Un-stuffing Your Stuffy Nose:
What You Need To Know So You Can
Breathe Better, Sleep Better, & Live Better

5 Health Reasons to Breathe Through Your Nose
7 Ways To Better Breathe Through Your Nose
How Nasal Allergies Can Ruin Your Sleep
Myths & Facts About Septoplasty
Turbinates: What You Must Know
Do You Have Flimsy Nostrils?
The Truth About Snoring: What Works
Nasal Saline: Myths & Facts

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Introduction

Congratulations on ordering this ebook. You've taken the first step in your journey towards breathing better, sleeping better, and waking up refreshed again. Whether you've had nasal issue for a while, or this is a new issue for you, the information in this ebook will guide you to make the most appropriate decision in treating your nasal problems. Chances are, you've already probably tried everything out there, from prescription medications to natural, herbal, or homeopathic remedies.

I'm Dr. Steven Y. Park, and I'm an otolaryngologist, an ear, nose and throat physician and surgeon that specializes in treating nasal congestion, snoring and obstructive sleep apnea. And what makes me qualified to give you information about your nose? I'm board certified in otolaryngology - head and neck surgery, and I specialize in treating sleep-breathing problems ranging from nasal congestion and snoring to upper airway resistance syndrome and obstructive sleep apnea.

I used to do the same thing that all otolaryngologists did with nasal and sinus procedures but even though they worked to to various degrees initially, it almost always seemed to come back. Then as I began to connect the dots between nasal congestion, snoring, sleep apnea, jaw anatomy, lifestyles, diet, heart disease, and even digestive problems. I began to see having a stuffy nose in a totally new light. About 5 years ago, I had a eureka moment, which lead me to develop concepts that I eventually wrote about in my book *Sleep, Interrupted: A physician reveals the #1 reason why so many of us are sick and tired*—that all modern humans are susceptible to sleep-breathing problems to various degrees. It was endorsed by numerous New York Times best-selling authors including Dr. Dean Ornish, Dr. Christiane Northrup, Dr. Mark Liponis and Mary Shomon. I got my undergraduate degree at Johns Hopkins and my medical degree from Columbia University. I'm also a clinical assistant professor of otolaryngology at the New York Medical College.
I’m not trying to impress you with my credentials—rather, I wanted you to know more about my background and training so that you’ll understand how I became so passionate about treating snoring and obstructive sleep apnea. Yes, academics and a medical practice are a great place to learn about these issues, but ultimately it was on a personal level that lead me to my passion for this area: my son’s snoring problem, and my wife’s sleep problem. I describe these personal situations more fully in my book, *Sleep, Interrupted*.

The content you’ll see in this ebook is a compilation of various articles that I wrote about in the past few months regarding your most important nasal issues. Hopefully, after reading this report, you’ll take your nasal condition more seriously and have the tools to deal with it once and for all.
Chapter 1: Five Health Reasons to Breathe Through Your Nose

- Why mouth breathing deprives you of oxygen (literally 10-20%)
- Why nasal breathing is so important to your sense of smell and taste
- What your nose and teeth have in common

If you are a chronic mouth breather because of a stuffy nose, you're not alone. Do you feel like you can never get enough oxygen into your lungs? Do you feel tired all day no matter how much sleep you get? Have you tried various home remedies, over-the-counter medications or even prescription medications with no help? If you answered yes to any of the above, what you will read below will show you how critical it is to breathe well through your nose. Chronic mouth breathing can not only affect your quality of life, but your life, period. As an ear, nose and throat specialist with years of experience helping people breathe better through their noses, I have seen hundreds of people have dramatically improved lives.

One of the most important reasons to breathe through your nose is because of a gas called nitric oxide that's made by your nose and sinus mucous membranes. This gas is produced in small amounts, but when inhaled into the lungs, significantly enhances your lung's capacity to absorb oxygen. Nitric oxide is lethal to bacteria and viruses and is also known to increase oxygen absorption in your lungs from 10-25 percent. This is why it's important to inhale through your nose, especially when you are exercising.

Your smell and taste buds are connected. If you can't breathe well through your nose, then your sense of smell will suffer, which means that your sense of taste will be altered as well. This can lead to appetite and weight issues.

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Your nose has vital nervous system connections to your lungs and heart. Not breathing well through your nose can alter your heart rate and blood pressure, as well as to increasing your stress response.

Your nose makes about 2 pints of mucous every day. If your nose isn't working properly and mucous isn't cleared, the stagnant mucous can lead to infections such as sinusitis or ear infections.

Lastly, not breathing well through your nose can aggravate snoring or obstructive sleep apnea. Nasal congestion alone doesn't cause obstructive sleep apnea, but it can definitely aggravate it. If your palate and tongue structures are predisposed to falling back easily due to sleeping on your back and muscle relaxation in deep sleep, then having a stuffy nose can aggravate further collapse downstream. Untreated obstructive sleep apnea can lead to chronic fatigue, depression, anxiety, weight gain, high blood pressure, heart disease, heart attack and stroke.
Chapter 2: Seven Tips for Better Nasal Breathing

- One simple natural tip that cost only pennies
- A simple maneuver that is major cause of stuffy noses that most doctors never check for
- How to literally exercise your nose

Most people take breathing through their nose for granted. But for many chronic mouth breathers, breathing through the nose is a struggle, if not impossible. Not only is their quality of life diminished, but they'll also have a variety of other health-related conditions such as dry mouth, snoring, fatigue, and poor sleep. In my last article I addressed 5 reasons why it's important to breathe through your nose. In this article, I'll talk about 7 ways that you can breathe better through your nose naturally.

Before I discuss the various ways to breathe better, a short anatomy course in in order. The nasal septum is a thin piece of cartilage and bone that splits your nasal cavity right down the middle. No one has a perfectly straight septum; everyone's septum is slightly curved. Sometimes, nasal trauma can shift or move the septum away from its' midline position. The nasal turbinates are wing-like structures that line the sidewalls of your nose. It's covered with a mucous membrane, and normally it helps to smooth, warm and humidify air. The turbinates and sinuses also produce about 2 pints of mucous every day. The turbinates swell and shrink, alternating from side to side every few hours. This is called the nasal cycle.

The front side walls make up your nostrils, which are soft cartilages covered on the inside and outside with skin. The back of your nose is one big cavity (called the nasopharynx), and the passageway turns down 90 degrees into the back of your throat. The nasopharynx is also where your ears connect via the Eustachian tubes. If any part of the anatomy that I described becomes obstructed partially or completely, you'll feel stuffy in your nose. Usually it's not one thing, but usually due to a combination
of different reasons. For example, if you have a mildly deviated septum, suffering from mild allergies will swell up your nasal turbinates, narrowing you nasal passageways. This may not be enough to clog up your nose, but if you have flimsy nostrils or had rhinoplasty in the past that weakened the nostrils, then breathing in with a stuffy nose may trigger your nostrils to collapse.

