

INFORMATION

FOR PEOPLE WITH DIABETES

STAYING SAFE IN THE SUMMER

At times the winter felt unending, but finally the snow is behind us! We can remove our winter coats and store the heavy blankets. We're all relieved that it's warmed up outside and summer is around the corner. As it gets hotter, though, people with diabetes should be aware of how heat can affect their blood glucose levels, medications, and equipment such as monitors. But by taking adequate precautions, people with diabetes can enjoy the summer and have fun in the sun.

Here are some important things to know:

Your blood sugar fluctuates in hot weather

Many people with diabetes find that their blood sugar levels go up in hot weather. Others experience lower glucose levels – possibly due to improved blood flow as a result of blood vessels that dilate in the heat, or a speeded up metabolism that uses more glucose. In either case, since very hot temperatures can cause glucose levels to fluctuate, it's a good idea to test your blood more frequently than usual.

If you're among those whose blood glucose goes down in hot weather and you're using glucose-lowering medication, blood glucose levels can get too low, which is called hypoglycemia. You should be concerned that you might be having an episode of hypoglycemia if you have symptoms such as:

- Dizziness
- Fainting
- Confusion
- Excessive sweating

If you have any of these symptoms, check your blood sugar. If you're hypoglycemic, have a high-glucose snack such as glucose pills or half a cup of a fruit juice or a sugary drink. If you can't test your blood sugar, just have the snack. Most important is to eat small amounts of healthy foods every three hours.

People with diabetes are more prone to heat exhaustion

Heat exhaustion can occur if you get very hot and lose water and/or salts from the body. People with diabetes are more prone to heat exhaustion because diabetes affects the ability to sweat, which is the body's cooling mechanism.



Symptoms of heat exhaustion are similar to those of hypoglycemia and include:

- Sweating more than usual
- Dizziness
- Cramping muscles
- Clammy skin
- Headaches
- Fast heartbeat
- Nausea

To avoid heat exhaustion, stay in the shade and stay hydrated. Drink cool drinks.

Sunburn and dehydration raise your blood sugar

Sunburn can raise blood sugar. Like your parents used to tell you, wear sunscreen (SPF 15 or higher), sunglasses, and a hat while out in the sun. The sun is strongest between 11:00 am–3:00 pm.

Dehydration from sweating can raise blood sugar and can lead to heat exhaustion. According to the Cleveland Clinic, people with diabetes are more likely than others to be admitted to hospitals for dehydration and heat exhaustion, and to die from it.

If you become dehydrated, your blood glucose levels will rise. This can lead to frequent urination, which leads to further dehydration and even higher blood sugar levels — a kind of vicious cycle. Further, if you are taking insulin, dehydration reduces blood supply to the skin so you absorb less of the injected insulin dosage.

The best way to deal with dehydration is to prevent it. Drink more when it's hot. Water along with your healthy snacks is the best combination. Have a bottle of water with you, and don't wait until you're thirsty to drink. Coffee and alcoholic beverages are dehydrating, so if you have coffee or alcohol in hot weather you should drink extra water.

Heat can affect medications and test results

Extreme heat or cold can affect test results and degrade diabetes drugs and test strips. The Joslin Clinic advises people to keep their insulin cool, but not on ice. If you take medicines with you while you're away from home, keep your medicines and test strips in a cooler bag. Insulin pumps and continuous glucose monitors should do fine in hot weather if they are not exposed to direct sunlight for long. When outside, Joslin suggests covering them with a white towel to reflect the sunlight and its heat.

Test strips are sensitive to temperature as well. Test your blood sugar in a cool, shaded place and keep your test strips away from direct sunlight.

Exercise is important, but staying cool is, too

Some people love to exercise in the heat, and for others, it becomes harder. It is preferable that you exercise and do other strenuous activities in the early morning or late

afternoon or evening hours when temperatures are cooler and the sun is not at its peak.

Foot care is vitally important

People with diabetes need to take care of their feet more than most people, since diabetes affects the functioning of nerves that sense pressure and pain. This can predispose you to injury and cause difficulties with healing. When cuts, burns, and blisters are not able to heal, this can become dangerous in people with diabetes. It is therefore important to prevent your feet from injury.

We would say that people with diabetes should always wear closed shoes – but we know that people like to wear summer footwear such as sandals or flip-flops, and to go barefoot. Like everyone else, remember to apply sunscreen to your toes and tops of your feet. Have fun, be safe, be careful – and the only thing you have to do that is different from people who don't have diabetes is to check your feet carefully at the end of each day. If you have an injury, clean it well, protect it, and track that it is healing. Seek medical attention early if it looks like it is getting red or swollen.

SUMMER TIPS FOR PEOPLE WITH DIABETES

-  Eat small meals more often. Don't go three hours without eating a healthy snack.
-  Check your blood glucose levels often
-  Use sunblock
-  Avoid the sun
-  Stay hydrated
-  Know the signs of heat exhaustion and hypoglycemia
-  Keep medications and test strips cool
-  Exercise in the early morning or late evening, or in an air-conditioned space
-  Avoid the temptation to wear sandals or go barefoot – Wear closed shoes!
-  Stay cool and enjoy the summer!

Source: <https://health.clevelandclinic.org/how-to-manage-your-diabetes-in-extreme-summer-heat/>
<https://www.diabetesselfmanagement.com/blog/diabetes-hot-weather-12-things-know/>
<https://www.diabetes.co.uk/diabetes-and-hot-weather.html>
<https://www.diabetes.co.uk/diabetes-and-sun-protection.html>