

Stress and Blood Sugars

Written and clinically reviewed by Marissa Town, RN, BSN, CDCES

The amount of stress that we have undergone as humans in the last few years has been ridiculous. This is certainly not how I imagined I would be spending my adult life. It feels like every chance we get to come up for a breath after drowning in major horrible world event after major horrible world event, another awful thing happens. Even reading the word stress makes my heart rate go up.

Stress & BGs

When you experience stress – even if it's positive stress – it can raise your blood glucose levels. This is because our bodies react in a very primitive way to stressors. When the mind or body feels stress, the body quickly releases chemicals that are made to help us survive the stress. When it releases those chemicals, it also triggers our liver to dump glucose into the blood stream, giving us energy to fight or flee the danger.¹

Unfortunately for those of us with diabetes, this results in high blood sugars. (For people without diabetes, the pancreas will increase insulin production. Lucky ducks.) This is why many recommend channeling stress into things like exercise. Even taking a walk can help reduce the blood sugars and stress response. But exercise isn't always feasible, so finding something that works for you is super important.

Stress and the COVID-19 Pandemic on PWD

There have been a few studies showing that people with diabetes had higher rates of stress throughout the pandemic than healthy people.² DUH! We already have too much experience in our healthcare system to know how broken it is and how fragile we as humans can be. I was scared for so long that I was going to leave my children without a mother because I contracted COVID from an unmasked person at the grocery store. I was sure that I would be one of the unlucky ones who had a severe reaction to the virus.

Then in the summer of 2022, I finally caught it. I immediately messaged my doctor asking for Paxlovid, knowing there may be some side effects, but my fear of the virus outweighed any doubts about trying the medicine. My case was mild except for some fatigue and brain fog after coming off of Paxlovid. I was fine, and I would be okay. I didn't have to keep living with the looming anxiety of possible impending doom. It was such a relief, honestly, after living so long in this crippling fear of what could go wrong with COVID.

Navigating Stress

There is no way to avoid all stress – and given that stress tends to raise blood sugars, it's important to figure out a way to cope with the stressor and help lower the blood sugars back down. There is also no one-size-fits-all solution for stress management; You'll have to find something that works for you.

Here are some examples of stress management techniques:³

- 1. Deep Breathing for kids, blowing bubbles
- 2. Meditation or Mindfulness practice there are lots of apps to help you develop these skills
- 3. Physical Activity walking, playing a sport, anything that gets your body moving
- 4. Do something just for YOU take a bath, listen to some music, paint, color, whatever makes you happy

- 5. Talk to someone a friend, a counselor, a psychologist, someone supportive in your life
- 6. Get enough sleep without enough sleep or rest, it's hard to manage stress and life in general
- 7. Spend some time with your pets (if you have them) studies show spending time with your pets reduces the stress hormones⁴

When you find something that helps reduce your stress, it can be helpful to have a routine or scheduled times for you to participate in that activity. This can help you stay in a more balanced mental state, which is easier said than done sometimes. I notice a drop in my blood sugars when I do certain things unrelated to exercise, and I always chalk it up to relaxation. For example, painting, exploring a new park, going to Target – ask other people with diabetes, the Target low is real.

I have friends with diabetes who notice a drop in their blood sugar at the end of the workday due to the decrease in stress. Others experience a decrease when on vacation, even if they're more sedentary on that vacation. The experience of stress is very real, and our bodies react accordingly. What will you try next to help promote relaxation and decrease stress? See if you notice a change in your CGM or blood glucose levels. It's a very easy experiment, hopefully.

- Fight Or Flight Response (Psychology Tools)
- Increased stress, weight gain and less exercise in relation to glycemic control in people with type 1 and type 2 diabetes during the COVID-19 pandemic
- Coping With Stress
- The Power of Pets