

Snoring? The Sooner You Stop it the Better

The Problem

Yes, snoring bothers the companion and they lose sleep. Yes, severe snoring takes a terrible toll on someone's health, including hypertension, obesity, diabetes, fatigue, accidents and more.

But what is important to understand is that early snoring can lead to major snoring and why this happens; which is why snoring should be fixed.

With early snoring there is less good sleep. This leads to fatigue and the need to take doughnuts and muffins for energy. This leads to increase fat built up in the airway passages, which eventually may lead to sleep apnea. To avoid the obesity, stop the snoring early. The sooner you stop it the better.

CRRS

I call this the CRRS Method

Clear Nasal Condition

Reduce throat swelling

Reduce acid reflux

Strengthen throat muscles

The reason to stop your snoring now, is to prevent the condition becoming OSA. OSA stands for Obstructive Sleep Apnea. In Obstructive Sleep Apnea insufficient oxygen gets to the brain because the breathing passageway is temporarily blocked. Apnea means no air. Doctors define sleep apnea based on a test performed in the special sleep laboratory. Here the oxygen level, breathing activity and brain activity is recorded during actual sleep. Depending on how often a person stops breathing, and how long that non-breathing (apnea) lasts, we give them a score that says yes, they have OSA or no they don't.

When OSA is severe, with many periods of apnea – not breathing, an evaluation of the patients usually finds hypertension, obesity, reflux of acid

from the stomach fatigue, poor sleep at night and frequent falling asleep in the day.

Why does snoring result in hypertension? The brain isn't getting enough oxygen due to obstruction to breathing; therefore the body increases the blood pressure in order to push more oxygen to the brain.

Why obesity? In the morning the OSA person needs energy to fight his/her fatigue, so they take food. In driving, they may feel sleepy, so they stop for more coffee and a doughnut. Despite the ten o'clock snack, they are still sleepy at lunch and overeat. Those extra calories end up making the soft palate heavier and more likely to block the airway.

Why is there daytime fatigue? Genetically we are supposed to get good sleep during dark hours. Failure to get sufficient sleep leads to fatigue and irritability. There are various stages of sleep that refreshes the whole body, especially the brain. If the brain gets less oxygen during those periods, then the next day the person is fatigued.

Why acid reflux? Acid reflux refers to Gastro esophageal Reflux Disease or GERD. Current theory is that when the tongue falls back to block breathing, there is a pressure built up that pushes stomach contents up against the sphincter that separates the stomach from the esophagus. This acid makes the OSA worse. If you hold your breath and try to inhale, you will note how your stomach rises up. When this attempt to breathe against an obstruction occurs while lying flat, the abdominal muscles contract, push against the stomach, and this pressure, plus the horizontal position, presses the acid against the sphincter that closes the stomach from the esophagus (your swallowing channel.) After a time, the sphincter gets increasingly weaker.

Whether your problem is social snoring, severe snoring, whether you are snoring because of seasonal allergy, what is important is that early snoring must be corrected in order to avoid becoming a full blown OSA. My philosophy is to clear the causes of snoring at an early stage and avoid the very serious OSA. To do this:

- o Clear the nose and sinuses of infection or drainage
- o Reduce the swollen throat tissue
- o Reduce acid reflux disease GERD
- o Strengthen the throat muscles
- o

These are simple, easy to do, and don't involve surgery or expensive therapies. With the CRRS method, you clear the nasal condition with Hydro Pulse Sinus irrigation or other Neil Med irrigation products. You reduce the swollen throat membranes with Hydro Pulse Throat pulsation irrigation, stop the acid reflux with diet and bed position, and strengthen the throat muscles with the throat muscle exercises.

Yes, I left out weight loss in the above list. It is very difficult to lose weight when you snore and have morning fatigue and need that cookie for energy. Clearing the snoring is a way to lose weight.

What is most important to understand is that any single one of these activities may be sufficient for you. Clearing the nose of a sinus problem can be the total cure. Fixing the allergy problem also works. Sleeping on the side so that the tongue falls forward to unblock the airway, may be enough. See what works for you. But I recommend you use the entire system.

Early Snoring creates viscous cycle

In the book, *Sleep Interrupted*, by New York ENT specialist, Steven Y Park, he shows how early snoring creates a vicious cycle that eventually leads to the worst kind of snoring where oxygen is denied to the brain and heart for long periods of time, called Obstructive Sleep Apnea –OSA. Thus, you should get a snoring cure as early as possible.

For example, take a theoretical patient, Jack. Jack had mild snoring at age 20. This was due to weak throat muscles and recurrent sinus infections. By age 40, he had gained weight and so his flabby throat muscles were now heavier and had more tendency to fall back and block his breathing. Meanwhile, the periods of blockage with his sinus infections, acted to increase the degree of acid reflux which further caused swelling of throat areas. The more the blockage, the more the reflux. By age 50, he had a full blown OSA with many episodes of apnea during sleep. He had fatigue, hypertension, and the need to overeat for his fatigue.

This mechanism is well documented in the excellent book by Stephen Park, *Sleep Interrupted*.

Note that at age 35 Jack could have cleared his sinus problem, lost weight, treated his acid reflux, and strengthened his throat muscles. Then he would have avoided his lifelong OSA at age 50. Actually, any single one of these therapies might have been sufficient. We see serious OSA patients cured just by losing weight.

Recent studies have pointed to the negative effect on circulation in the neck of the severe vibration. Some severe snoring persons die in the early morning in their sleep. The vibration from the snoring sound can affect blood vessel carrying the circulation, in a study by Urschitz.

One of the difficulties is that, for most patients, you either have OSA or you don't. If you don't have OSA then you don't need the services of Professor Expert. But, the problem is that you are still snoring, still not getting good sleep, and you are still operating at poor efficiency. You still need the snoring cure. More important, you may develop OSA without prevention and treatment. However, the fact is, that patients don't come to the doctor because they are snoring, so that early intervention is rarely used. Why don't they come for treatment?