Starting from the tip of your nose, the first thing you must do is to find out if you have flimsy nostrils. If you have a very narrow nose, or if your nostril openings are very narrow and slit-like, then you may be prone to having flimsy nostrils. Try this experiment: Take both index fingers and press them just besides your nostrils on your cheek. While firmly pressing on your cheeks, lift the cheek skin upwards and sideways, pointing towards the outer corners of your eyes. Take a deep breath in. Can you breathe much better through your nose? Let go and try it again. If this maneuver works for you, you may benefit from using nasal dilator strips at night (one brand is called Breathe-Rite). Sometimes, the adhesives on these devices are not strong enough, or end up irritating the skin. Another way of treating this condition are various internal dilators (such as Nozovent, Breathewitheez, Nasal cones) that you can find over the counter or over the internet.

Second, try using nasal saline sprays. You can use the simple spray bottles that put out a fine mist, to more sophisticated methods such as aerosol cans or even using a Waterpik machine (there's a nasal adaptor that you can buy for this). Another popular variation is something called a Nedi-pot, which uses gravity to pour salt water into your nose and sinuses. You can either use prepared saline packages, or mix your own recipe (one cup of lukewarm water and 1/2 teaspoon of sea salt or Kosher salt with a pinch of baking soda). Whatever method you use, you'll have to do it frequently to get maximum results. Besides cleansing out mucous, pollutants and allergens, saline also acts as a mild decongestant.

Third, try not to eat anything within three hours of going to bed. If you still have food or juices lingering in your stomach when you go to bed, it can leak up passively into your
throat and not only prevent a good night’s sleep, but these same juices can also leak up into your nose, causing swelling and inflammation. In addition, many people will also stop breathing once in a while, which creates a vacuum effect in the throat which actively suctions up your stomach juices into your throat and nose.

Fourth, try to avoid drinking alcohol close to bedtime. Not only does alcohol irritate the stomach, it also relaxes your throat muscles as you sleep, which aggravates the process described in the previous paragraph.

Fifth, if you have any known allergies, especially if it's something in your bedroom, try to either remove it or or lessen your exposure to it. For example, many people are allergic to dust or molds, and if you have carpeting, or an area rug, it can harbor these allergens. Frequently washing your bed sheets in very hot water also helps. Investing in a quality HEPA filter should help even more. If you have any pets, consider keeping them out of your bedroom. If conservative measure to control allergies is not good enough, consider seeing an allergist for a more formal evaluation.

Sixth, get regular exercise, especially outdoors. Not only are you exercising your heart and your muscles, you’re also exercising the nervous system in your nose. Vigorous physical activity activates your sympathetic nervous system, which constricts the blood vessels that supply your nasal turbinates. This allows you to breathe better through your nose, with all the added benefits described in my previous article.

Lastly, slow down and relax. Modern society has removed all the natural built-in breaks throughout the day. Along with all the information overload and constant stimulation, going nonstop all day only adds to the increased stress levels that everyone experiences. In between major activities, take a minute or so to stop what you’re doing and stretch, get up and move around, and do some deep-breathing exercises. Stress can tense up the muscles, causing you to breathe shallower, which causes physiologic changes that can ultimately aggravate nasal congestion.
These simple 7 steps won't help everyone, but if you can go down the list and apply all the steps, many if not most of you should feel some improvement in your ability to breathe through your nose. If you've tried all these steps and still can't breathe through your nose, then seek medical help. An otolaryngologist (an ear, nose and throat doctor) is the best doctor to take care of this condition.

If you are a chronic mouth breather, in addition to what I described above, your jaw is probably more narrow than normal, with some degree of dental crowding. Chronic mouth breathers also tend not to sleep well at night due to various degrees of breathing difficulty. I discuss these issues in my other articles (sleep apnea and upper airway resistance syndrome).
Chapter 3: How Nasal Allergies Can Ruin Your Sleep

• When your allergy is not an allergy
• How your jaw size affects your allergies
• Overcoming your allergies

When spring is in the air, so are the tree pollens. Millions of people suffer this time of the year from sneezing, scratchy, itchy eyes, nose and throats, nasal congestion and chronic cough. It's also a given that if you have allergies, you won't sleep as well, along with everything from asthma, cough, and sinusitis to diarrhea. So how do allergies cause sleep problems, and in general, and how does it specifically cause or aggravate obstructive sleep apnea?

When Allergies Lead to Something Worse

There are already tomes of articles, books and websites offering tips for allergy sufferers including traditional options like nasal saline irrigation, homeopathic remedies, and using a HEPA filter to prescription medications and allergy shots. But again, how can having a runny nose cause you not to sleep well at night? I've combed through numerous medical and internet resources and to date, I haven't found one good explanation.

However, looking at it from a sleep-breathing standpoint, it makes total sense: Any degree of nasal congestion, whether from allergies, colds, or even weather changes, causes a slight vacuum effect downstream in the throat which can aggravate tongue collapse, especially in certain susceptible people. Who then, are susceptible to tongue collapse? Almost every modern human!
It's All In Your Jaws

To be more specific, the smaller your jaws, the more likely you'll sleep poorly when you have allergies. Even if you're completely normal, having a stuffy nose can suddenly cause your tongue to fall back and block your breathing. Plugging your nose has been shown to cause obstructions and arousals during sleep. This is why you'll toss and turn when you have an allergy or a simple cold.

Many people with allergies and small mouths will also have grooves or indentations along the side of their tongues. This is called tongue scalloping. Since the tongue and other soft tissues grow to their genetically predetermined size, and due to crowding from having smaller jaws, the teeth leave their imprints along the side of the tongue. If you have additional inflammation from gastric reflux that's a given with sleep-breathing problems, then this scalloping problem gets worse. Not too surprisingly, tongue scalloping is predictive of having apneas, hypopneas, or oxygen drops in almost 90% of people.

Allergies From Stress?

So then, why do allergies happen in the first place? Again, there are tons of proposed explanations that I don't have the space for, but here's a simple concept from Robert Sapolsky's classic book, *Why Zebras Don't Get Ulcers*: Humans can handle big stresses such as a major catastrophe, a death in the family, or running away from a tiger. In these scenarios, your stress response leads to an intense activation of your immune system (in addition to your nervous system's fight or flight response). Once the stress is over, your immune system's activity level drops down to normal, but only after it dips below normal for a short period of time. During this short period, you're also more susceptible to getting sick.
However, modern societies don't have very big stresses such as running from a saber tooth tiger. Rather, we have multiple micro-stresses spread throughout the day such as being honked from the rear on the way to work, your boss yelling at you, or your computer crashing. These little stresses push your immune system's activity higher and higher, with not enough time for it to recover and go back to normal levels. After a certain point, your immune system is on constant overdrive, leading to the typical allergic or autoimmune conditions that are all-too-common today.

