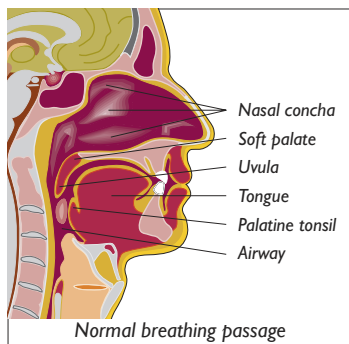


What causes snoring?

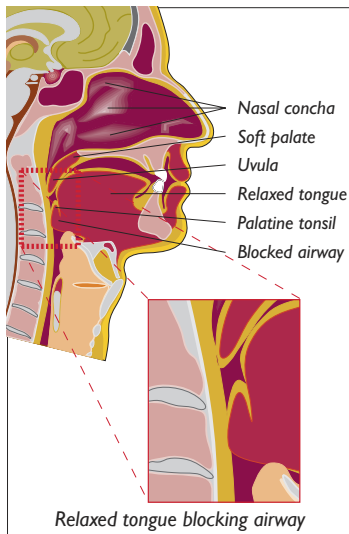
Quite simply, snoring is vibration caused by a constricted or narrowed airway during sleep. Snoring occurs because air travels faster through a narrow tube than a broad one. This causes the relaxed soft tissues of the throat (tonsils, soft palate, uvula) to vibrate. This vibration is the sound we know as snoring.

Constriction or narrowing can happen for many reasons:



- large tonsils
- a long soft palate or uvula
- excessive flabby tissue (in those who are overweight)
- nasal congestion from allergies or infections
- cartilage deformities in the nose or nasal structure.

The most common cause, however, is a tongue muscle which relaxes too much during sleep and allows the tongue to be sucked back into the airway with each breath.



By keeping the airway open, air travels more slowly, which reduces the vibrations in the throat. This eliminates or reduces snoring.

One of the more effective ways to keep the airway open during sleep is by keeping the tongue in a forward position.

Is snoring harmful?

New research suggests that heavy snoring can cause hypertension and – as a result – increased blood pressure during sleep. Snoring can also lead to a medical condition known as *Obstructive Sleep Apnea* (OSA), where the tongue is drawn against the airway with such force that the throat is closed and breathing stops.

This airway obstruction causes the heart rate to fall below normal, with decreases in blood oxygen levels. The obstruction will normally not clear until the brain oxygen level falls low enough to prompt the brain to release of adrenalin to prevent suffocation. This may happen hundreds of times each night.

The sleeper may be jarred into partial wakefulness by the increased adrenalin flow, and may experience an abnormally high heart rate with each adrenalin release. Over the course of a night, this can impede deep restorative sleep and reduce blood oxygen levels.

OBSTRUCTIVE SLEEP APNEA (OSA) has been linked with an increased risk of hypertension/increased blood pressure, strokes, cardiovascular disorders, depression, impotence, reflux/heartburn, obesity, diabetes and memory problems.

The most common health consequences of OSA are excessive daytime tiredness (affecting both physical and intellectual performance) and falling asleep at inappropriate times (increasing the risk of both vehicle- and work-related accidents).

Snoring and OSA are known collectively as “**Sleep Disordered Breathing**”.

Do I have obstructive sleep apnea (OSA)?

If you snore, you may have OSA. Some symptoms are:

- frequent waking, with sensations of gasping, choking or palpitations
- headaches when waking in the morning
- night-time reflux and heartburn
- excessive tiredness during the day
- sleeping at inappropriate times
- poor physical or intellectual performance.

Can snoring and obstructive sleep apnea (OSA) be treated?

Mild or occasional snoring and symptoms of OSA may be alleviated by simple lifestyle changes such as:

- losing weight
- getting regular exercise
- within three hours of bedtime, avoiding alcohol, heavy meals and medications which make you drowsy.

