and now you're not – I think you know what I'm about to tell you. Pull out those running shoes and get moving.
- If you're ill or stressed – these levels are most likely temporary. Meditate. Call a friend. If you feel that your glucose level is dangerously high, however, contact your physician for a recommendation.

The Bottom Line…

Hyperglycemia is not *always* dangerous. However, long-term and persistent hyperglycemia can lead to diabetic

complications. You may not realize that your blood sugar levels are running high if you do not monitor your levels, as symptoms do not develop until they are dangerously high. This is why it is extremely important to measure your glucose levels as per your treatment plan if you have been diagnosed with diabetes, or talk to your physician if you suspect you are at risk for developing diabetes. Think critically about the cause of your high glucose, and contact your healthcare provider if you need assistance in reducing your blood sugar.