**When Your Allergy is Not An Allergy**

This process also explains why you may also have a chronically runny nose. This is called chronic or nonallergic rhinitis, when the involuntary nervous system in your nose overreacts to irritants, chemical, odors, or weather changes (either pressure, temperature, or humidity changes). Symptoms include runny nose, sneezing, nasal congestion, post-nasal drip and headaches, and is often mistaken for regular allergies. This condition may respond to regular allergy medications, but not as well. Either way, inflammation and swelling can also cause nasal congestion, leading to poor quality sleep.

**Overcoming Your Allergies**

If you have classic allergies, you must start with the basics: Avoid outdoor activity on high-pollen days, shower before bedtime to get the allergies out of your hair, don't wear shoes indoors, get a HEPA filter, and take over-the-counter medications as needed. Some people benefit from routine use of HEPA filters as well in their bedrooms. You may have to see your doctor if conservative measures don't help.

There are various over-the-counter allergy medications. The newer, nonsedating antihistamines block the effects of histamine, which is what causes watery, itchy, runny eyes and nose. The most common brands are Claritin, Allegra, and Zyrtec. They all work differently in different people, so the only thing you can do is to try each one and
see which you prefer. Although they are nonsedating in theory, there are reported cases of drowsiness with all three. Benadryl is an older antihistamine that's very effective for allergies, except that many more people may get drowsy.

If your nose is stuffy, then two options are nasal decongestant sprays (which you can only use for 2-3 days) or decongestant pills. Routine nasal saline irrigation can also help your breathing and sleep.

There are a number of prescription medications, including topical nasal steroid or topical steroid sprays. Leukotriene phosphate inhibitors, such as Singulair, and various others also available. Oral steroids can also be useful in emergency situations. As a last resort, an allergy evaluation with shots are a consideration.

Regardless of which way you treat your allergies, it's important to follow all my recommendations for better breathing while sleeping, such as avoiding eating or drinking alcohol within 3-4 hours of bedtime, sleeping on your side or stomach. Having a stuffy nose for whatever reason can trigger breathing pauses downstream, ultimately giving you a bad night's sleep.
Chapter 4: Myths & Facts About Septoplasty

• The most common myth about septoplasty
• What may prevent you from breathing better after this procedure
• How to significantly reduce pain and discomfort after this procedure

A septoplasty operation is one of the most misunderstood procedures that lay people, and even most physicians have. Some people even equate septoplasty with having a nose job, which is not true. Although, some people do use having a crooked septum as an excuse to undergo a rhinoplasty. What follows is a brief description of septal anatomy, when a septoplasty is required, a brief review of the surgical technique, and what to expect after the surgery.

Understanding The Anatomy

The nasal septum is the midline cartilaginous structure that divides the two halves of your nasal cavity. The parts in the back of the septum are made of bone. Whenever the septum is crooked to a significant degree, your nose can be stuffy, and a septoplasty can be offered if conservative therapy doesn't work.

However, having a crooked septum doesn't mean that you'll have a stuffy nose, or that you'll need a septoplasty. No one has a perfectly straight septum. There are other parts of your nasal anatomy that contributes to your ability to breathe, which includes your nasal turbinates and your nostrils. The turbinates are wing-like structures that jut in from the side-walls of your nose that look like winds. They normally warm, filter, smooth and humidify the air that you breathe. The inside is made of bone and the outside is a mucous membrane lining. The middle part is made of very vascular tissues that can swell tremendously when filled with blood. This is regulated by your involuntary nervous system. This nervous system normally swells and shrinks the turbinates, alternating from side to side, every few hours (called the nasal cycle).

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Do You Have Flimsy Nostrils?

The other structure that is often overlooked are your nostrils. For most people, breathing in causes a mild vacuum effect that causes a mild collapse and constriction of the nostrils. But in some people with either flimsy or weakened nostrils (from prior rhinoplasty), they collapse very easily, even with a slight bit of inspiration. If you are one of these people, you may benefit from nasal dilator strips (Breathe-rite is one brand). Sometimes these strips are not strong enough, or it can irritate the skin. Another option is to use internal nasal dilators which work much better. Some of the more common brands are Breathewitheeze, Nasal Cones, and Nozovent.

What's Involved With Septal Surgery?

The septoplasty procedure can be done in conjunction with a turbinate procedure. There are many ways to perform a septoplasty, but the most important point is that it should be done well. The septum is covered on both sides by a mucous membrane. After an incision is made inside the nose on the mucous membrane, this layer is peeled away from the septal cartilage. The other side is also entered, which creates two tunnels on either side of the septal cartilage. The crooked part of the septal cartilage is next removed. Some surgeons either soften the cartilage or flatten it out and place it back, and others leave it out completely. In many cases, a small portion of bony spur that juts out at the base of the septal cartilage is also removed.

The last part of the operation is where different surgeons use different techniques. Traditionally, thin plastic sheets with or without soft sponge-like packs are placed against the septum on both sides to keep the mucous membrane together for proper healing. If a large clot of blood forms between the two mucous membrane layers, the remaining cartilage may lose its blood supply and literally melt away.

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Because the entire procedure is done inside the nose, there is no swelling, bruising or changes to the outside of the nose or face (unless a rhinoplasty is done simultaneously).

**What to Expect After Surgery**

These packs, if placed, are removed anywhere from 1-5 days. Many patients report that this is one of the most uncomfortable parts of undergoing this procedure. Some surgeons, like myself, don't use any packs or splints using the following method: compressing the two mucous membrane layers by sewing the two layers together using an absorbable suture, like a quilting stitch. This way, nothing needs to be removed, and you're breathing much better right after the surgery. It's expected with this procedure that your nose will get clogged up after a day or two with accumulation of blood, mucous and debris. This is usually cleaned out in the office once or twice.

This operation usually performed as an outpatient procedure, so you'll go home a few hours after surgery. It's usually performed under general anesthesia, but can also be done under local anesthesia with sedation for certain situations. Most people can go back to work after a day or two. Heavy straining or lifting should be restricted for about one week. In my practice, I see the patients about 2 days after the surgery, when this nose is cleaned of all the accumulated debris. Some people need a second cleaning 1-2 weeks later.

Typically, it may take a few weeks to months to feel the full benefits of this operation. During the first few weeks, crusts will build up and fall out as wounds heal. This is also the time when the swelling from the surgery goes away. Afterwards, scarring and tightening of the soft tissues can take weeks to months. You may have your ups and downs in the first few weeks, but you should see consistent improvement by 3-4 weeks.
Most people don't use any pain medications, but one is prescribed just in case. You'll probably be more bothered by the sore throat from having a breathing tube placed.

**What Are The Risks?**

Complications are rare, but with any surgical procedure, there is a small chance of infection or bleeding. There is also a small risk any time someone undergoes general anesthesia, which includes, allergic or medication reactions or airway problems. In terms of overall risk, it's riskier when you cross the street. Other very rare complications such as smell loss or a hole in your septum have been reported.