For more serious cases of snoring or OSA, medical treatment options have typically included:

- surgery to the nose, throat, tongue or jaw
- Nasal CPAP (Continuous Positive Airway Pressure), which involves air compression used to force the airway open and aid breathing during sleep (requires medical supervision)
- Oral dental devices (mandibular advancement splints), attached to the teeth and worn at night to hold the lower jaw in a forward position.

After several years of clinical research, a new anti-snoring aid has been developed: the **aveoTSD®**.

The **aveoTSD®**, approved by the US FDA as a medical device, works by stabilizing the tongue in a forward position through gentle suction. The device is not attached to the teeth, and there is no need for fitting by a health professional. Made of soft, medical-grade silicone, it is flexible, comfortable, easy to use and very effective in the treatment of both snoring and OSA.

Snoring and obstructive sleep apnea are receiving increasing attention amongst medical researchers. While snoring has always been recognized as a social irritant, there is growing evidence that both snoring and OSA can be more detrimental to a person's general health and well-being than previously thought. For more information, visit our web site.

If you are worried about snoring, OSA, or the health-related effects of “Sleep Disordered Breathing”, consult your family doctor to discuss your concerns.

You can have an uninterrupted night of sleep! See how at:

www.aveosleep.ca

For more information about snoring and OSA, visit:

www.aveosleep.ca

Ask your doctor about...

aveoTSD®



Introducing...

aveoTSD[®]
anti-snoring aid



The **aveoTSD[®]** is a simple and effective clinically proven medical device for the treatment of sleep disordered breathing (snoring and/or obstructive sleep apnea [OSA]).

The **aveoTSD[®]** is Health Canada and FDA approved as a medical device.

The **aveoTSD[®]** is made from soft, medical-grade silicone, assuring a comfortable fit.

The **aveoTSD[®]** uses gentle suction to hold the tongue forward in the mouth during sleep. This prevents the tongue from relaxing against the back of the throat and constricting the airway.

The **aveoTSD[®]**:

- ✓ stops or reduces snoring
- ✓ reduces daytime sleepiness or inappropriate sleeping
- ✓ stops or reduces night-time reflux episodes
- ✓ lessens the incidence of morning headaches.

By encouraging good blood oxygen levels during the night, **aveoTSD[®]** is effective in:

- ✓ reducing sleep disturbances
- ✓ lowering hypertension and increased blood pressure associated with snoring and/or obstructive sleep apnea
- ✓ improving physical and intellectual performance.

aveoTSD[®]
tongue stabilizing device

snoring is no joke!

There may be nothing more irritating in a relationship than a partner who snores. That is no laughing matter.

More than an irritation, however, snoring is receiving increasing attention as a health warning – a symptom of sleep disturbances which may affect the snorer's health, intellectual and physical performance, and general well-being.

“Sleep Disordered Breathing” – the collective term for snoring and obstructive sleep apnea (OSA) – affects more than 40 per cent of the adult population.

For more information about snoring, obstructive sleep apnea, and “Sleep Disordered Breathing”, search the internet under “Sleep Disordered Breathing” or visit our website at:

www.aveosleep.ca

If you are worried about snoring, OSA, or about the health-related effects of “Sleep Disordered Breathing”, see your family doctor.

To purchase **aveoTSD[®]** directly, or to find a retailer/sales outlet near you, see our website.



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NOTES:

www.aveosleep.ca

aveoTSD[®] is a registered trademark of:
INNOVATIVE HEALTH TECHNOLOGIES (NZ) Limited.
European Patent 1349521. New Zealand Patent 526404.
International Patents Pending.

snoring

More than an irritation...



it could be a warning!

If you snore, do you...

- disturb your partner's sleep?
- awaken gasping for air?
- cause your partner to waken you because you have stopped breathing?
- have reflux episodes during the night?
- have morning headaches?
- feel tired during the day?
- fall asleep at inappropriate times?
- suffer from high blood pressure?

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anti-snoring aid
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