When You Avoid the Doctor

It is a fact that many patients avoid seeking a snoring cure because they look in the internet and they see hundreds of discussions of surgical snoring cures. Then they read comments by patients in whom the snoring surgery failed – or worse. They seldom see comments by persons who were helped! Indeed lots of “nice guys” ignore their wife's pleading about the snoring because unconsciously that are afraid of needing surgery for the cure.

Jason didn't mention his snoring because

The other day Jason L. age 40, came for a revisit. All his life he had suffered because of his snoring. A month ago I told him to sew a tennis ball on his T Shirt back in order to keep him sleeping on his side, as therapy for his snoring. If he slept on his back, the ball nudged him to turn to the side. Now he no longer snored. His snoring cure was successful! In my examining room he actually wept at all the years that he had wasted in not seeking a cure for his snoring. If only he had known of this snoring cure before! He kept postponing seeing a doctor because the only cures he found on the internet were surgical or dental.

They are advertising a belt you wear that electronically tells you when you are lying on your back, so you can then turn on your side. If you have a great deal of money, you can buy this; however, I think the tennis ball works just as well.)

I am part of a five person ear nose and throat group that specializes in snoring procedures. We have pioneered some of the procedures used for sleep apnea and our members are invited to lecture on this subject at medical meetings. The scene of Jason weeping in our office is not unusual. Imagine their relief when they learn that the cure is as simple as clearing their nasal stuffiness! (*I call the tennis ball the 50 cent cure, and taping up the nose to open the airway, the ten cent cure.*)

When patients come to our office, we make a diagnosis. Each patient is different; one has weak throat muscles, one has a dependent nasal tip, one has severe reflux and so on. Ideally the therapy is individualized.

For most snorers, we first try clearing them with pulsed irrigation. The Hydro Pulse™ is particularly suited for snoring because you need to treat the nasal problem with pulse wave irrigation in order to restore nasal cilia function, and the throat problem with pulsed massage of the throat that reduces swelling and makes the critical throat muscles stronger. The Hydro Pulse® for nasal irrigation removes thick mucus and toxins; the pulsing action acts just like any massage to reduce swelling. The pulse rate is designed to restore the normal action of the tiny oars in the nose called Cilia that normally beat to move bacteria out of the nose and sinuses.

On the other hand, a majority of patients respond to the nasal irrigation methods of Neil Med Pharmaceutical – the squeeze bottle or the Neti Pot with the saline packets. What is important, is getting early snoring cleared up before it does major harm.

Harold S. age 30 had been married for three years. His wife Judy, was completing her nurse training program. The reason they were in my office was that she had moved out of their apartment because of his snoring. Judy: “I can’t get any sleep because of his snoring. I fall asleep in class and I can’t get any studying done because I am fatigued. I moved in with a girlfriend so I can study and get sleep, otherwise I will flunk out of school.” Harold had no choice but to see me. Fortunately his was a simple problem of nasal blockage that cleared with pulsed irrigation.

Harold nearly wrecked his marriage by stubbornly refusing to accept his snoring problem. In Harold’s case, as in so many I see daily, the cure was simply to clear his postnasal drip.

It is important to realize that all patients are different. Some have huge tonsils that require Hydro Pulse throat irrigation to shrink them. Some have

postnasal drainage that keeps the throat swollen, and require Hydro Pulse Nasal/Sinus irrigation to clear. Some have weak flaccid throat muscles that can be strengthened by voice exercises. Others have GERD and simply need to stop eating three hours before bedtime.

Your cure may be to simply secure a tennis ball to a shirt for your back, so that you are nudged to sleep on your side. Or a tape to lift the tip of your nose to open the nasal valve.

Nasal Obstruction

When your nose is plugged up, you can't get good sleep because you are struggling to get enough air. Your brain keeps waking you up so you can breathe better. For example, if the tip of your nose droops, then that obstructs breathing and blocks good sleep. When you lift your nasal tip up and open the airway, then you get good sleep. Or, as is usually the case, your nasal cilia may be moving too slowly. Normally the nasal cilia move rapidly and in synchrony to move bacteria and pollen out of the nose. When they move too slowly, bacteria can multiply and cause postnasal drip or sinusitis. For the cilia problem, pulsed irrigation works well.

Many who snore have swollen nasal membranes. When I see them they have usually tried pills and various sprays. The reason their membranes stay swollen and prevent sleep is that the swelling is caused by inflammation. The massage action of the Hydro Pulse nasal irrigation removes those inflammation factors and speeds healing. The reason persons feel such relief after this pulse/wave irrigation is that the factors of inflammation have been massaged away. This is similar to how you feel good after a body massage.

Deviated Nasal Septum

The nasal septum is the divider between the right and left nasal airway. Rarely is it perfectly straight, even when there has never been any nasal trauma. This is because there are several growth areas in the formation of the adult septum and they may not all grow in synch. On the other hand, few of us grow to adulthood without bumping into the door.

If the septum is severely blocking both airways, a surgical correction is the best option; surgery is done to make the septum straight and even on both sides. If you think of this as a very expensive veneer door that is badly warped, *surgery* consists of lifting the veneer and making cuts so that the

door becomes straight and then the expensive veneer is replaced. Similarly the surgeon lifts up the membrane and makes corrections that brings the septum to the midline.

Deciding if surgery is needed is often not an easy choice. If one side is open and only one side is blocked, some patients may not be having a snoring problem. Or, there may only be blockage during allergy season. Or the problem of snoring isn't severe enough to require surgery.

Allergy Causes Snoring

Allergy may be all year round, perennial, or seasonal when the pollen is in the air. Standard therapy during the pollen season is usually sufficient for the temporary snoring from allergy. One problem is that if the allergy attack is prolonged without relief, there is exhaustion of the cilia and infection can take place because the bacteria remain in place. This is the sinus infection that is seen after the allergy attack. Pulse wave irrigation restores the cilia and clears the infection.

At the same time, good bed rest and massage help that healing too.

