The Impact of Hot Weather on Diabetes

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Diabetes and Heat: Can the Heat Affect Diabetes?

Living with diabetes, you likely know how to manage your symptoms most of the time, but you may not realize just how much diabetes and heat interact.

While some people might be able to brave the beach all day until the sun dips down, that can be a recipe for disaster for anyone with a blood sugar disorder — after all, heat and humidity affect your metabolism, and can throw your carefully concocted diabetes management plan out of whack.

The first step to a safer and happier summer season is a better understanding of how diabetes and temperature interact on hot days. Take some time to learn exactly what diabetic challenges you may face, so you can prepare and protect yourself when the temperature rises.

Hot Weather Risks for Diabetics

Studies show that visits to the emergency room and hospitalizations go way up for diabetics during the hottest times of the year, and that's not always traced to careless behavior. Some people simply don't realize how much they need to change their routine when the temperature soars.

Diabetes impairs your ability to sweat, and since sweat is your body's natural cooling system, you can get overheated a lot quicker than your neighbor. Blood sugar can be more difficult to control as your body tries to adapt to the rising temperature, too, which sets the stage for uncomfortable hypo- or hyperglycemic episodes.

Some specific risks to keep in mind include:

- **Dehydration.** Dehydration is a risk for everyone, but it can affect diabetics much more severely. The problem is that less blood flows through your kidneys, which leaves a higher concentration of glucose in your blood and cause you to urinate more, leading to further dehydration, higher blood sugar, and eventually, hyperglycemic emergency.
- **Hypoglycemia.** Hot and humid weather tends to kick-start your metabolism, which may send your blood sugar into a nosedive if your glucose stores are already low.
- **Heat exhaustion**. Since your body may not be able to cool itself efficiently, you may absorb heat more quickly than the people around you. That makes it even more important to listen to your own body instead of taking cues from your friends and neighbors.

Tips for Coping With Diabetes and the Heat

In order to prepare and react appropriately, you need to consider the whole situation, and a high number on the thermometer is only part of the picture. The heat index is a combination of air temperature and humidity, and since humidity slows the evaporation of perspiration, it plays a role in how the heat affects your body. The higher

the humidity, the harder it is for your body to cool itself.

On days with a very high heat index, consider spending your time inside, with a fan or air conditioning. If you are planning on heading outside, take some wise precautions to ensure you don't fall into any trouble while you're away from home.

Don't Disregard Warning Signs

When it's hot out, it's natural to chalk up any sweating, fatigue or irritation to the weather, but that can be a terrible mistake since they can point to hypoglycemia. Heat exhaustion can also hit hard if you're not careful, so watch out for these telltale signs and to seek cover and hydration right away:

- Dizziness
- Muscle cramps
- A headache
- Fast heartbeat
- Nausea
- Clammy hands
- Shakiness

Since some of the signs of heat exhaustion are so similar to symptoms of hypoglycemia, so be prepared to test your blood more often for an accurate assessment.

Keep Quick Carbs on Hand

A picnic on a sunny afternoon is a nice idea, but don't rely on a midday meal to keep your blood sugar steady. Pack a few high-carb snacks along with a source of fasting carbohydrate — like glucose tablets — so you can get the boost you need. Stick with water for refreshment; sweet drinks can make you thirstier and will challenge your blood sugar management even more.

Adjust Your Insulin Levels

If you manage your diabetes with insulin, you may need to adjust the amount you take on hot days, when dehydration is a bigger threat. As you become dehydrated, less blood reaches the skin, and that means less of your insulin injection will be absorbed. It can be very difficult to determine just how much more you need without your doctor's help, so pay them a visit before trying to adjust your dosage yourself.

Rest and Rehydrate

It may seem pretty obvious, but rest and water are vital when the temperature rises. Since you can dehydrate quickly, always keep a bottle of water in your hand. When you're not holding it, use a chair with a cup holder or place the bottle on the table directly in front of you to keep it in your line of site. Sip often.

You should curb your activity on really hot days, keeping exercise to a minimum and only during the morning or evening. Stay well out of the midday sun, and if it's humid as well it's probably best to enjoy the cool, dry air of an air-conditioned room.

Bring a Cooler

Cold water is always more refreshing, but a cooler is even more useful for sensitive medicine that you should be keeping by your side. Insulin, oral medications, even glucose test strips can be damaged by the heat of the sun, which calls for shade and cooling packs if you plan to venture outside for a while. If a cooler is too bulky, keep it simple with a cooling wallet — you can find them in hardcovers, soft-sided packs, purse-sized or pen-sized. The idea is to keep the medications cool without letting them freeze.

Ultimately, you'll want to do everything you can to avoid stressing your body on hot days. This means avoiding sunburn at all costs, checking your blood sugar levels frequently, and never walking barefoot on hot surfaces. A bit of planning can make a very big difference, especially if you're away from the comfort and safety of your home this summer.