A septoplasty, if done properly, is one of the most gratifying procedures for both the patient and the surgeon. Success rates are very high. However, there are a few percent of patients where nasal congestion still persists, or it comes back after a few weeks to months. In this situation, there are two main possible reasons: there is persistent turbinate swelling due to inflammation, or you have flimsy nostrils. There are treatment options for both theses conditions.
Chapter 5: The Turbinates: What You Must Know

• What the surgeon MUST NOT do with your turbinates
• What you must address besides the turbinates if you want to breathe better
• One of the most commonly misdiagnosed conditions related to this structure

Most people know about the septum and sinuses when it comes to breathing, but not many people (even most doctors) know about the nasal turbinates. Turbinates are like wings along the sidewalls of your nasal cavity, opposite your midline nasal septum. There are three paired structures: the inferior, middle and superior turbinates. Your sinus passageways drain from underneath the middle turbinates. Swollen turbinates are probably responsible for most cases of nasal congestion.

The turbinates are bony on the inside and surrounded by a mucous membrane covering, with a very rich vascular tissue in between. The vascular tissue can engorge significantly, like what occurs with the penis. Any degree of inflammation, irritation or infection can aggravate turbinate swelling. Allergies are a common cause. Even weather changes such as temperature, pressure or humidity fluctuations can aggravate turbinate swelling. In many instances patients are told by their medical doctors that they have nasal polyps, when in fact, it's a very enlarged turbinate that's seen.

Sometimes it's difficult to tell whether a swollen structure is a turbinate or a polyp. A polyp is a protuberance of mucous membrane that grows beyond the normal tissue boundaries. Most nasal polyps originate from underneath the middle turbinates where the sinuses drain, but polyps can also occur anywhere in the nose, including on the turbinates.

Turbinate Trivia
One important feature of the turbinates that not too many people know about is what's called the nasal cycle. The turbinates alternate in size from side to side every few hours. One side shrinks and the other side swells. Normally you won't notice this, unless both your turbinates are somewhat congested. If you have a deviated septum, then you'll notice this more.

Gravity also affects the size of your nasal turbinates. When you lay down, blood pools in the vessels, leading to slight engorgement. However, your involuntary nervous system detects this relative change and automatically constricts your blood vessels to improve breathing. The same process occurs when you exercise—due to activation of the sympathetic nervous system, the turbinates shrink, opening up your breathing passageways.

Sometimes, the balance between the two halves of the involuntary nervous system (the sympathetic and parasympathetic parts) is out of alignment, and this automatic mechanism doesn't work properly. So when you lay down or exercise, the vessels don't constrict fully. Other times, the turbinates become extra sensitive to allergies, weather changes, chemicals, scents or odors. Once it's irritated, an inflammatory reaction occurs which leads to engorgement and production of mucous. This is called vasomotor or nonallergic rhinitis. Throat acid reflux has been shown to be associated with this condition.

Ultimately, how well you breathe through your nose is determined by a combination of the size of your turbinates, your septal geometry, and the how flimsy your nostrils are. (See the other sections on the septum and flimsy nostrils.) Your nose is not just a passive tube that acts a channel for air to pass into the lungs—it's a very dynamic structure, able to change minute by minute.
What You Must Know About Turbinate Surgery

If you've tried all the conservative options for treating your allergies or nasal congestion, and surgery is the only option left, there are a few very important facts that you must know before undergoing any type of turbinate surgery. Decades ago, surgeons use to remove significant amounts or completely the lower nasal turbinates. Initially, patients would breathe much better, but years later would complain of either a dry nose or a constantly runny nose and even a return of nasal congestion. Paradoxically, when you look into these patient's noses, the nasal cavity would be wide open. The is called the empty nose syndrome (ENS).

We now know that turbinates are a vital part of your nasal anatomy and functioning, and you need a certain amount of nasal resistance to perceive and benefit from proper breathing.

There are a variety of options for shrinking nasal turbinates, from more conservative to more aggressive. The simplest procedure that can be performed in the office is an intramural cautery procedure. This is where a needle or a probe is placed underneath the mucous membranes and the blood vessels are either cauterized or vaporized. With time, the scar tissue that's created shrinks and tightens the turbinate soft tissues. You'll see various names such as radio-frequency or Somnoplasty. One recent variation called Coblation uses radiofrequency energy to vaporize tissues at relatively low temperatures. All these procedures have the advantage that they can be performed in the office, and no cutting or excising of the mucous membrane is involved.

The remaining procedures are usually performed in the operating room, under local or general anesthesia. There are many ways that surgeons modify, shrink, de-bulk, or excise parts of the turbinate. The previously mentioned in-office procedures can be performed along with any other procedures, such as a septoplasty or sinus surgery. The
simplest way is to physically cut the front-lower portion of the turbinate off using scissors or electrocautery. Sometimes the deep bony parts are removed as well. Complete inferior turbinate resections are rarely performed anymore due to the possible risk of the "empty nose syndrome."

Another popular method is called a sub-mucous resection (meaning the any deep bone, cartilage or tissue is removed, leaving behind the overlying mucous membrane). For the turbinates, an incision is made lengthwise along the lower portion of the inferior turbinate, and the bone is exposed and a portion removed. The mucous membrane layers are replaced and pressed down onto the raw bony bed with soft nasal packing. A more recent way of doing this without making an incision is to use what's called a suction microdebrider. This device has been used for years in sinus surgery. The tip of a long thin rod with an open end has a rotating blade which oscillates back and forth, while simultaneously applying a vacuum to suction out whatever tissues is removed (either soft tissue or bone).

**What To Expect After Surgery**

Most surgeons still use nasal packing, especially with the more aggressive procedures, to keep the mucous membrane layer pressed against the raw surfaces. Since turbinate procedures are usually performed alongside septal procedures, nasal packing with or without splints are more common than not. Depending on surgeon preference, packing may or may not be used for some of the minimally invasive procedures.

Turbinate procedures by themselves are not considered painful. Most patients don't take any pain medications, unless other procedures are performed simultaneously.

It may take anywhere from days to weeks before your breathing improves significantly, since there will be swelling, blood and mucous immediately after the procedure. Many surgeons clean out this debris a few days to a week after the procedure in the office during follow-up.

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Nasal saline can be applied every few hours just after the surgery to loosen the secretions. Blowing your nose is discouraged until you get the go ahead from your surgeon during the first post-op visit.

Turbinate surgery is a very useful procedure that can be done alone or in combination with other procedures. Bleeding and infection, although rare, can occur, just like any other surgical procedure. There can be anesthesia risks as well. In the rare chance that the procedure fails, reasons for failure include too conservative of a procedure, persistent nasal septal deviation, or nasal valve collapse.
Chapter 6: Do You Have Flimsy Nostrils?

