

# PhysioBiz

**Health newflashes**

*for bodies busy moving, working, playing, being.*



## **Brain food**

**Are you feeding your brain enough oxygen?**

**Welcome to PhysioBiz, with healthcare advice and information you can trust and rely on, brought to you by the South African Society of Physiotherapy!**

How do you feel when you wake up in the morning – full of energy and raring to go? Or are you foggy in the head, unrested and fatigued?

You might just be suffering from sleep apnoea. And you may very well not know you have it. Sleep apnoea is a disorder in which sleep is interrupted or even paused for a few seconds to a minute or more – partners sleeping in the same bedroom will likely notice that the person stops breathing and then gasps for air, often with loud rattling noises.

Aside from that interrupted breathing and choking sound, symptoms include:

- Heavy snoring
- Headaches in the morning
- Excessive sleepiness during the day
- Dry mouth or sore throat on waking
- Needing to urinate often at night
- Trouble concentrating
- Memory or learning problems
- Moodiness, irritability or depression

What's happening here is that your brain is not getting enough oxygen, says South African Society of Physiotherapy Deputy President Rogier van Bever Donker. That's quite dangerous and raises your risk of death from something like stroke or heart disease significantly. "And it's not uncommon," he adds. "We used to think it was relatively rare, but more recent research suggests that in the USA, maybe one in five to one in three adults suffer from sleep apnoea. We're probably not far behind." Children can get it, too, but it's most common in adults over forty.

There are three kinds of sleep apnoea, as PhysioPedia tells us:

**Obstructive sleep apnoea (OSA)** is caused by repeated partial or complete obstruction of the upper airway that diminishes or stops breathing.

**Central sleep apnoea** occurs when the brain is less sensitive to changes in carbon dioxide levels in the blood and fails to send signals to the respiratory muscles to breathe deeper.

**Mixed sleep apnoea** is a combination of both obstructive and central sleep apnoea episodes.

Causes may include having a big neck, being obese, a large tongue or tonsils, a particularly narrow airway, nasal congestion and smoking, drinking alcohol or taking sedatives.

“OSA is the most common kind,” says Van Bever Donker.

### **What to do?**

If you suspect that you might have it, you need to get a confirmed diagnosis at a sleep clinic. They will advise you on treatment – they are likely to prescribe a CPAP (Continuous Positive Air Pressure machine), a mask/fan combination which ensures the airway is open and getting air while you sleep. “You should also consult your physiotherapist,” says Van Bever Donker. “An adjunct treatment for sleep apnoea is exercise, and that’s one of the things physiotherapists are highly qualified to do, trained as they are in every subtle detail of the anatomy, even the tiny muscles in your throat.”

Two kinds of exercise may help: exercise aimed at improving general fitness, and specific exercises targeting muscles in your throat and neck.

A Brazilian study published in 2016 showed marked benefits from improving general fitness: “Exercise-related physiological adaptations in OSA patients include increased upper airway dilator muscle tone, reduced fluid accumulation in the neck, increased slow-wave sleep (stage 3 NREM sleep), reduced body weight, and reduced systemic inflammatory response.”

Simply reducing inflammation and the amount of fluid retained in your upper body – both proven results of regular aerobic exercise – can make a noticeable difference to the quality of your sleep, says Van Bever Donker.

And a number of studies have shown the benefits of targeting those muscles and structures most involved, the ones in your throat, tongue and back of the mouth. How do you do that? Your physio can tell you – and she or he will show you that exercise can be fun! One of the simplest exercises for sleep apnoea is a special kind of singing.

“Our bodies are meant to be active,” the deputy President says. “Take advantage of your physiotherapist’s extensive knowledge of how the body works and start an exercise programme that will help you avoid the unpleasant and even life-threatening consequences of sleep apnoea – and start waking up with loads of energy!”

To find a physiotherapist near you, go to [www.saphysio.co.za](http://www.saphysio.co.za).

### References

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