Sleep Position

Your tongue is supposed to stay forward in sleep, when you sleep on your back. When the tongue is “weak” or too big, or too swollen, then the brain wakes you up in order for you to move the tongue forward out of the way. Sleeping on your side or stomach will position the tongue so it doesn't block breathing. When you sleep on your left side, there is less possibility of having reflux symptoms.

OSA – Obstructive Sleep Apnea

Common signs of OSA include unexplained daytime sleepiness, restless sleep, and loud snoring (with periods of silence followed by gasps). Less common symptoms are morning headaches; insomnia; trouble concentrating; mood changes such as irritability, anxiety and depression; forgetfulness; increased heart rate and/or blood pressure; decreased sex drive; unexplained weight gain; increased urination and/or nocturia; frequent heartburn or gastroesophageal reflux disease; and heavy night sweats.

The hallmark symptom of OSA syndrome in adults is excessive daytime sleepiness. Typically, an adult or adolescent with severe long-

standing OSA will fall asleep for very brief periods in the course of usual daytime activities if given any opportunity to sit or rest. This behavior may be quite dramatic, sometimes occurring during conversations with others at social gatherings. Men, in whom the anatomy is typified by increased mass in the torso and neck, are at increased risk of developing sleep apnea, especially through middle age and later in life. OSA is associated with traffic and industrial accidents.

When Your Child Snores

Your child snores. He is cranky, his breath is offensive. He falls asleep in school and his/her achievement is below par. He doesn't seem to have pep and energy. She is irritable: before she snored she was always sweet and laughing.

I have seen hundreds of children with this story. Snoring in a child is not a joke; the entire course of their lives can be affected.

There are dozens of articles on snoring of adults: marriage difficulties, less sex energy, etc. But you must realize that when a child snores from age 4 to 5, that is about 20% of her entire life span; the important part in growing and learning. I think it is rank criminal to say about the snoring child: "Oh, he will eventually outgrow it." Meanwhile the parents worry, are upset by the snoring and the child remains irritable and a poor achiever. Worse, continued snoring can change the physiology and make snoring worse. For example, obstructive snoring can develop acid reflux.

Occasional snoring from a cold is not a problem. It is the nightly snoring when there is no acute illness. Worse, snoring usually reduces resistance to infection.

I can assure you that the happiest and most satisfied persons I have had in my practice are the parents of the children who no longer snore. As parents, they appreciate the sleeping quietly through the night, the pleasant breath, the change from cranky and irritable to regular happy child.

When the child snores, and there is no detectable nasal or adenoid or tonsil blockage, the doctor looks for anatomical causes such as a very short mandible.

If the child has a sleep problem, without anatomical causes, a sleep study may be needed to diagnose a sleep disorder.

Auto Accidents

Just today the CDC (Communicable Disease Center published statistics relating poor sleep and snoring to traffic accidents. In a survey, 4.2% of drivers admit to falling asleep while driving in the past month. This is associated with not getting enough good sleep, falling asleep during the day, and snoring. According to Anne G. Wheaton, the author of this report from the Centers for Disease Control and Prevention, the actual numbers are much higher than the number who admitted to falling asleep.

Poor sleep impairs drivers by slowing their reaction time, makes them less attentive, and reduces their decision making ability. Many of these sleep related accidents are single cars that leave the road. When sleep related accidents involve other cars, there may be head on collisions with casualties. The CDC states that the sleep deprived auto accidents could be between 15 and 33% of all accidents.

The AAA reported that 30% of drivers said they had driven in the last month despite struggling to keep their eyes open!

Similar snoring accidents are seen in industrial work related accidents, which may be fatal. In daytime drowsiness the worker forgets to turn off the motor, fails to hear the safety signal, or slips and falls. There is little question that good sleep can not only prevent accidents, but also may save your life.

Snoring is shown by the CDC report to be an important indicator of good sleep. if you clear the snoring early, you have the best opportunity to avoid daytime fatigue, drowsiness, and overeating. As discussed previously, the more you snore, the more it advances and can lead to Obstructive Sleep Apnea.

When you snore you gain weight

Diet doctors today tell their patients they must clear their snoring in order to lose weight! The reverse of this is also true: snoring that accompanies obesity, may be cured by losing weight! We see this success in our clinic, and patients have avoided surgery this way. Of course losing weight is not easy. Knowing the relation between snoring and weight gain may assist persons who want to become thin.

Bill S., age 50, had hypertension and was obese. He complained of fatigue. One look at his nose and throat and I immediately knew he was snoring. I asked his wife, "How bad is his snoring?" She threw up her hands

in disgust, “It’s terrible. It’s making me sick.”

Bill protested, “But I have been trying to lose weight for years.” I explained that the reason he couldn’t lose weight was because of his snoring, causing him to be fatigued and pushing him to eat for the energy to work all day. Fortunately, when we cleared his postnasal drip with pulsatile nasal irrigation and reduced his swollen throat tissue with pulse wave massage, his snoring improved and he could improve his weight by understanding the process.

One of the worst things about snoring is that next day you feel fatigued. So, you need to take that candy bar in order to get through the day. The more cookies, the more fat deposits in the throat and the soft palate gets heavier and falls back and blocks the breathing. The more the blockage, the more cookies are needed to wake up during the day. We see this vicious circle all the time.

Fatigue and Snoring. Is it Chronic Fatigue or Snoring?

Personality changes, loss of creativity, and fatigue may be primarily due to poor sleep and/or blocked breathing in sleep. One example of this is:

Amanda saw me for wax blocking her ear. Her history was that she had been diagnosed Chronic Fatigue Syndrome. She also had a snoring problem. I diagnosed her snoring as being due to her sinus problem. I explained how this blocked her breathing at night, leading to snoring and reflux. Turned out she was taking acid blocking medications for “stomach distress.”

When her sinus condition was cleared, the snoring was reduced, and her fatigue was improved. Not only did clearing her airway reduce her fatigue, but now she was free from the toxins of her chronic sinusitis infection.. She sleeps better and no longer needs to rest in the afternoon. Since she is now working full time, I conclude that she no longer has chronic fatigue.