• How you can tell if you have this condition without going to the doctor
• What are the conservative ways of treating this condition?
• What are the more definitive ways of treating this?

One of the most common reasons for continued nasal congestion despite allergy medications and even nasal surgery is due to flimsy nostrils. Your nose comes in various shapes and sizes, but having naturally thin nostrils or weakened nostrils after rhinoplasty can lead to flimsy nostrils that collapse during even quiet inspiration. Unfortunately, many people undergo a number of different medical treatments using allergy sprays or even surgery before this condition is even considered.

There are three simple ways to tell if you have flimsy nostrils:

1. look in the mirror and take in a deep breath through your nose. Do the sidewalls of your nostrils cave in as you breathe in?
2. place your index finger just beside your nostrils on both sides. While pushing gently on each side, pull the cheek skin up and away from the nose, towards the outer corners of the eyes. Breathe in and see how you feel.
3. take off the cotton ends from two Q-Tips and place the thin end inside your nostril and lift up and sideways. Take a deep breathe in. Is your breathing much improved?

One very important point to make here is that how stuffy your nose is on the inside can also determine how much your nostrils will collapse. Think of sucking through a flimsy straw. If you pinch the middle slowly, the end will collapse since there's increased airflow. The same thing happens with your nostrils. In many cases properly addressing intranasal allergies or a deviated septum and enlarged turbinates will prevent the nostrils from collapsing.

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If you use over-the-counter decongestants like Afrin or Sudafed and you can breathe much better, then you need to address the inside of your nose first. But if you still have nasal congestion and it's obvious that your nostrils are caving in, then you have flimsy nostrils, or nasal valve collapse. Lifting up your nostrils by pulling your cheeks apart or using Q-Tips is a good test to see if you have this condition.

If treating your allergies or deviated septum or enlarged turbinates don't help, then there are two major ways of treating this problem:

1. **Nasal dilator devices. These come in two varieties: external and internal.**

External devices are mainly over-the-counter adhesive strips that attach to the nostrils on the outside that pulls the nostrils apart. This works for most people, but for some people with thick or oily skin, it may not work as well.

Internal nasal dilator clips. There are a number of these devices, including Nozovent, Sinus Cones, Breathewitheez, and Brez. You can find any of these devices online.

2. **Surgery**

The most common way of managing this surgically is through a functional nasal reconstruction procedure, using rhinoplasty techniques. Small strips of cartilage (harvested from either the nasal septum or the ear) are placed under the skin of the nostrils and between the septum and the cartilage of the lower part of the nose. There can be a little widening of your nose due to added support structures.

A newer and easier way of addressing flimsy nostrils is to make a tiny incision under the lower eyelid and attach a thin suture the bone. The suture is then threaded under the skin towards the floppy nostril area, looped about the nostril, and tunneled back out of the eyelid incision, and tied under a mild degree of tension. This suspends the nostril so that it doesn't fall in. This procedure can be performed under local anesthesia and it
literally can take about 30 minutes and recovery is very quick. Unlike the more formal procedure, your nose is less likely to widen, since you’re only suspending or "hanging" your nostrils to the bone above.
Chapter 7: The Truth About Snoring: What Works

• What most doctors don't know about snoring
• Which procedures work and which ones don't
• Three myths about snoring that can kill you

What Most Doctors Don't Know About Snoring

Snoring is probably one of the most frustrating conditions not only for the snorer, but for spouses and bed-partners as well. It's also one of the least understood medical conditions by most doctors. One of the main reasons for this is that snoring is portrayed in the media and pop culture as something to be laughed at. The truth is that snoring reveals that the person who snores is most likely struggling to breathe at night, and is at a much higher risk of having a heart attack or stroke. Most textbooks and internet resources describe snoring as coming from the soft palate, since that's where most of the vibrations occur. However, the soft palate doesn't flutter all by itself: the nose as well as the tongue can be involved. Even most doctors focus way too much attention on the soft palate.

The challenging part of eliminating snoring is in figuring out what's actually causing the snoring. The vibrations of the soft palate is only the end result. Imagine your upper airway as a long, thin tube with three main areas that can either narrow or collapse when a slight vacuum pressure is applied. Think of a flimsy straw as you suction in through one end: as you pinch the tip (the nose), the middle part collapses. If you pinch the middle part, the tip collapses. Your upper airway is a lot more complicated with various turns, crevices, narrowing, as well as certain areas that are collapsible to various degrees depending on your sleep stage (determining muscle tone), gravity, and factors that cause inflammation (colds, allergies, etc.).
One major factor that determines how well you breathe at night is the size of your jaws. It's been shown that modern human's jaws are slightly smaller than what we had hundreds of years ago. Various reasons are proposed, but one major reason is thought to be due to a major change in our diets. (For a more complete description of this process, take a look at my book, *Sleep, Interrupted: A physician reveals the #1 reason why so many of us are sick and tired.*) If your jaw is slightly smaller, then your tongue which grows to its' normal size, takes up too much space, sitting higher and more backwards in your throat. When you lay flat on your back, due to gravity, your tongue will fall back partially, and when you breathe in, a mild vacuum effect is created upstream at the palatal level, which constricts the soft palate closed, and then the free edge of the soft palate flutters. If your nose is stuffy for any reason, then a vacuum effect is created downstream, and the palate and tongue can collapse even more. So this is how a simple cold or an allergy attack can aggravate temporary snoring.

Furthermore, if your muscles relax more than usual (like after alcohol ingestion), then you may stop breathing once in a while. If these pauses last longer than 10 seconds, then it's called an apnea. If you have 5 or more apneas every hour on average, then you have obstructive sleep apnea. Untreated obstructive sleep apnea can lead to depression, anxiety, weight gain, diabetes, sexual dysfunction, high blood pressure, heart disease, heart attack and stroke.

It's been shown that a significant number of heavy snorers have obstructive sleep apnea (about 30-40%, and much higher as you get older or heavier). Not all snorers have sleep apnea, and not all people with sleep apnea snore. If you're not snoring, then you may not be breathing. It's also been shown that neither you nor your bed-partner can tell if you stop breathing—it can just be silent pauses, without gasping, coking or snorting sounds. When some people say, I used to snore a lot, and now I don't anymore, but I'm still tired, then I get very suspicious. Others say with confidence, "I know I don't have sleep apnea." More often than not, they're wrong.
One major myth that's perpetuated by most doctors and with the general public is that you have to be an older, middle-aged, snoring man with a big neck to have sleep apnea. Now it's been shown that even young thin women who don't snore can still have significant sleep apnea. I remember seeing one young, thin, petite woman who stopped breathing over 110 times every hour!

Some of you will tell me, "I sleep fine. I sleep like a rock. I can sleep for 10 hours without waking up." This is a potential warning sign. If you fall asleep too quickly or can sleep for 10 hours without feeling refreshed, what this means if that you're not able to sleep efficiently. This goes along with studies that show that if you sleep less than 5 hours or sleep more than 9-10 hours, then you'll have a higher chance of developing depression, diabetes, and heart disease.

