Tinnitus Miracle™
Proven Holistic System For
Quieting The Noise In Your Head

A Unique Easy To Follow 5-Step Plan To Curing Tinnitus Using Proven Holistic Strategies

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By Thomas Coleman

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INTRODUCTION: ............................................................................................................ 12

Links & Other Resources ......................................................................................334
INTRODUCTION:

THE STORY OF TINNITUS

If you or someone you know suffers from Tinnitus, you will know the havoc it can cause and how it can wreak your life. Beyond just a ringing in the ears, Tinnitus causes severe non-stop noise in the head. Some people have actually gone mad and even committed suicide while trying to stop these “thoughts.”

If you’re reading this book, then you know all about the decibel damage Tinnitus can cause to your physical and emotional well being. No one can truly understand the distress and frustration you are feeling unless they’ve lived with this painful noise themselves. But I can! You see, I’ve experienced exactly what you are experiencing right now – the unrelenting buzz, ring and banging in my head that made me question my own sanity. I too was a Tinnitus sufferer, with the important word here being was.
I was 29 years old and experiencing life at its fullest. My days were hectic. I was handling responsibilities at work, and coming back home to face homework with the kids; running them from activity to activity; finding quality time for my spouse and all the other stuff modern families have to deal with. The stress was mounting, but still I was in control. Unfortunately, that was about to change.

One evening after work I headed to a local restaurant with some friends for some much needed R&R. After spending three hours in the noisy restaurant, sitting next to the piano player, my head ached as the dins of the evening continued to ring in my head for hours.

The next morning I was surprised to notice that a slight ringing was still left in my ears. Not thinking much of it, I headed off for another busy day at the office. Little did I know that my life was about to take an unexpected turn.

Within a few days, that slight ringing became a noticeable buzz, and it was followed periodically by loud bangs. Before long, the noise that started as a nuisance was beginning to grind on my nerves. My head felt like it was going to explode. No matter what I tried, I could not get away
from that ear piercing noise -- day or night it was there, and it was beginning to take its toll.

A trip to my general practitioner did no good. He thought maybe it was just a migraine induced by stress. I tried relaxing more, and that helped (a little), but still I couldn’t get rid of that constant buzz in my ears.

Several weeks and several visits later, the doctor began to suspect that something was indeed wrong, and initiated a series of tests to rule out anything serious. After undergoing what seemed like endless round of tests, we finally had a diagnosis: Tinnitus.

“Whew” I thought. “Now we can fix it.” It wasn’t long before my relief turned into panic as the doctor explained that there is no cure, or even much treatment for this condition. I would simply have to learn to live with it like the thousands of other sufferers who are walking the planet.

“Live with this constant pounding in my head!” I thought. “How in the world am I going to do that?”

After a couple of months, I went to see a doctor (who was also a psychiatrist), and described the unbearable situation I was in. He
recommended several prescription medications, anti-anxiety drugs, muscle relaxers and a set of anti-depressants.

**Needless to say, it didn't help at all.**

I travelled from one doctor’s office to another looking for some relief – any relief! The noise was growing worse – some days reaching 70 or even 80 decibels – and I needed help!

My life was no longer my own. I couldn’t work (the loud noise in my ears was making it impossible to deal with my many responsibilities at the office); I was short tempered with my family (after all, they didn’t realize that every little noise they made aggravated an already precarious situation); my health was suffering (I couldn’t eat or sleep normally); and I was becoming more and more depressed. I was reaching my breaking point and I knew it. Something had to be done and it had to be done quickly, or I was going to lose my mind. It was time to take action!

I took a few weeks off from my work. I switched several doctors and complained about the stabbing pulsing sounds and other symptoms I was experiencing. But it seemed that surgery was the only option – this was the only answer I got. Unbelievable I thought, only to later find out
that in the vast majority of cases, surgeries are completely unnecessary and can often lead to irreversible results.

Deep down, I felt that there must be another option, a healthier alternative.

I stopped taking the prescription medications and muscle relaxers. I was determined to find a natural solution to my problem, despite what my doctors had recommended.

I became obsessed with the subjects of holistic health and nutrition. I wanted to find out everything there was to know about how to cure Tinnitus and prevent it permanently – I was absolutely consumed by this quest. So I started studying - and hard! I bought every book on ear infections, nerve damage, sinus issues, sound therapies, oriental medicine, detoxing, dieting, and nutrition that I could get my hands on.