You can’t turn on TV without seeing an ad for a caffeine booster; at the check- out counter these are prominently displayed. I have gotten in the habit of asking my patients if they take these. Harriet said, “I take these about one three times a day. Which brand do you recommend?”

What I find is that many of these patients turn out to have snoring and sleep problems; they have “snoring fatigue” and therefore need the caffeine boost. I prefer to clear their snoring problem and relieve their fatigue by better sleep, so they can skip the booster.

In these days where every aberrant behavior is blamed on psychology, it is common to blame yourself for being slow or tired at the job. However, sometimes it is not because of some distant psychological incident; sometimes you are tired during the day because of OSA. I know this because when the snoring problem is cleared, I hear from my patients that they no longer need the caffeine boosters and now find their job more enjoyable.

Ever stop for gas and the salesperson tried to sell you tires? I feel like that sometimes.

Pete came to see me about his hearing loss. His swollen heavy palate indicated snoring. Turns out he did snore, significantly, and the poor guy who only wanted information about his hearing loss, ended up with a full program about treating his snoring. On the other hand, I know how important it is to stop snoring so that it doesn't lead to the more serious Obstructive Sleep Apnea.

Snoring Caused by Airway Blockage

The reason you get snoring in the first place is that when air passage is narrowed, instead of a steady flow of air, the air is narrowed and is caused to vibrate. Think of 8 lanes of cars that are narrowed to two lanes, yet don't slow down. Those 8 lanes suddenly into 2 lanes would make a terrible noise! Similarly, you can get snoring when air passage is narrowed.

Now visualize the air being narrowed and that narrowing moves back and forth or more likely up and down. Air passes liquid surfaces that may narrow the passage, as in allergy mucus or postnasal drainage and this can make a fluttering sound.

When you lie on your back, the soft palate, which is the back part of the roof of your mouth, is soft and could fall back and block the breathing. But when you are awake, your muscles of the soft palate prevent that from falling back and causing the air to vibrate.

But in deep sleep, with weak soft palate muscles, gravity can pull the palate back and this can block the air flow. Since you want to get air, you force against this closure and this causes the soft palate to move up and down, thereby vibrating the air, and you get a snoring sound.

Better Sleep Calls for Good Sleep Habits

- Regular Sleep Time. The more consistent the better. This sets the sleep clock.
- A sleep routine. The more complex the better. A warm bath, brush your teeth, cream your face and hands. Doing this consistently sets your sleep clock and gives better sleep.
- Have bedroom at a comfortable temperature
- Important to have bedroom dust free
 - * Bed should be only for sleep, not doing office work or reading exciting novels or watching the 10 o'clock news. Especially bad is eating in bed. If you must read, a good book an algebra book is best.
 - * Do not linger in bed in the morning.
- Don't eat a meal within three hours of bedtime.
- Wind down.
- The more "dull" the sleep time the better.
- To distract the mind from taxes or pain, having the Shopping Channel on works because your brain is slightly distracted. If you have no interest in sports, then the Sports Channel may be useful
- Actually any kind of counting – imaginary sheep, breaths, etc. works by distraction from cares or worries.
- Count your breathing: inhale count four and exhale count six.

Chronic Sinusitis and Snoring

Any kind of nasal congestion such as allergy or a common cold will result in snoring. It is reported that thirty seven million people have chronic sinusitis; no wonder there is so much snoring! Fortunately, many sinus problems can be resolved when the nasal cilia are restored. When the nasal cilia slow down, bacteria remain in place. Normally, these cilia beat to remove bacteria and allergens from the nose. When bacteria remain in place, they multiply, and the toxins drain into the throat causing postnasal drip. Here they cause inflammation and swelling, for example chronic tonsillitis. If postnasal drip is causing your snoring:

- a. Drink green tea with or without caffeine. Best to add lemon/lime with honey.
- b. Hum. When you hum at a low tone, like "ooooommm" that vibration also vibrates the nasal cilia. Put your fingers on the nose; the more you feel vibration the better.

c. Use Hydro Pulse™ nasal irrigation. This pulses at a rate to pulse the nasal cilia back to good speed.

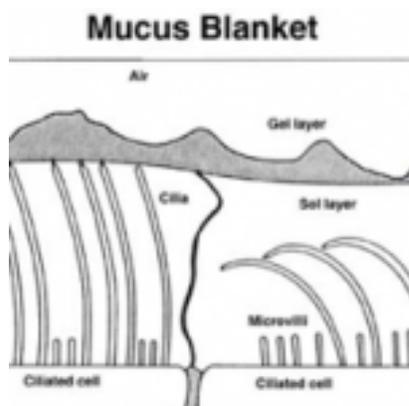
Some persons clear their nasal blockage at night using one of the prescription nasal sprays. (find a doctor with lots of samples to try out)

Chronic sinusitis causes postnasal drip to the throat.

When there is nasal infection, the bacteria and toxins drain to the throat by passageways called lymphatic channels. This results in swelling of throat tissues, especially the back and sides of the throat where the tonsils are located. Actually, the tonsils are designed to filter out that nasal drainage. But if they swell, the airway is affected and people snore. One of the best ways to reduce that swelling is by massage and irrigation. The Hydro Pulse™ comes with two throat attachments. Using regular warm water, the pulsing stream is directed to just behind the last tooth on the right. This washes and massages the right tonsil, then swirls around to exit on the left side. By this massage action, the swollen tissue is reduced in size and becomes firm again. The massage action removes the factors of inflammation, which speeds healing.

For some patients there are holes in the tonsils called crypts. These may be filled with bacteria products that the systemic antibiotics can't get to. For this condition, called tonsilloliths, the Hydro Pulse throat irrigation pulses the stale material out easily. Although patients are upset by these tonsil "stones" that may be a breath problem, as a rule, they do not harm the patient.

By clearing the nasal cause of snoring and also the throat problem caused by that drainage, many persons stop snoring.



