

Scientific Study – Effectiveness of dental sleep appliances for snoring (2010)

A scientific study conducted in Melbourne*, involving 116 consecutive patients who have completed treatment, demonstrated that 111, which represented 96% of the patients, were satisfied with the improvement in their snoring following the use of a customised adjustable dental sleep appliance. Most of these patients had adapted well to their appliance and were feeling more refreshed on waking and less sleepy during the day.

***Assessment of dental sleep appliance treatment’ August-October 2010**
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“The evidence base for the use of dental splints in the treatment of sleep apnea has increased dramatically in the last decade, and new clinical practice guidelines now recommend their use as a treatment alternative in mild to moderate sleep apnea”

Professor Peter Cistulli MBBS, PhD, FRACP, FCCP
Professor of Respiratory Medicine,
University of Sydney & Royal North Shore Hospital.

“Oral appliances are proven effective in mild to moderate sleep apnea and snoring, and are very well tolerated. The primary advantages, compared to the CPAP machine, are that they are more portable, make no noise, are better tolerated, and require no significant care...”

Professor John Truelson MD FACS
University of Texas USA.

Dental Sleep Appliances

Effective Treatment for Snoring and Sleep Apnea



Snoring is no joking matter! It is a sign of airway obstruction and a medical condition called sleep apnea. Snoring can have a huge impact on relationships, and could also be affecting your health.

Dental Sleep Appliances - the best solution

Custom made, adjustable dental sleep appliances are scientifically proven and widely regarded by sleep physicians as the best available treatment for snoring and a frontline treatment for mild to moderate sleep apnea.

Comfortable, effective and easy to use

Dental sleep appliances are comfortable and easy to use with studies demonstrating 95% effectiveness in overcoming snoring.

Recent guidelines from the American Academy of Sleep Medicine, the peak body in the field, recognise dental sleep appliances as a frontline treatment for snoring and mild-to-moderate sleep apnea. In severe cases of sleep apnea the Continuous Positive Airway Pressure (CPAP) machine is the optimal treatment, in which air pressure of adjustable intensity is delivered through a nasal mask worn during sleep. However many people find it very difficult, or just cannot use CPAP.

Dental sleep appliances are an excellent alternative therapy for people with severe sleep apnea when CPAP is not tolerated, or when travelling, camping, or in any situation with no access to electricity.

Do you also have sleep apnea?

If you snore you also might have sleep apnea

If you wake feeling somewhat unrefreshed and are sleepy during the day then your snoring may be more than just a noise - it may be a sign of an underlying medical condition called sleep apnea.

Up to 70% of adults who regularly snore have sleep apnea, with most unaware they have this condition. Sleep apnea is caused by soft tissues in the throat, including the tongue, collapsing against the back of the throat. This obstructs the upper airway and air flow is reduced.

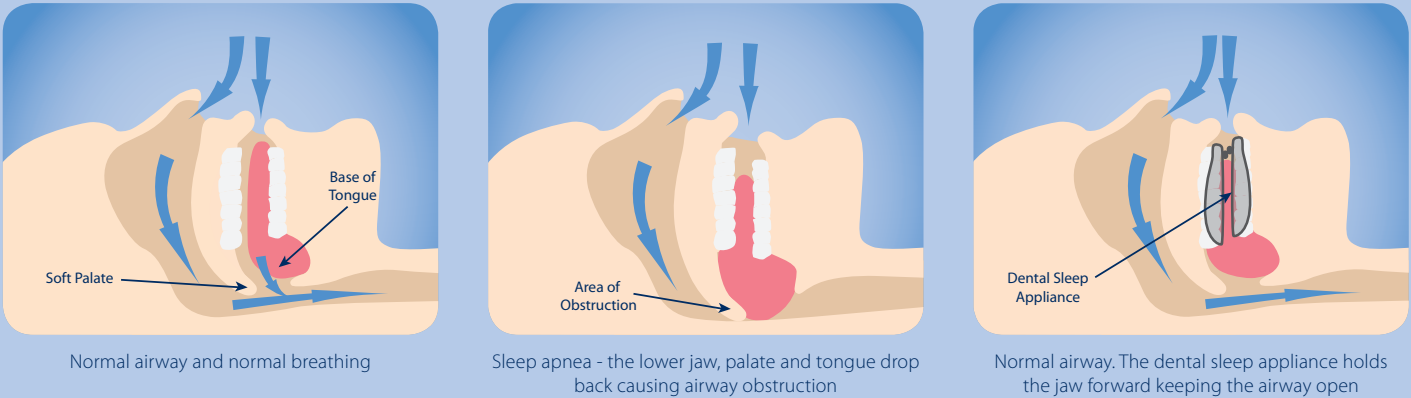
This cycle of obstruction and then breathing can occur many times per hour disrupting the quality of sleep. Sleep apnea can cause high blood pressure, heart and health problems and is an important cause of excessive daytime sleepiness.

Important note

It is possible to have significant sleep apnea even if no one has seen you stop breathing. Even partial obstructions can have a severe impact on health and quality of life.

How does the dental sleep appliance work?

Dental sleep appliances work by comfortably holding the lower jaw slightly forward, which prevents the tongue and structures at the back of the throat from collapsing into the airway. This keeps the airway open.