I spent hours at the library swallowing stacks of books, journals and magazines about Tinnitus, hearing loss, and nutrition and I read every word. I have literally read hundreds of medicine books from cover to cover. My library quickly grew to over 537 health and nutrition books, and I had read every word almost to the point of memorizing them.
But I didn't just read. I interviewed countless other Tinnitus sufferers and endlessly picked the brains of every doctor, herbalist, homeopath and naturopath... those who were kind enough to lend me a few minutes of their time and fragments of their expertise and knowledge to help me find a solid solution to my Tinnitus.

Book knowledge and interviews is one thing, but it's not the same as knowledge from actual experience. Scientific facts, figures and theories weren't enough.

I tried other types of prescription drugs (anti-anxieties and anti-depressants) and took muscle relaxers, vitamins and oriental medicinal herbs daily with high hopes for a change. I bought numerous "white noise" CDs and attended plenty of noise therapies, but to no avail.

I have also tried every Tinnitus treatment known to science and natural health with conviction, desire and hope that it will make a difference. I sincerely hoped that it will finally eliminate my Tinnitus and bring me my life back.
Over the years I have spent a small fortune trying every type of product and treatment you can think of. I have tried: herbal remedies, Cellfood Oxygen, tonics, habituation, detox diets, vitamin therapy, hydrotherapy, aromatherapy, macrobiotics, reflexology, Chinese Medicine, vegetarianism, the Wai diet, magnetic therapy, the mucus-less diet, the blood type diet, psychiatric treatments and what not.

While I did find some minor relief, it was always temporary and the ringing in my ears came back with a vengeance, and sometimes it became even worse than what it was before the treatments. I just could not sleep. I was stressed, angry and depressed all the time. The extreme sleep-deprivation along with the immense anxiety and stress I was experiencing, took its toll and I even started to hallucinate. I started to see blinding lights in the middle of the day as I was walking or driving, and there were many other weird experiences as a result of the extreme emotional state I was in. My condition had become much more dangerous and frightening than ever, when I almost crashed into a street sign on the way to my doctor.

Tinnitus was now a lot more than a tormenting noise in my ears. It had become a real and meaningful threat to my life.

Facing no other choice due to the extreme condition I was in, and its potential consequences, I scheduled a surgery to fix my Tinnitus with high hopes that this was the final resort. I wasn't specifically thrilled by
the idea, but after my doctor mentioned the success rate of all Tinnitus surgeries and praised their effectiveness at reversing the disease, I decided to go under the knife.

The surgery took about 4 hours, and after I woke up, I felt an amazing relief. Several days after I was released from the hospital, the operation seemed to be working. The volume of the ringing in my ears had decreased and it seemed that there was finally hope for me. I started sleeping better at nights and became the old relaxed fellow my loved ones had known to appreciate and relate to.

But my hopes soon crashed. In less than a month, I started feeling an excruciating pain and pressure in my ears and the ringing in my ears were back - but this time the noise was louder than ever. I seriously felt like my eardrums were about to explode. What a NIGHTMARE I thought! My worst fears had come true. I immediately called my doctor and shouted that my Tinnitus was back and it was even worse. I already knew what he was going to say: that it takes several months to see results and sometimes the condition becomes severe before the patient experiences relief (as I read about the recovery process of Tinnitus surgeries years before) - but this was not a recovery process! I tried with all my powers to convince my doctor that such a loud noise cannot be part of any recovery and that, the surgery had probably failed. But all my arguments fell on deaf ears.
Three months went by slowly and painfully and by the fourth month, as my Tinnitus condition became worse than ever, I visited my doctor. He apologized in a very formal and polite manner and said he was sorry that the operation did not work, and that he could not help me.

Out of sheer desperation, I purchased additional alternative medicine books on Tinnitus and was amazed to find out that most, if not all of them, offered partial dietary advice along with vitamins and special herbal supplements. These approaches don't work either! I know because I tried them all, and I still suffered from severe Tinnitus.

Not the kind of person who readily gives up, I decided enough was enough. If the dozen or so doctors that I had seen couldn’t offer any help, I would find it on my own. Maybe it was frustration, or maybe it was a sense of self preservation that drove me forward on my quest to treat my own Tinnitus, but I was determined to find a cure for myself and the others like me – and guess what -- I did!