Normally, nasal cilia beat in synchrony to move bacteria and pollen out of the nose. When the cilia stop moving the bacteria out, they lay in place and multiply. Then this infected material causes the nose to swell, leading to nasal airway blockage and to snoring. When the nose/sinuses are irrigated with pulsed wave irrigation, that frequency of pulsation is timed to restore the nasal cilia. This is a massage action the massages the swollen tissue and removes factors of inflammation too. Once the nasal cilia are restored to normal, there is no need to continue Hydro Pulse™ irrigation. Once the cilia are normal, there is no need to be more normal. Now the normal cilia do the therapy.



Whether snoring is social or leads to sleep apnea, before any surgical procedure is contemplated, the non-surgical approach to a snoring cure should be tried first.

For more detail, see, *Free Yourself from Sinus and Allergy Problems – Permanently.*

Open the Nasal Valve

Your nose has a valve. It is located where the tip of the nose joins the “hard” part of the nose. In childhood, the nasal tip is high up, and wide open. In the adult, the angle between the bottom of your nose and the lip may be exactly 90 degrees. With aging, the tip droops down. The lower the tip, the more blockage to breathing in sleep. Try lifting the nasal tip; see if that opens the breathing. If it does, get a roll of ½ inch medical grade tape:

Cut a 3 inch strip

Attach it to the underside of the nasal tip

Bring it up over the front of the nose, up to the area between the eyes.

When you do this, gently lift the nasal tip to open the airway and then attach the tape.

This can be the snoring cure for many persons. And it only costs a dime! In some persons, there is a deviation of the front part of the nasal septum. When you look at the bottom of the nose it is off to one side. This blocks breathing; try moving the nasal tip around to find a place that overcomes this blockage. I call this the ten cent cure for snoring.

Weak Throat Muscles Cause Snoring

Fact is that many snorers have weak or flaccid throat muscles. These weak muscles allow airway blockage in sleep. How to make strong throat muscles? The same way you make any muscle strong, by exercise. These exercises reduce fat accumulation and strong muscles are less likely to fall back by gravity and block the airway. As you exercise the muscles, you remove surrounding fat, which makes the tissue significantly lighter.

When you practice singing and voice lessons, this acts to reduce the fat around those muscles, just as doing weight lifting would for flabby arms. It also makes these muscles stronger.

An ingenious method to build strong muscles and reduce fat is done by practicing the Didgeridoo. This is a long Australian horn. To play it you blow rather hard; this blowing action works to make the throat muscles strong.

Didgeridoo horns are available on the internet and there are lots of places that give lessons. They cost about fifty dollars.

At my clinic, Tower ENT at Cedars Sinai center, we have had success with the didgeridoo when it is combined with attention to any nasal or throat problem. Many patients find playing the didgeridoo fun, and so they are more apt to continue to practice it on a regular basis. This can help patients with OSA – obstructive sleep apnea.

We have couples that play the didgeridoo together. The goal is to continue this practice, and if couples find it fun, so much the better. Speech therapists use throat exercises to strengthen the throat muscles and make throat tissue stiffer with less fat. Forceful mouth blowing can be therapeutic. Any forceful blowing – trumpet, blowing a balloon, the didgeridoo – all these strengthen the throat muscles and reduce snoring. Try these throat exercises that have been reported in the medical literature for snoring relief:

Throat exercises:

These throat exercises reduce snoring:

- Hold the tongue on the hard palate. Say the vowel sounds. Move the tongue around as you do these.
- Place the tongue in front of the roof of the mouth. Then slide it all the way to the back of the roof of the mouth.
- Pronounce vowels rapidly for 3 minutes.
- Press the tongue hard against the hard palate. Press frequently.
- Press the tip of the tongue into just behind the incisor teeth while pushing the back of the tongue into the floor of the mouth.
- Blow up a balloon by sniffing air in hard through the nose and forcing it out hard against the balloon.
- Swallow keeping the tongue on the roof of the mouth.

These exercises need to be done for 3 minutes each. It takes time to build and strengthen muscles by exercise and the throat is no exception. You can feel the throat muscles contract as you perform these movement and pronounce the vowels loudly and forcefully.

Vibrating the throat muscles is also helpful. Hum “ooooomm.” Feel the throat vibrate.

Singing for snoring

At the Department of Complementary Medicine, School of Postgraduate Medicine and Health Studies, University of Exeter, Exeter, UK. they studied the effects of singing exercises on snoring. This was published in Complement Ther Med. 2000 Sep;8(3):151-6. Titled: Can singing exercises reduce snoring?

The study showed that performing singing exercises for 20 minutes a day did reduce snoring significantly. Singing exercises can vary from therapist to therapist.

Judy S. told me that her husband used to complain about the cost of her singing lessons. But when he noticed that her snoring decreased, he said the cost of the lessons was well worth it, because her snoring had stopped. I explained to her how repeating the singing lessons made her throat muscles stronger, and I encouraged her to continue the exercises.

Pulsed irrigation for throat snoring

When you use the Hydro Pulse™ throat irrigation that too is a means of vibration and massage to the muscles. The flabby fatty areas are massaged and muscles can become more functional. Not only are swollen tonsils reduced, but this action may reduce soft palate and size of the uvula.

The uvula is the long extension that hangs down from the soft palate. Lying on your back can pull that area down by gravity. As it blocks the airway, forcing the air through causes loud snoring. Fortunately, the voice exercises and the pulsed throat irrigation aid in making the soft palate stronger so that it doesn't block the airway in sleep.

Clear.ease.™

Clear.ease™ is a lozenge that contains measured amounts of papain and bromelain. These are fruit enzymes that naturally reduce swelling. When taken for snoring, they reduce unwanted edema, especially the tonsils and soft palate.



We get papain from the papaya: this is an enzyme that reduces swelling from inflammation. Bromelain is the enzyme from pineapples that has a similar action. When they are used together, they can be effective in reducing swelling of the tonsils, the voice box – larynx, and the swollen uvula. These enzymes are commonly swallowed for digestion; but for snoring they are combined into Clear.ease™ and melted in the mouth, to bypass the stomach, for reduction of swelling.

