

How might type 2 diabetes affect your sleep?

Having diabetes can impact on your nights as much as your days. It can stop you getting the sleep you need in a number of different ways.

Professor Merlin Thomas explains.

Diabetes can indirectly affect your sleep pattern by causing you to need to get up and go to the toilet, often many times during the night. This is known as **nocturia**. Healthy kidneys are able to make more concentrated urine overnight. This means that most adults do not need to get up more than once, if at all. However, getting up more frequently at night is a common symptom of diabetes and a common cause of disrupted sleep.

Nocturia can sometimes be a sign of **poor glucose control during the night**. When glucose levels get too high, glucose spills over into your urine, which increases the amount of urine you will make. This is most noticeable at night, when you should normally be making less. Most people don't test their glucose levels at night (as they are asleep) so it can be hard to detect. But when glucose control is improved, this symptom can quickly go away. So it is always worthwhile pointing it out to your diabetes care team and asking their advice.

Damage to the kidneys or the bladder associated with diabetes may also cause you to get up frequently in the night. Many people with type 2 diabetes benefit from bladder retraining and/or taking medications in the evening to reduce the irritability of their bladder.

Passing more urine at night can also be a sign of **problems with your heart**. Again, instead of making less urine during the night, some people with impaired heart function (known as heart failure) make more. This is to enable them to clear the extra fluid from their body that has accumulated in their legs during the day, but comes back into their system when they lie down.

This is treated by diuretics – medication to increase the amount of fluid lost into the urine through the day, making less of a burden at night.

Sometimes, **low glucose levels (hypoglycaemia)** at night can also cause you to wake up. To protect against hypoglycaemia, the body has a number of defence mechanisms that trigger warning symptoms to alert you that things are awry. One of them is to wake you up and make it hard to go back to sleep until you have eaten. Again, hypos can't occur in the majority of people with type 2 diabetes because their body is able to make enough glucose in the event that levels fall. However, in some people with type 2 diabetes who take medications that increase their insulin levels (sulphonylureas and meglitinides) or are injecting insulin itself, hypos can occur at night.

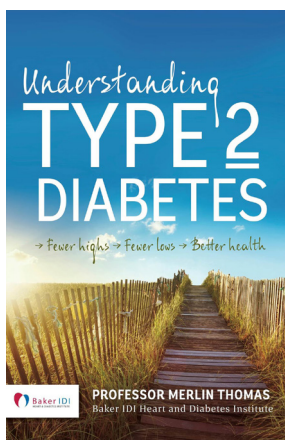
Type 2 diabetes is also associated with **increased levels of stress and mental illness**, including depression and anxiety disorders. These can significantly affect the quantity and quality of your sleep.



The **health of your feet** also affects how well you sleep. It is not unusual for people with type 2 diabetes to experience pain in their feet (due to ulcers, infection, nerve damage and/or vascular disease). Pain from these foot problems is often worse at night (or even limited to night-time) as the feet are elevated, warm and partly compressed by the bedclothes. Each has a specific treatment that includes medication and/or surgery; in addition, simple things such as using a bed cradle can keep sheets and blankets from touching your sensitive feet and legs.

Some people with type 2 diabetes experience an unpleasant 'crawling' feeling in their legs at night, accompanied by a tremendous urge to move. This is known as **restless legs syndrome**. It is often dismissed as something due to your diabetes, back problems or 'just nerves'. However, a number of different medications are now available to tackle this real problem, once it is recognised for what it is.

Another problem that can keep you up at night is **leg cramps**, usually affecting the calves but also sometimes the thighs or the feet. These cramps can be intensely painful and last up to several minutes before subsiding. This is followed by a deep muscle ache that can last up to a few hours. Leg cramps are more common in people with type 2 diabetes, especially older people, those with kidney problems or poor circulation. Again, this is not a problem that should be simply put up with. In those with troubling or frequent cramping, symptoms can be reduced by using verapamil or diltiazem (commonly prescribed as blood pressure-lowering medications). Vitamin B complex may also be helpful in some people. Quinine, the active ingredient in tonic water, may also be useful in some people although its effects are quite variable.



*Extracted from **Understanding Type 2 Diabetes** by Professor Merlin Thomas, a Kiwi living and working in Australia at the Baker IDI Heart and Diabetes Institute. You can buy his excellent and easy-to-read guide to managing diabetes at www.exislepublishing.co.nz RRP \$32.99 (audio and e-book also available).*

Diabetes New Zealand is a leading national organisation and registered charity. Our aim is to support all people affected by diabetes to live well through: Providing information and support to help people take charge of their health • Acting as an advocate and representing all people with, or at risk of developing, diabetes • Raising awareness of diabetes, especially around lifestyle factors that can help prevent or delay type 2 and help manage and control type 1 and type 2.