Benefits of dental sleep appliances:

- You and your partner can look forward to a quiet night of sleep.
- Wake up feeling refreshed.
- Improved quality of life with a better mood and greater vitality.
- Decreased risk of fatigue-related vehicle and work accidents.
- Improved work performance due to greater concentration and energy levels.
- Decreased risk of heart disease, stroke and blood pressure problems.

What is the best treatment for snoring?

Dental sleep appliances are generally regarded as the most effective treatment for snoring, with the least side-effects. Studies demonstrate that dental sleep appliances are far more effective than surgical treatments. Surgery is only around 55% effective with significant potential side-effects including severe post-operative pain and regurgitation of food through the nose. Surgery is currently a very uncommon treatment.

Beware unproven treatments

Sleep physicians and experts in the field are extremely concerned about “over the counter treatments” for snoring. These products, which includes sprays, medications, pillows and breathing techniques, are lacking in any standard scientific evidence and have been demonstrated to be ineffective.

While weight loss, avoiding caffeine, nicotine and alcohol prior to sleep can be very helpful, custom made, adjustable dental sleep appliances remain the gold standard for the immediate elimination of snoring.

Do you have sleep apnea?

It is important to distinguish between:

- a. People who only snore.
- b. People who snore and also have sleep apnea, an important medical condition.

Self Assessment for Sleep Apnea

1. Do you snore loudly?
2. Is your snoring a problem for others?
3. Do you wake feeling unrefreshed?
4. Are you somewhat sleepy during the day?
5. Has anyone heard you snort, gasp, or hold your breath during sleep?

If you answered yes to one or more of these questions you may be suffering from more than just snoring, you may have obstructive sleep apnea. It is recommended you call our practice to be assessed with a diagnostic sleep study.

Diagnosing sleep apnea

An overnight sleep test is the only way of diagnosing sleep apnea. The sleep test is important not just to determine whether you have sleep apnea, but also the severity. The severity is an important factor in determining the optimal treatment.



Home Monitoring - Diagnosis in the comfort of your own home

A sleep monitoring device is taken home, and is simple to connect and sleep with. The device is returned the next day and the parameters of sleep are measured. The results are evaluated by a sleep physician, with a diagnosis made for both the presence and severity of sleep apnea. The severity of the sleep apnea will help determine what the best treatment is. Sleep tests are inexpensive with most of the costs covered by a Medicare rebate. Sleep tests can be organised at our clinic.

What is the role of dental sleep appliances for sleep apnea?

Dental sleep appliances are a frontline treatment for mild to moderate sleep apnea. Most people with mild to moderate sleep apnea will elect to use a dental sleep appliance as they are far more comfortable and easier to use than the traditional treatment which is the CPAP machine and mask. While the CPAP machine is the gold standard treatment for severe sleep apnea many people find it difficult and are unable to use it.

Dental sleep appliances can often achieve excellent results with severe sleep apnea for people who can't or won't use the CPAP machine. Even if 70% to 80% of the sleep apnea is eliminated by using a dental sleep appliance this is often sufficient for the patient to feel more refreshed, less tired, stop snoring and have a reduced risk of blood pressure problems and heart disease. Greater effectiveness is often achieved in managing severe sleep apnea when the use of a dental sleep appliance is combined with other measures such as weight loss.

If you have been diagnosed with severe sleep apnea and you are not using CPAP then it is very important that a dental sleep appliance is used to assist with your breathing during sleep in order to prevent health and quality of life problems.

Are dental sleep appliances comfortable to wear?

Although the mouth is a very sensitive area, the vast majority of people adapt within a night or two and find the appliance surprisingly comfortable. This is because the appliances are tailor made and very thin. Once the snoring stops and the patient is feeling more refreshed, and have adapted to the appliance, most people would much rather wear it during sleep than leave it out, in order to maintain the benefits.

Are all dental sleep appliances the same?

Not all dental sleep appliances are the same. Current scientific research demonstrates that custom made appliances made by an appropriately trained dentist, from impressions and models of the patient's own teeth are by far the most effective, comfortable type of appliances.

There are also “boil and bite” devices available from the internet. These are non custom made plastic shells, one size fits all, and are mostly non adjustable. These non - prescription devices have been banned in the USA by the Food and Drug Administration (FDA). They have the potential to cause significant side-effects and are difficult for people to wear - even in the short term.

While there are currently over 40 different appliances being advertised throughout the world many do not have associated studies demonstrating effectiveness. It is important to only use appliances that are supported by scientific studies which prove their effectiveness and comfort.

How long does a dental sleep appliance last?

If you don't clench or grind your teeth a dental sleep appliance can last for 4 or 5 years and often much longer. Even if you do clench or grind your teeth an appliance can still last for years and has the added benefit of protecting your teeth and dental work.

Dental Laboratory

Our clinic works in close association with SleepWise Dental Lab, the only laboratory in Australia that specialises in the manufacture of an extensive range of high quality custom made dental sleep appliances. Impressions are taken and the appliances are made on accurate moulds of the patient's mouth. New generation materials are thin, yet strong, and ensure that the appliances are comfortable and last for the long term.