I originally developed this for scuba divers and pilots who get blocked ears because of swelling at the tube from the nose to the ear called the Eustachian tube.

Clear ease thins thick mucus, which helps keep the Eustachian tube open. It also thins thick mucus around the larynx to aid the voice.

There is a suggestion that it may reduce the swelling of the esophageal sphincter and aid in reflux. Since a common cause of snoring is swollen uvula and soft palate, taking the Clear.ease lozenge to melt in the mouth between the cheek and gums is often beneficial .

GERD or Gastroesophageal Reflux

Sleeping on the left side is also beneficial for GERD. . When you eat a full meal and go to bed, on your back, you have an easy channel for stomach acid to go up the swallowing tube, the esophagus, and irritate and swell the throat tissue. Some persons have stopped snoring just by not going to sleep right after eating. Best to wait three hours. Elevating the head of the bed is also useful: when you lie flat the liquid stomach acid has easy access to the throat, nose and even the ears! You can purchase a wedge that raises you head level and prevents reflux. The fancy name for this condition is Gastro Esophageal Reflux Disorder. It is commonly called GERD.

In Gerd, there is acid from your stomach that gets up into the upper throat and perhaps even into the nose. If you have a full meal and go right to bed, lying flat, then your stomach creates acid for meal. Because you are lying flat, it may run to your upper throat. Entertainers have a special problem with GERD. They finish work late, get home, eat a meal and go right to bed. This makes them easy targets for getting GERD.

You have a valve or stopcock that is supposed to close off so that acid and food don't come up. When you are struggling in sleep to get air because of blockage, the abdominal muscles contract, and push the acid in the stomach against that stopcock, forcing it open. This is why the best prevention is to finish eating three hours before sleep. It is why you should have the head of your bed as high as possible so the acid can't run uphill.

This acid can particularly affect the voice box or larynx. In one study, 60 percent of persons complaining of voice problems were found to have GERD and most responded to therapy. There are lots of therapies available for GERD today including antacids, acid blockers and acid inhibitors.

With the symptoms of either GERD or LPRD, the goal is to use as minimal medication as possible. Medications used include:

Proton Pump inhibitors to reduce gastric acid. Some examples are Aciphex, Dexilant, Nexium, Prilosec and others.

H2 blockers which also reduce gastric acid output. Some examples are Axid, Pepcid, Tagamet, Zantac and others.

Antacids to neutralize the acid.

In many patients, clearing the nasal blockage can significantly reduce the reflux.

LPR stands for laryngopharyngeal reflux. There is a sphincter at the top of the esophagus that is supposed to prevent stomach contents from coming out of the esophagus. When the lower sphincter between stomach and esophagus and the upper one fail, stomach contents get onto the area around the vocal organs of speech – the larynx with its vocal cords - and the lower throat. Symptoms include a burning sensation in the lower throat, a bitter taste, hoarse voice, a lump in the throat feeling.

There is much overlap between GERD and LPR. LPR deals more with its effect on the voice and GERD more with indigestion and heartburn and pain in the chest from the inflamed esophagus. Both are treated about the same. Overeating, excess alcohol and smoking are important causes, as well as spices and fatty foods. This is why it is important to wait three hours after you finish eating before bedtime.

In GERD patients may complain of difficulty in swallowing and the need to constantly clear their throat.

Since nasal blockage and GERD are seen so frequently together, there is a theory that the nasal blockage creates a stressor on the abdomen that weakens the sphincters and pulls/pushes acid up from the stomach. If you visualize a blocked breathing, you can feel the abdomen contracting.

Allergy and Snoring

Allergy symptoms can be seasonal, tree in the spring, grass in the summer, weeds in the fall, or perennial – all year round. With allergy, the nasal tissues swell, causing blockage.

Many patients find relief with the newer nasal sprays such as Astepro or Flonase. Often it is necessary to try the pills such as Allegra or Zyrtec and the various sprays to see which works best for the individual.

For children, desensitization may be the best approach, because the allergy condition can lead to more significant health problems, including asthma.

With the allergy symptoms, try lifting the nasal tip for better airway.

Entertainers Who Snore

Snoring problems are common to show people. They are among my patients who need to stop snoring.

Entertainers and performers have a major problem with snoring. They have strange hours, bad eating habits, which makes a snoring cure difficult. Often they don't eat until after a performance, which can be after midnight. They arrive home hungry, eat and go right to bed. This is a sure recipe for acid reflux.

Another problem is alcohol and smoking. Especially when on the road, it is common to unwind after a performance with smoking and drinking. When this is combined with singing, the voice suffers too. With alcohol, you have the additional relaxation from the alcohol to add to the muscle relaxation of deep sleep; this makes it more likely for the tongue to fall back and block the airway.

Boomer was a drummer with a popular band that was on the road most of the year. His problem was that no one would share a hotel room with him, and the band couldn't afford to get him a private room. The band was very unhappy about paying for his private room out of their meager funds. He might even lose his job!

He needed a cure of his snoring as soon as possible. After I examined him and registered his nasal blockage, his throat swelling, and his chronic hoarseness, I explained that he must stop smoking, take a stomach acid inhibitor, use Hydro Pulse Sinus Irrigation before sleep to open his nasal passages and keep them open. His snoring improved enough to allow a roommate while traveling. Why Hydro Pulse instead of a nasal spray? I was attempting to restore his impaired cilia for a permanent cure. Once the nose is normal, there is no further need to use pulsed irrigation, because the nasal cilia are working.

Anxiety and Snoring

We live in a busy world with lots to be stressed about. It is difficult to sleep soundly when you watch the news about molestation and worldly

woes. For some person, their stress situation is such that their body is flooded with adrenalin when they should be falling asleep.