Sure, it took months of reading, studying and experimenting, but I finally found the right combination of treatments that have since eliminated the noise I hear in my ears. I’ve reclaimed my life and you can too!
After more than 12 years of diligent work and in depth research on a daily basis, after experiencing several eureka moments and after a long process of trial and error and dozens of interviews and self experiments, I applied my years of training to finally uncover the solution to Tinnitus. From all the truths and evidence, misconceptions and lies... the Tinnitus puzzle was finally solved. It took me more than a year to polish and refine my discovery and in the end, I applied it myself with great hopes and passion and to my sheer amazement it worked - after few weeks of following it.

It took me a few years with a lot of research to get where I am today. To know exactly what works and what doesn't. Yes, after desperate trial and error, countless rounds of useless treatments, disappointments and agony, a simple holistic system opened the door to my new and much brighter Tinnitus free life. I was also excited to see that my Tinnitus and other related symptoms (such as the minor hearing loss I had) had completely diminished. After years of suffering, I was finally free from Tinnitus!

Now, I’m no medical doctor and I can’t promise you that you will find instant relief from your Tinnitus symptoms. But, I do know that there is help out there. Through the years that have followed since my own battle with this horrendous condition, I have uncovered dozens of homeopathic remedies for treating and curing Tinnitus, and I’m going to share them all with you in the pages to come.
WHAT THIS BOOK IS ABOUT

This is not your standard book on Tinnitus. My guide goes beyond explaining what Tinnitus is (although I do that too). I've designed this book to be a road map to recovery, walking you through every stage of the disease from diagnosis and testing to traditional as well as holistic treatment, to help you find your own path toward the freedom from the noise that is disrupting – and ruining – your life.

I've been where you are, and that’s why I’ve written this book: to share what I've learned with other sufferers to help you overcome your own Tinnitus, and finally find relief from the constant buzzing, hissing, humming, swooshing, screeching, ringing and other sounds that are filling your head and disrupting your life.
HOW THIS BOOK IS ORGANIZED

I’ve organized this book in several sections, beginning with an introduction of the ear and how your hearing works. After all, if you don’t completely understand how your body is intended to function, how can you figure out how best to treat it when things go awry?

Next, I’ll explain to you what Tinnitus is, and what may be causing your symptoms. I’ll also offer some simple lifestyle changes that you can adopt in your daily routine to help relieve some of the noise you are hearing until you can find your own complete cure.

In section three, the guide will focus on the statistics of Tinnitus, and offer you a survey to take, to see the degree of your symptoms so that you can devise a better treatment plan.

Once you know what Tinnitus is; how it is caused and what type of Tinnitus you suffer from, it’s time to look at some basic treatment options that are available. This will help you get started on your recovery journey, while you learn more about diagnosis, triggers and more.
Some of the traditional and holistic treatments discussed in this section include:

- acupuncture
- vitamin & mineral therapies
- herbs
- laser treatments
- Tinnitus retraining
- ECT
- Maskers
- Drugs & Steroids
- Neuronomics
- DTM System
- Ear Candling
- Hydergine
- Hypnotherapy and Biofeedback

Of course, you can’t figure out the right treatment for Tinnitus until you have a solid diagnosis. So that's what we'll discuss in the next chapter: recognizing your symptoms; getting tested for Tinnitus; learning the
role emotions play in treatment and diagnosis; figuring out your individual symptom triggers; measuring the sounds you hear; and more.

As an added bonus, I have also included a section in the book to explain Tinnitus and the Emotional Brain. This section will discuss Phantom Perception; how Tinnitus affects the inner ear and your emotional brain.

Finally, in the last section of the book, I’ll outline my own 5-Step Holistic Plan to Getting Rid of Tinnitus called “From Noise to Silence.”

I consider this the most important section of the book since it gives you practical ways to stop the noise in your head once and for all. Here is just a sampling of what you’ll learn in the last section of the book:

**Step One:** How your diet can increase the severity of your symptoms, and how simple dietary changes and Vitamin supplements can actually decrease the noise levels you hear in your ears and head?

**Step Two:** How to use your immune system to better control (and even eliminate) your Tinnitus symptoms?

**Step Three:** A Powerful 4 Point Tinnitus Retraining Program

Step Five: Using Hypnotherapy to tune out your Tinnitus. This section includes a unique script for self hypnosis that has proved to decrease the volume, intensity and frequency of Tinnitus and it can help you relax and regain your inner peace as well.