What Can I Do To Stop The Snoring?

Most internet sites on snoring or brochures from doctors offices list a routine series of tips on what you can do:

• lose weight
• don't drink alcohol before bedtime
• don't take any medications that are sedating or relaxing
• sleep on your side
• sew a sock stuffed with a tennis ball to behind your back to prevent sleeping on your back.
• use nasal dilator strips.

Sometimes, any of these options may work to various degrees, but for most, the problem will usually come back. The most important point that I want to make here is that if you snore heavily, you have to make sure you do or don't have obstructive sleep apnea. Even if you are successful in covering up your snoring, you could still have untreated obstructive sleep apnea. The best way of finding out what's happening is to
see a sleep doctor and undergo an overnight sleep study. More recently, simpler home-based studies are starting to be used. If you are found to have obstructive sleep apnea, then treating this condition definitively should take care of your snoring. Not only will your snoring improve, you'll also feel much better in the morning, and have much more energy during the day. In addition, your increased risk for heart disease, heart attack and stroke will be improved as well. You may also lose weight. Treatment for obstructive sleep apnea is a whole other discussion, which I address in a separate report.

So let's say that you don't officially have sleep apnea. What can you do? Before I go into this discussion, sleep apnea is not something that you either have or don't have. Everyone is on a continuum. As mentioned before, if your AHI is 5.1, you're told you have it, whereas if your score is 4.9, you don't have it, and because you don't officially meet the formal criteria, you won't be eligible for coverage by your insurance carrier, despite the fact that you feel lousy during the day, and your relationship with your wife or bed-partner is suffering.

**Treatment Options For Snoring**

There are over 300 patented devices and gadgets for snoring. Sometimes they work, but with a few exceptions, most of these devices either cover up your snoring without getting to the root cause of your condition, or keeps you awake so that you don't snore. Three popular anti-snore aids were recently tested for effectiveness in a prospective study: a throat spray, nasal dilator strips and a pillow. None of these three were found significantly better than controls when tested prospectively. There are even devices that wake you up as you enter deeper levels of sleep to prevent muscle relaxation. What I'll describe in this section is a comprehensive list of all the standard medical, surgical, and over-the-counter options that you'll hear and read about. If you see one that I've left out, please let me know and I'll give you my opinion. Remember, many of these devices (with a few exceptions) only cover up the snoring, without treating the real cause. If you try a variety of these options to find no relief, please see your medical doctor or a sleep specialist for a formal evaluation and treatment.
Medical Options For Snoring

Note: Many of the procedures below, although effective for snoring, are never 100 successful. Success rates range from 70% to 95%. There is also a small chance of relapse even if initially successful.

*Continuous Positive Airway Pressure (CPAP)*: This option may be overkill, and you'll need to pay for it out of pocket if you don't officially have obstructive sleep apnea. But it does work, if you can get used to it.

*Dental devices*: There are multiple options with this type of treatment, with the formal mandibular advancement devices that are made by dentists. These devices pulls your tongue forward by pulling your lower jaw forward. There are many different models that all have various features that make it more likely to work depending on your anatomy. Different dentists have different preferences as well. A less expensive way to "test" whether or not these devices may work is to try one of the many over-the-counter (or over-the-internet) boil-and-bite models. These devices are softened in hot boiling water and the set as you softly clench down while simultaneously pushing your jaw forward.

Laser Assisted Uvulo-Palatplasty (LAUP): A laser is used to trim the free edge of the soft palate. It's somewhat painful, and usually must be performed 2-3 times. It can be performed in the doctor's office, and is relatively expensive.

Injection Snoreplasty: Any type of scarring agent (sodium tetradecyl sulfate, ethanol, etc.) can be injected just underneath the mucous membrane of the soft palate. Must be performed 2-3 times for maximum effectiveness, is less painful in general, and is the least expensive.
Pillar Procedure: Three thin woven braided polyester rods are inserted inside the muscle layer of the soft palate. It's usually performed under local anesthesia and is one of the least painful. Typically, only one treatment is needed, and is most expensive.

Uvulopalatopharyngplasty (UPPP): Usually used for obstructive sleep apnea, but very effective for snoring. In general, it's only about 40% successful for obstructive sleep apnea.

**Other Classic or Unusual Ways to Stop Snoring**

Note: All the options listed below, although not proven to help snorers on a consistent basis, have been reported to work at least some times in some people. Most of the reports are anecdotal, with no objective supportive data. One major problem is that if it works, it may only delay diagnosing and treating any underlying obstructive sleep apnea.

_Tennis balls_: For some people, staying off your back can make a big difference. The problem is staying on your back. The most common recommendation is to sew a sock filled with a tennis ball to the back of your pajamas. This method has mixed results, and in general, although it sounds great, doesn't work that well. It just only annoys the snorer or they just sleep on top of it.

_Sleep position devices_: There are a number of gadgets and devices that prevents you from rolling onto your back. They range from triangular wedges to shirts filled with foam rods to prevent sleeping on your back. The only way to know whether or not they work is to try it. For some people, it can make a huge difference, even if you have obstructive sleep apnea. For many others, you may have a mixed response, or no response at all.

_Side sleep position pillows_: This one positions your arm above your head and somehow forces you to sleep on your side. Again, I've heard mixed responses from my patients. If
you can sleep with your arm above your head for hours without it becoming numb, then this may work for you.

"Contour" pillows: This pillow works better if you prefer to sleep on your back. The lower end of this pillow is a bit higher than the middle part that the top of your head touches. This forces your head to be cocked back a bit, lifting up your chin somewhat, thereby opening up your airway somewhat. This the the same maneuver that you're taught to do during CPR to open up the airway before you give mouth-to-mouth. Notice that after you fluff up your pillow you go to bed, the pillow height diminishes slowly, and by the end of the night, your chin is closer to your head, which closes your airway. Another option is to either roll up a towel into a "log" or get one of the Asian husk-filled pillows that are shaped like a roll. You'll have to experiment to find the right height.

Diet and weight loss: This will help to various degrees for most people who are overweight, but what if you're already thin? Also, since poor sleep leads to weight gain hormonally and metabolically, it can be very difficult to lose weight no matter how much you diet or exercise. For some, losing 10-15 pounds may help a great deal with your snoring, but chances are, it'll return sooner or later as you get older.

Nasal dilator clips: Whether external (Breathe-Rite) or internal (Nozovent, Nasal Cones, or Breathewith theezez), these work sometimes by pulling your soft flimsy nostrils apart, preventing nostril collapse when you inhale. During sleep, especially when your muscles relax, any degree of nasal congestion can aggravate higher vacuum pressures that can aggravate tongue collapse. Despite being touted to cure snoring, it only works about 10% of the time. Here's one simple test to see if you should invest any money on these products: take both you index fingers and gently press on your skin, right next to your nostrils. Press gently and pull your cheeks apart on each side towards the outer corners of the eyes. This is called the Cottle maneuver.