Remember counting sheep? Turns out that this is useful. Why, because visualizing the sheep being counted displaces your thoughts to the counting task and way from the thoughts of the tax audit tomorrow. This is why a countdown, relaxation is needed for sleep. This can be pleasant music, a dull TV program, a boring books on tape, a waterfall sound. I have recommended the shopping channel for men and the sports channel TV for some women. It is very useful to find out which works best for you, so that you don't try to fall asleep while filled with stress chemicals.

Best "counting" is done by measured breathing. Count inhalation four and exhalation six. This performs two things;

By making exhalation longer than inhalation, you signal your stress center that there is no stress and to stop making stress chemicals.

Counting in any manner, your mind is on a neutral subject, numbers and not on the bill you forgot to pay and they will close the electricity.

Temporomandibular Joint Disease and Snoring

Months ago I had a patient whose snoring was due to clenching her jaws when she sleeps! The cure was to use the TMJ Therapy from my book, *Stressed? Anxiety? Your Cure is in the Mirror*. Essentially you draw a vertical line on the mirror and practice relaxing the jaw so that it drops by gravity. She did this 15 minutes a day and now no longer is a jaw clencher; she sleeps much better without the snoring, as does her husband.

Why partners snore

Yes, the flu is contagious, and so is snoring!

It is astonishing to me that when I see a patient for snoring, how often the partner is also snoring! Why does this happen? Actually there are several causes. In some cases, the partner is losing sleep due to the snoring noise. This may result in fatigue next day, with increased eating to counter the fatigue. Or, the partner simply gets less sleep. This may cause fat deposits in the soft palate and throat, increasing obstructive breathing and snoring. Another factor is that in snoring, as well as in poor sleep, there is a high % of patients with GERD. This acid reflux also increases the swelling that causes snoring.

Stress is a factor; with less sleep, you get more stress

This is a very good reason, therefore, to get your partner's snoring treated before it affects you!

Separate Bedrooms

A recent article in Wall Street Journal states that many new homes are being built with two master bedrooms, so that the snoring won't bother the partner. I think it is much wiser to correct the snoring instead. It is much better to have wedded bliss.

Measuring Sleep:

Use the following scale to choose the most appropriate number for each situation:

0 = would *never* doze or sleep.

1 = *slight* chance of dozing or sleeping

2 = *moderate* chance of dozing or sleeping

3 = *high* chance of dozing or sleeping

Print out this test, fill in your answers and see where you stand.

Situation	Chance of Dozing or Sleeping
Sitting and reading	_____
Watching TV	_____
Sitting inactive in a public place	_____
Being a passenger in a motor vehicle for an hour or more	_____
Lying down in the afternoon	_____
Sitting and talking to someone	_____
Sitting quietly after lunch (no alcohol)	_____
Stopped for a few minutes in traffic while driving	_____
Total score	_____

Situation	Chance of Dozing or Sleeping
-----------	--

(This is your Epworth score)

Source: http://www.umm.edu/sleep/epworth_sleep.htm

There are stages of sleep:

Stages of sleep are defined as Non-Rapid Eye Movement stage, or NREM, and Rapid Eye Movement or REM. You start to fall asleep in NREM. The brain wave rhythm slows, there is reduced muscle activity and breathing slows. Heart rate slows. Here you might get an answer to your question with a slightly loud voice. As the sleep deepens, heart rate is reduced, and it takes a louder voice to get an answer. There is a third stage of NREM sleep where heart rate slows and brain waves slow too, and muscles are fully relaxed. . Next, sleep goes to REM sleep.

In REM sleep, you have rapid eye movements. This is where you have active dreaming. The brain waves are actually similar to those in the awake state. Skeletal muscle tone is significantly diminished; here is where the soft palate and the tongue can fall back and block breathing. You may get cardiac arrhythmia here, because air is blocked, as when persons die in their sleep.

It is fortunate that skeletal muscle tone is lowered because some of the dreams may be quite active and otherwise the partner might get hurt.

In the sleep study, recordings are made of:

- brain waves
- eye movements
- chin movements
- leg movements
- heart EKG
- nasal air passage
- blood oxygen
- chest movements
- abdominal movements

These measurements help determine if the snoring is significant, or social snoring. The episodes of apnea, or non-breathing of more than ten seconds,

are counted and compared to the oxygen levels, as well as their effect on the brain and heart.

In sleep studies, we count arousals. Here, the tongue or soft palate may fall back to block breathing, but not enough to cause “no breathing.” These do not show up as apnea episodes. However they do awaken a person, though not fully awake. These persons complain of insomnia, headaches, TMJD, GERD and daytime irritability. Best therapy is to open the nasal passages, strengthen the throat muscles and clear reflux.

It is always best to try sleeping on your left side. The tennis ball attached to the back of the shirt will nudge you when you are on your back and get you to turn to the side.

Why is position so important? It is a matter of gravity. On your back the tongue, soft palate, and loose tissue falls back and narrows the airway. On your left side, these factors are reduced.

An additional factor is that sleeping on your side reduces acid reflux. In this position the stomach opening to the esophagus is quite high and the stomach acid is unlikely to reach it.

Children Who Snore

Children snore because of nasal blockage, enlarged adenoids and enlarged tonsils. There may also be acid reflux. In many patients, clearing the nasal inflammation can lead to the adenoids and tonsils shrinking and the airway opening up and the snoring improved. Enlarged adenoids can be a direct cause of frequent ear infections.

Children as young as five will perform Hydro Pulse™ nasal/sinus irrigation because the irrigation makes them feel better, with clear breathing and stops postnasal drip.

Enlarged adenoids are a major factor in childhood snoring. This may be associated with frequent ear infections. If the child has had several severe ear infections, constant mouth breathing, and little benefit from the antibiotics, surgical adenoidectomy – removing the adenoid tissue that blocks the Eustachian tube to the middle ear has a high rate of success. For the usual enlarged adenoid mass with associated nasal disease, the therapy that I use is pulsatile irrigation.

If enlarged tonsils are a factor in mouth breathing, these can be reduced in size by the Hydro Pulse throat irrigation. In fact, clearing the adenoid blockage improves the nasal infections.