While instituting the five step program, you’ll also learn what role stress plays in increasing your Tinnitus symptoms, and how to be more active in beating and combating stress in your life so that you can live without Tinnitus. Other important things you’ll learn include:

- how to use sleep and exercise to your advantage
- recognizing and eliminating harmful toxins from your environment
- reducing the impact loud noises will have on your treatment
- treating your Tinnitus using Habituation Therapy

WHY SETTLE FOR LESS THAN A CURE?

The odds are, you have heard it over and over again: there’s no treatment for Tinnitus - learn to live with it. I ask: Why? Just because today’s scientists haven’t yet found a “drug” that works to treat all types of Tinnitus, it doesn’t mean that there isn’t a way to stop those
symptoms and live noise free! Tinnitus affects one in ten people. Isn't it about time they find a relief? I say yes, and I’m going to show you how!

If you are ready to take back the control Tinnitus has taken from your life and experience a quieter and calmer existence, than keep reading: you are about to get started on the path toward a whole new life. Still skeptical? Keep reading anyway. After all, what do you have to lose but a little excess noise?
CHAPTER ONE:

HOW YOUR HEARING WORKS

Before we can even begin to discuss the causes of Tinnitus and how to get rid of it, you must first understand how your hearing works. So, let’s learn more about the workings of the ear...

Although we use our sense of hearing all day, every day, most of us take it for granted until there is a problem. Whether it’s the annoyance of a constantly ringing phone or a sweet whisper from a loved one, hearing is one of the most important ways we experience and interact with the world. Scientists are learning more and more about how the sounds that enter our ears are translated into information that we need to understand the world around us. The process by which sound is captured and funneled into our ears is simply mechanical - it is not a chemical process like the others that are related to our senses of sight, taste and smell. As we will see, each part of the ear has a job to do in collecting and transporting sound to the brain.
THE OUTER EAR

When we think of our ears, we generally think of the pinnae, which are the visible protrusions of our ears. Some of us may have large ears, others small, but they all serve the same function: to collect the sounds around us and transport them to the inner ear where they are sent as signals to the brain. The shape of our ears is ingenious—the curves of the outer ear, which are made up of cartilage, are not simply decorative, they serve to funnel the sounds in the atmosphere into the ear canal. The ear is actually much more than what is visible to the eye.

How sound is Made and Carried

To understand the function of the ears, we should take a moment to discuss how sound is created and how it travels. Sound waves are the result of vibrations that travel through our atmosphere - basically the bumping together of particles of matter through the collision of air particles.

Wherever the vibration is made, the sound will be carried, even in water or in earth.
The speed of the vibrations created by an object which is emitting sound, make a difference in the pitch of the sound we are able to hear. A high pitched sound is the result of very quick vibrations; and a low pitched sound, conversely, is the effect of slow vibrations. These sound waves are picked up by the outer ear and channeled into the interior components of your ear.

*Designed for Hearing*

Humans have pinnae (the outermost part of the ear) which point forward and have a myriad of curves that catch the sounds that are traveling all around us. Unlike other mammals, human beings cannot move their ears in the direction of sounds. If you have a dog, you have probably seen him perk up his ears and turn them to the side and forward again, attempting to find the source of the noise. Predatory animals as well as their prey use their ears to hunt and to hide, respectively. Human ears are positioned more for communication than for hunting, but you can augment your ability to hear by cupping your hand behind your ear, and this channelizes the sound more effectively. If you have larger than average ears, take heart - you actually hear better than your smaller eared friends, because your large pinnae can collect more sound than smaller ones!

Our brains are able to interpret the distance and placement of sound because of the way the sounds reach our outer ears. A sound that is
coming from the front of you will be collected and channeled, and then translated differently from those sounds that are coming from behind your back. You are able to place the sound horizontally - whether it is coming from the left or right because the sound waves will actually reach the respective ear faster. If your son is calling you and he is standing to your left, the vibrations he is creating will hit your left ear before they make it to the right. The information that gets transferred to the brain will alert you that the sound is coming from your left side.

The Ear Canal

Measuring roughly an inch in length and about ¼ inch in diameter, the ear canal carries the sound that is captured by the pinnae into the middle ear - to the eardrum. The canal is funnel shaped and sloped to ensure that no water is collected close to the eardrum under normal conditions. It is sized and shaped for maximum efficiency in delivering sound to the middle and the inner ear, and also to keep the area free from infection.

