# Is There a Link Between Diabetes and Weather Changes?

by AFRA WILLMORE

## Diabetes and Weather

It's frustrating when you have been carefully watching your carbs, saying no to the sweet treats and exercising as always, and yet a check of your blood glucose reveals crazy numbers that make no sense.

What could possibly be causing this anomaly? Would you believe me if I told you it could be all down to the weather?

My grandma blames quite a lot on the weather. Excitable behavior in children or animals is attributed to wind, thunder or snow in the air. Cows lying down? It's going to rain. Ants walking in a straight line? It's going to rain. Chairs squeaking? It's going to rain.

She's often right, but to be fair where we live it rains a lot, so she probably has a more than 50 percent chance of being right anyway.

Luckily for me, my type 2 diabetes is not affected by rain – but cold weather and snow, or conversely hot weather, really can make a difference to my blood sugar levels – and I am not alone.

Many diabetic patients find that diabetes and body temperature regulation are closely linked when it comes to inclement weather.

### Impact on Testing Equipment and Meds

Apparently, extremes of heat can affect your testing equipment if you use a machine to monitor levels, and can change the way any medications work.

Some people even avoid finger prick tests in cold weather because it tends to hurt more – but a teeny bit of pain is better than risking a hypo or hyper surely? Warm your hands before finger-pricking by rubbing them together, holding a nice warm cuppa or washing them in warm water. Simply warning your hands will make the procedure as pain-free as possible.

Whatever the weather, it's important to keep your equipment and medications at a moderate temperature. Don't leave them in a car or anywhere which is likely to get sizzling hot or freezing cold, depending on the season.

Invest in a cool bag for hot weather to transport your vital kit, but don't let your meds or testing kit rest directly on an ice pack!

### Impact on Your Body

Much of the problem however stems from our own bodies in weather extremes.

Hot weather can increase blood glucose because the risk of dehydration is higher. Dehydration decreases blood flow through kidneys, and with less blood the kidneys don't work as efficiently to clear out any excess glucose (sugar) from your blood. Voila! Higher blood sugars.

Cold weather often means coughs, colds, flu and other illnesses affecting your immune system and causing you stress. Stress and illness can raise your blood sugar, plus it's often harder to eat properly when you feel ill, tired, under stress or depressed.

Add to that the temptation of the winter holiday season when it's all to easy to forget "everything in moderation" and overdo sweet treats, alcohol and carbs. I have just had my diabetic review and am fully aware that my higher than advisable HBA1C is down to Prosecco wine and too much Christmas cake (and goose-fat roasted potatoes, chocolates, etc...).

**Managing Diabetes Despite the Weather**

Here are some top tips to help you keep good control throughout the year:

- In hot weather, remember to stay out of sun during the hottest part of the day. Keep exercising, but do it early in the morning, when the sun has gone down, or treat yourself to a membership at a nice air-conditioned gym.
- Watch out for heat exhaustion or dehydration – carry water and a snack with you in case you start to feel dizzy, sick, shaky or confused.
- Look after your feet in hot weather – open-toed sandals keep feet cool but watch out for cuts, bruises, and scrapes which can be dangerous for diabetic feet.
- In cold weather it is all too tempting to skip exercise and nurse a mug of hot chocolate and a few cookies by a roaring fire instead. But going out for a walk, joining an exercise class or going for a run will warm you up, increase insulin sensitivity, lift your mood and help keep your blood sugars under control. Dress in layers if you plan to go outside, or work out inside at home with a DVD, taking the stairs instead of the elevator at work or the mall or exercise in a temperature-controlled gym.
- Your feet need extra care in winter too. Wear the right footwear for the weather, especially in snow. Diabetic feet often have less sensation, especially when they are cold, and you might not notice if they get damaged. All year round you should check your feet regularly and report any damage that isn't healing or loss of sensation to your doctor.
- And lastly, think about assembling a "sick kit" containing sugar-free cough pastilles, soup, tea and other (diabetic friendly) things that will help you feel better in case of illness. Neither feeding a cold or starving a fever – another one of Granny's sayings – will help your blood glucose levels!