Wind instruments: Playing any type of wind instrument (flute, clarinet, trumpet, etc.) can in theory promote throat and tongue muscle tone. Reports of success are anecdotal.
Playing the Didgeridoo: Various studies have suggested that playing this ancient Aborigine wind instrument can help relieve snoring. The mechanism in how it works is similar to any wind instrument.

Singing: The mechanical act of singing promotes profound throat muscle tone and control. Similar to all the wind instruments, prolonged periods of singing promotes relaxation, since exhalation is activated by your parasympathetic nervous system.

Tongue Exercises: Has been found to be helpful for some people, but needs continuous exercises.

Throat sprays: Various mixtures of herbs and natural ingredients are promoted for snoring, but a recent objective study showed that they were not helpful.

Acupuncture: No consistent evidence, but helps with stress and fatigue.

Bedpartner's elbow: Works to wake you up to stop snoring, but never curative. This is called the "bruised rib syndrome".

Electronic devices that wake you up when you snore: More expensive than a bedpartner elbowing you in the ribs.

Ear plugs for the bedpartner: May help the bedpartner sleep, but not very effective for the very low-frequency snoring vibrations.

Sleeping in another room: Usually alleviates the problem, but bad for relationships, and not very helpful for "heroic" snorers where the sounds vibrate the bedroom walls 2-3 rooms down.
The Nose And Snoring

A few words about nasal congestion and sleep-breathing problems are in order. If you have sleep apnea and have nasal congestion, undergoing a septoplasty will not cure you of your sleep apnea in most cases. Studies have shown only about a 10% chance of sleep apnea eradication after nasal surgery only. Also, contrary to popular belief, snoring does not come from the nose. Snoring sounds come mainly from the soft palate, but can also come from the tonsils, the tongue, sidewalls of your throat, or the epiglottis.

Any degree of nasal congestion can aggravate soft palate or tongue collapse, leading to either snoring or breathing stoppages, especially in deeper levels of sleep due to muscle relaxation. Rarely, opening your nose can help with snoring, but even if it doesn’t, it’s a good thing to be able to breathe through your nose. If you have a sleep-breathing disorder, it's important to be able to breathe through your nose for many of the treatment options to work.
Chapter 8: Nasal Saline: Myths & Facts

- A simple, cheap, home recipe for saline
- How nasal saline can sometimes be dangerous
- Various device and gadgets to get salt water up your nose

For many people with nasal congestion or chronic sinus infections nasal irrigation with saline is a natural way of clearing nasal and sinus passageways. There are various ways of getting salt water into your nose and sinuses, including mists, sprays, squeeze bottles, pumps, aerosol cans, and irrigation systems. The Neti-Pot is a yogic variation of saline irrigation that became much more popular after Oprah's recommendation. Many patients have tried nasal saline and report good results, with better breathing and less sinus pressure and headaches.

It's also been shown that if the salt concentration is a bit saltier than your nasal membranes' concentration, the cilia that help to move the mucous blanket down into your throat become paralyzed. This is why you want isotonic saline, where iso- means same or similar to your body's plasma concentration. Some pre-made salt packets or readily available recipes are hyertonic, meaning that it's saltier than your body's normal plasma.

A recent study showed that contrary to popular belief, irrigating the nose on a daily basis over a long-term period may actually make things worse. Researchers studied 68 people who used nasal saline irrigation every day for one year. In those that stopped after one year, 62% had a significant drop-off in the number of infections compared with those that continued irrigating their noses.

The authors of the study proposed that the likely reason for this finding is that frequent irrigation depletes nasal mucous, which contains several important defense
mechanisms, including antibodies, lactoferrin, and lysozyme. It's also known that the nose produces nitric oxide, which also has antimicrobial properties.

These results are a bit conflicting with what many people report, but there may be some good reasons to follow the study authors' recommendations. Besides the reasons mentioned above, saline can act as a mild decongestant (especially if hypertonic), which is similar to the over-the-counter decongestant, Afrin, but not as strong. This is why you can breathe better after irrigation. One of the reasons why you can't use Afrin for more than 3 days is because of the rebound effect, where after the medicine wears off, your nose gets stuffy again, making you use it more and more frequently. Nasal saline, although not as strong as Afrin, also has a mild rebound effect. This is why some people use it 2 to 4 times every day.

If used for short-term periods, such as during an acute sinus infection, it can be useful (just like Afrin), but this study's result shows that long-term use may be more harmful.

My feeling is that if you feel better and you don't get as many infections, keep doing it. After a few weeks or months, you can experiment by stopping the irrigation and seeing what happens.

Recent studies also show that the vast majority of what may feel like sinus infections are actually a variation of a migraine headache. Furthermore, it's been shown that nasal saline doesn't really go into your sinus passageways. It works by decongesting your nasal passageways, which indirectly opens the passageways to your sinuses.

Here's simple saline recipe (0.9% isotonic) that you can make on your own:

1 teaspoon canning/picking salt (not table salt)
pinch of baking soda (not baking powder)
2 cups of lukewarm water
For a hypertonic recipe, just double amount of salt. The baking soda (sodium bicarbonate) makes the saline less irritating. You can store this solution at room temperature for up to one week. Hypotonic saline or water is not recommended, as it can make your nasal membranes swell, just like if you sit in a bath for too long. It’s also best to use this solution as close to body temperature as possible. You can use a bulb syringe, such as for infants or a turkey-basting type for adults. A Water-Pik machine can also be used with a nasal adaptor called the Grossan nasal irrigator tip, found online or at various pharmacies. Instructions for how to use a Neti-Pot can be found online and on YouTube.

There's no recommended frequency of use. For some people they use it a few times with a severe sinus infections. Others who suffer from chronic sinus problems use it on a daily bases, some even 2-3 times every day. If you're using it regularly for weeks to months and your sinus problems don't improve, try giving yourself a break to see what happens. You can also experiment by using differing concentrations of salt.

While saline irrigation can help lots of people, it won't help everyone. Some people are very sensitive to any form of liquid in the nose, no matter how dilute it is. With continued use, some get used to it, but for many others, it can make things worse.

If your sinus problems don't improves significantly with frequent saline irrigations, see an ear, nose and throat (ENT) doctor. Remember, saline irrigation should be part of a holistic regimen, including allergy management, regular exercise, a healthy diet, eating early and avoiding alcohol within 3-4 hours of bedtime. If you continue to have problems breathing through your nose, then discuss this issue with your ENT doctor, since you could have structural issues that need to be addressed.
Final Words

My main mission is to educate and empower as many people as possible about the seriousness of breathing problems and how they can better navigate the maze of different options and opinions. Hopefully you found this information helpful. Regardless of which option you choose to treat your nasal problems, the key is to take action and be persistent. Thanks for reading this ebook and I wish you all the best.