If the child is snoring pre-teen, a careful dental evaluation may show anatomical factors such as the shortened mandible that leaves little room for the tongue. These factors may respond well to dental correction. Often we speak of correcting the child's bite and appearance, but in fact the snoring factor is just as important.

Snoring is common in children because so many have enlarged tonsils and adenoids, that block the breathing. Many of these children fall asleep in class, have bad breath, are irritable and have personality change.

"Before she snored, she was always sweet and loveable. Now she is cranky and irritated, too tired to play. She is inattentive in school."

Some kids don't gain weight because, with a blocked nose, food is tasteless and it bothers them to swallow. No wonder parents are so grateful after the snoring is cleared and the child is back to the way she was before.

Note that some of these symptoms sound like ADHD. One study was done on children carefully diagnosed with ADHD.

In that study, one year after tonsillectomy and adenoidectomy, 50% of children diagnosed before surgery with ADHD no longer displayed these symptoms. This study recruited 78 children scheduled for adeno-tonsillectomy and 27 control children undergoing other procedures. All the children were given a formal sleep study and a battery of behavioral, cognitive, and psychiatric tests.

Before surgery, 28% of children in the adeno-tonsillectomy group (22 children) and 7% of control group (2 children) were found to have ADHD (as defined by the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition). One year after surgery, half of the 22 children with ADHD who underwent surgery had persistent ADHD, which was no different from the rate of ADHD in the control children. Interestingly, before surgery 51% of the adeno-tonsillectomy group and 4% of the control group were found to have OSA. One year after surgery, only 12% in the adeno-tonsillectomy group while 13% in the control group were found to have OSA.

For this reason it is important to consider OSA when your child exhibits ADHD symptoms.

The signs of OSA in children are bad breath, irritability, poor appetite, "failure to thrive", and where growth is reduced. Poor growth occurs

for two reasons: the work of breathing is intense enough that calories are burned at high rates even at rest, and the nose and throat are so obstructed that eating is both tasteless and physically uncomfortable. OSA in children, unlike adults, is often caused by obstructive tonsils and adenoids and may sometimes be cured with tonsillectomy and adenoidectomy. In practice we first shrink the adenoids with nasal irrigation and then the throat swelling with Hydro Pulse throat pulse irrigation. If the snoring clears, then surgery won't be necessary. Naturally you expect children over five to resist throat irrigation; however when the child sees the parent use it first, and is convinced that this would avoid having to have surgery, many can do the throat irrigation.

Surgery and Gadgets for Snoring

Choosing if a surgical or dental procedure is best for you depends on precise measurements of anatomy and the experience of the ear nose throat doctor in treating snoring.

The internet is awash with gadgets and surgery details for snoring. Google lists 22 million topic for Snoring. Even though there are effective methods described here, google picks up the surgery and gadgets. As I previously mentioned, people go to google, read surgery and dental, and are afraid to mention snoring to the doctor. This is one reason why I promote the ten cent cure – where you lift the tip of the nose up to open the nasal valve with a dime's worth of tape.

Surgery may be done which reduces the size of the palate, called uvulo-palatoplasty. Various methods use laser, radio-frequency, or direct surgery.

Another method is to inject a scarring agent called sodium tetradecyl sulfate into the soft palate; with scarring and stiffness so it won't be fluttering. Another method is to place short rods inside the palate. This stiffens the soft palate and tightens it. Called the Pillar Procedure.

Rhinoplasty, correcting a badly deviated nose and septum, that corrects the blocked breathing is used when indicated. If the tongue is excessively large and falls back and blocks there are surgeries to keep it forward. There are dental procedures used for this as well. One is the

mandibular advancement device. Or the jaw can be surgically moved forward.

There are various objects to put in the mouth to keep the airway open.

If the sides of the nose collapse on inhalation, the Breathe.right strips work for many. Usually elevating the tip of the nose as described previously works well for most kinds of nasal external blockage.

CPAP or Continuous Positive Airway Pressure

No matter what the cause of obstructive sleep apnea, it is a serious condition. Therefore it is best to consider CPAP, continuous positive airway pressure for OSA therapy.

With CPAP, you have a mask on your nose or face, it is attached to device that pumps air to the mask at a certain pressure that is determined by the technician during sleep apnea study. Of course there is objection to wearing this device in sleep; however once the patient experiences the improvement in overall health, less or no fatigue, and better energy, they are more likely to use this device. If the sleep study diagnoses a certain level of OSA, most insurance companies cover CPAP. The best thing about CPAP is that various surgical procedures may not be successful, whereas the CPAP, if used, is mostly successful.

If the tongue is excessively large and falls back and blocks there are surgeries to keep it forward. There are dental procedures used for this as well. One is the mandibular advancement device. Or the jaw can be surgically moved forward.

IN CONCLUSION:

You can use the tennis ball on your back to help you sleep on your side.

The ½ inch medical grade tape to elevate the nasal tip, and open the airway

The Neil Med squeeze bottle to flush the nose, or the Neti Pot.

The Hydro Pulse Nasal/Sinus Pulsed irrigator to clear the nasal/sinus problem

The Hydro Pulse Throat Pulse irrigator to shrink swollen tonsil and throat tissue, and firm them

The oropharyngeal exercises to firm the throat tissue and reduce the flab and swelling

The Clear.ease lozenges to reduce swelling and inflammation

Do humming, including “oommm” to firm the throat muscles

Use nasal sprays such as Flonase to open stuffy noses

Follow recommendations to clear acid reflux or GERD

Blow the didgeridoo for its benefit for snoring

You can be confident that one or more of these recommendations can be as effective for you as it has been for so many of my patients at Tower ENT. The goal is to stop early snoring and prevent the serious effects of Obstructive Sleep Apnea. Using these methods, the additional benefits of better sleep, less need to overeat for energy and the overall benefits of improved quality of life it brings are worth the effort to stop snoring in its early stages.

Best of health to my readers. .

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Special thanks to Steven L Parks M.D. whose book, Sleep Interrupted gives excellent snoring tips. For further insight on snoring, do get his book.

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