Earwax

Earwax, also known as cerumen, is produced in the outer part of the ear canal to lubricate and clean the interior part of the canal. Earwax should not cause problems for most people as it helps to rid the ear canal from dead skin cells. Earwax also defends the ear against dirt and
infection. Many people resort to using cotton swabs to remove earwax and actually end up doing more harm than good when they push the wax back into the ear canal towards the eardrum. When it comes to wax, a hand off approach is best and you should never put anything into the ear canal.

THE MIDDLE EAR

The Eardrum

As sound waves travel down the ear canal, they will quickly move through the outer ear and hit what we generally refer to as the eardrum. This tympanic membrane separates the outer ear from the middle ear and serves as the sensory component of the ear. This tiny membrane is not even half inch in size, but it is constantly working and responding to the many air fluctuations that occur in the atmosphere. Every sound wave that enters the ear canal through the outer ear will hit the ear drum and cause a reaction.

The stiff and rigid piece of skin will be pushed back and forth by the air particles of sound in relation to their pitch, volume and even distance. A high pitched sound will vibrate the tympanic membrane very quickly; a loud sound will vibrate it for longer intervals to represent the intensity
of sound. The eardrum is the beginning of the interpretation of sound waves into information for the brain to process.

In situations where there are competing levels of sound, the eardrum will help you to focus and concentrate your hearing on higher pitched sounds, and essentially drown out the louder and lower pitched sounds. This would come into play if you are on the playground with your kids and you are trying to carry on a conversation with your friend. Your eardrum helps you zero in on what your friend is saying and relegate the playground noise to the background. When auditory conditions are less than optimal, the eardrum will actually protect you from loud and harmful noises. A very loud low pitched sound will cause the tympanic muscle to contract sharply and not vibrate in its normal way, thus lessening the amount of sound that will travel to the brain.

*The Ossicles*

So far, sound waves have traveled through the air. First, a sound was collected by the pinnae and pushed into the ear canal; second, the eardrum reacted to that sound by vibrating according to the pitch and volume. The next section of the middle ear will do the work of amplifying that sound so that when it reaches the fluid of the inner ear, it can stand up to the increased inertia that awaits it. The Ossicles are a series of bones that react in conjunction with the vibrations created by the eardrum. If you can imagine a set of dominoes - with each one
tipping over the next, you will have some idea of how these bones work in conjunction with each other to transfer the vibrations from the ear drum into the inner ear.

As we have already discovered, the middle ear is an air filled space that is occupied by three tiny bones: the malleus, the incus and the stapes. Commonly referred to as the hammer, the anvil and the stirrup respectively, these bones, although very small, do the big job of moving sounds into the inner ear. When the eardrum vibrates, it transfers that energy to the malleus, which is actually connected to the eardrum. The malleus moves back and forth, side to side; and this in turn moves the next attached bone, the incus. The incus takes that energy and transfers it to the stapes. The stapes is positioned to impact the cochlea, which make up the fluid filled chamber of the inner ear.

Amplification takes place in the middle ear because the bones are perfectly designed to work together, and their interaction increases the forces of pressure on the cochlea as they bump up against each other. The size of the eardrum in comparison to the size of the bones helps this amplification process. Because the eardrum is larger than the Ossicles, the energy can be actually multiplied as it is conducted through these bones. The smaller parts sustain a greater impact, and therefore pass on more energy to the next component than the eardrum would on its own.
The Eustachian Tube

Anyone who has ever suffered a head cold knows that the ears are connected to the nose, and this connection occurs in the middle ear through the Eustachian tube. A small tube leads from the middle ear to the Nasopharynx. The tube supplies the counter-pressure of air to the eardrum, making the air pressure on both sides of the small drum equal. It also helps to clear the middle ear of congestion and in doing so, prevents any infection. If you have felt the sensation of popping in your ear, it is the effect of air pressure on the Eustachian tube versus the exterior pressure of the ear canal.

When you yawn, chew or swallow, you usually hear a small clicking sound in the ear - this is the pressure equalizing between the Eustachian Tube and the ear canal. If you have flown in a plane, you may have experienced popping and clogging of your ears - maybe you chewed gum or tried to yawn to rid yourself of this annoying sensation. You were letting the interior pressure that is provided by the Eustachian tube through the Nasopharynx to rise to an equal level with the exterior pressure that was passing into the ear canal. If this cannot be achieved, as is the case with a person who flies when he or she has a cold or sinus congestion, it can be very painful and can even cause the eardrum to burst.
THE INNER EAR

As we continue our journey into the ear, let’s revisit what we have already discussed. Sounds created by compression and rarefaction in the atmosphere are collected by our ears - namely the pinnae or external protrusion of the outer ear. This sound travels down the funnel-like ear canal until it reaches the ear drum. This tympanic membrane vibrates in response to the moving air particles that make up sounds waves. This vibration puts into motion the Ossicles - the tiny bone structures that transfers the mechanical energy of sound and amplifies it as it passes through each in turn: the malleus, the incus, and the stapes. Once the stapes receives the amplified vibrations, it impacts the cochlea and brings us to the inner ear.