Dedicated to helping you breathe better and sleep better,

Steven Y. Park, M.D.

p.s. If you have chronic nasal congestion or sinus issues, there’s a good chance that you also have problems breathing while sleeping. Many of you will also snore or have undiagnosed obstructive sleep apnea. This is one major undiagnosed condition that’s not diagnosed in 90% of people who have it, and it may explain why you’re so tired all the time, no matter how much you sleep or how well you eat or exercise. Ignore all the stereotypes about sleep apnea (overweight, middle-aged snoring man with a big neck). It’s been shown that even young, thin, women who don’t snore can have significant sleep apnea.

If you want to learn about the real reasons for nasal congestion, snoring or sleep apnea and not the generic information that’s repeated over and over, check out my book, *Sleep, Interrupted: A physician reveals the #1 reason why so many of us are sick and tired*. It’s been endorsed by numerous New York Times best-selling authors such as Dr. Christiane Northrup, Dr. Dean Ornish, Dr. Mark Liponis, and Mary Shomon.

By reading this book, you’ll:

• know more about snoring and obstructive sleep apnea than most doctors

Copyright © 2010 Steven Y. Park, M.D. www.doctorstevenpark.com
• discover why only humans are susceptible to sleep apnea

• find out how you can be severely tired and have a sleep-breathing problem, but not obstructive sleep apnea

• discover how sleep-breathing problems can cause or aggravate ADHD, depression, anxiety, menopause symptoms, headaches, TMJ, weight gain, heart disease, heart attack or stroke.

• learn step by step action steps for conservative options without ever seeing a doctor

• discover the truth about snoring procedures

• learn about all the mainstream options for treating snoring and sleep apnea as well as all the major surgical options.

• find out if you're a candidate for surgery

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Read What New York Times Best-selling Authors Say About *Sleep, Interrupted*:

"There are many good books on better breathing. But none of them address why you need to breathe well when sleeping. Let Dr. Steven Park, an ENT physician, show you how you can breathe better while sleeping. Not only will this improve your energy, it can also save your life."

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• **Christiane Northrup, M.D.,** Author of New York Times bestseller, The Wisdom of Menopause

"Both patients and physicians must read Dr. Park’s unique and enlightening perspective on health issues related to poor breathing."

• **Dean Ornish, M.D.,** Author of New York Times bestseller, Dr. Dean Ornish’s Program for Reversing Heart Disease

"The unique concepts presented by Dr. Park questions traditional models of health and disease and challenges physicians and patients alike to be inspired towards better health.

• **Mark Liponis, M.D.,** co-author of New York Times Bestseller, Ultraprevention

“Dr. Park’s book offers not only a fascinating look at the critical role sleep plays in health and wellness, but practical advice to help resolve health- and energy-sapping sleep problems.”

• **Mary Shomon,** author of the New York Times bestseller, The Thyroid Diet: Manage Your Metabolism for Lasting Weight Loss

Here are some more reviewer's comments from Amazon:

I met with Dr. Park and from the moment I picked up the book in his waiting room, I knew I was destined to change my thinking about many factors affecting my health. I only had time to read the first chapter, and just like the time I met my husband, the "proverbial clouds parted and I saw the light." Dr. Park takes you on an amazing journey to self-realization, self-acceptance, and finally, self-help. He points out the many possible causes for your ailments. Most can be traced back to poor sleep hygiene. You

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will be truly enlightened by what Dr. Park reveals in his book. There’s nothing better for you than a good night’s sleep, every night - it refreshes, it restores, it may possibly heal. I read this book and gained a wealth of knowledge about my health. I recommend this book for every person who has been told they snore, who cannot seem to get a good night's sleep, and most importantly, for those who wake in the middle of the night frightened and unable to catch their breath. The information helped me and it can help you, too.

J. LaPreta

From Dr. Park's posts on the Sleepguide Sleep Apnea support forum, I recognized his passion about sleep disordered breathing issues and knew that reading his book would be a treat. What I didn't expect was that the book would be disruptive to our understanding of health and wellness generally. At the heart of Sleep Interrupted is Dr. Park's "Sleep- Breathing Paradigm," which he dares to put forward as an explanation for the interrelation and connection of a broad range of common and serious medical ailments that we typically don't see as being interrelated. The implications are enormous, and it behooves anyone serious about the future of our health care system to consider Dr. Park's revolutionary new paradigm.

Mike Goldman

As I began to read Dr. Park's informative and practical book, I had the feeling that I was reading a personal letter addressed to me from the doctor. It seemed that he knew exactly of the struggles and frustration that people with obstructive sleep apnea or upper airway resistance syndrome experience on a daily basis. Moreover, his insights on the Sleep- Breathing Paradigm are nothing short of profound. Yet in addition to the medical analysis, the book is highly practical as well and I implemented several of his suggestions on the first night.
Dr. Park delves into the causes, anatomy, and consequences of unrefreshing sleep in an easy to read, yet detailed style. Anyone struggling with poor quality sleep will benefit from reading this book. I know that I did.

J. Noah

I must admit that I couldn't put the book down before I was finished reading. In my opinion Steven Park is quite unique. The book offers many surprising descriptions of sleep disorders and provides a good insight into them. And his book is very easy to understand without any medical background.

After I had read a number of his posts on the American Sleep Apnea Association's support forum, I just HAD to read his book.

What I see as the most important thing in his message is that doctors should look at the whole person, not just at individual diseases. Although he is an ENT surgeon, he has a very broad experience in sleep disorders including Sleep Apnea, and he doesn't look at the problems only from a surgeon's point of view. (On the contrary)

This is THE BOOK if you have trouble sleeping, or for someone you know who has sleep problems.

But this book is also for physicians and I have therefore given one of his books to my ENT. I believe that if his "New Sleep Breathing Paradigm" was used by a broader group of physicians, it would be a major step forward in sleep medicine.

Henning Medum
Dr. Park has written a very important book. In doing so, he has managed to thread the content in such a way so that it is accessible to both the general population and the medical community.

Sleep-related breathing disorders are epidemic in our adult population and present to a significant degree in our youth. These disorders are independent risk factors for a host of serious diseases ranging from cardiovascular diseases to diabetes and are implicated in conditions as diverse as fibromyalgia and pre-eclampsia in pregnancy. Unfortunately, even in people seeing regular medical care, these disorders remain largely undiagnosed.

Dr. Park's brilliant book illuminates the insidious nature of these sleep-breathing disorders in a way that easily allows readers to connect the dots between their symptoms and his premise. Anyone reading this book who sleeps with a snorer will quickly discover that the annoying sound that is interfering with their own sleep is, in reality, the sound of their bed partner literally fighting for their life.

**David E. Lawler, DDS**

Don't lose any more sleep than you need to.

Order *Sleep, Interrupted* Today