Up to this point, all sound has been traveling through air. But at the inner ear, sound will encounter fluid for the first time and the way in which it travels to the brain changes dramatically. The inner ear is commonly referred to as the labyrinth due to the shell-like cochlea that makes up the space. Much of the work of hearing is done in the inner ear, and it is the last stop for sounds as they make their way to the brain in the form of information.
The scala tympani, the scala vestibuli, and the scala media are the tubes in the inner ear, and they are curved together into a shape that appears like the shell of a snail. These tubes are separated by extremely thin membranes that move the sound along the tubes, and move the pressure that is created when the stapes moves against the cochlea as a whole. The basilar membrane is made up of tiny hair cells – there are tens of thousands of them, which react to differing frequencies in the sound that is being pushed through the cochlea. The hair cells identify resonant frequencies in the sound waves that are transferred through the cochlea. These create electrical impulses that are transported to the brain and interpreted as recognizable sounds.

Scientists are still working on a thorough understanding of just how the brain is able to interpret these electrical pulses into language, music, or just plain noise. The ear is a complicated and sophisticated system, which takes an external stimulus and uses mechanical energy to transfer that information to the brain. As we learn more and more about how we hear and what we hear, the ear appears even more remarkable!

MAINTAINING BALANCE
There is more going on in the ear than just hearing, though that one activity is amazing in itself. The ear is part of the body's mechanism of balance that involves sight, input from the muscles, and the vestibular system of the inner ear. The vestibular system is the central command of balance in our bodies, and if things aren't functioning correctly in this small part of the inner ear, it can mean big trouble for our whole body. It's hard to imagine that an area so tiny could control so much! But, the inner ear is responsible not only for hearing, but also for maintaining balance.

*The vestibular system*

There are three semi-circular canals in the inner ear and these, along with the utricle and the saccule make up the vestibular system, which controls balance and gives us a sense of our body's position.

If you have ever spun around to make yourself dizzy (or watched someone else do it), you were witnessing this system at work. The fluid in the semi-circular canals act in response to our movements: in this case the spinning. When you stopped spinning, the fluid kept spinning for a moment or two, or longer. If you were spinning for a long time, it gave you that “off-balance” feeling. You essentially played a trick on your vestibular system to make yourself dizzy, and your muscles responded to that trick by functioning incorrectly, and this is what made it difficult for you to stand or walk. Basically, your vestibular system
was giving your brain the signal that you were still spinning, when in fact, you had stopped.

Let’s take a closer look at what happens in the inner ear with regards to balance to get a better understanding of the importance of this function.

The utricle and saccule determine the position of your head all the time, every moment of your day. As you turn your head from side to side, these two fluid filled cavities send signals to the rest of your body to adjust and adapt to the changes. We are designed to keep the head in line with the body, and these two do the work. They contain not only fluid, but also tiny hairs that are suspended in a jelly like substance as well as crystals or chalky substances that interacts with the hairs in the utricle and saccule. These crystals get pushed up against the hairs that are dependent on the movement perceived by the inner ear.

The three semi-circular canals serve much the same purpose, but they sense movement, rather than the head position. They are in perpendicular position to each other so that they are able to detect all types of movements, and send the necessary signals to the brain to maintain balance throughout the body. They also contain hair cells that act in response to the movement, and generate the information that is
carried to the brain, and then to the muscles in your body to keep you from feeling dizzy.

The Other components

The inner ear is like home base for the system of balance we rely on every day, often without even thinking about it. The other components that work in conjunction with the inner ear are also essential to maintain balance and interpret the signals that originate in the inner ear.

Sight is an important factor in maintaining balance. Signals the inner ear is sending about head positioning and movement will generally be aligned with the signals your eyes are sending. It is primarily because of this that we see what we feel. In some situations however, there is a mismatch, and this can leave you feeling queasy and nauseous, or it can also give you a terrible headache. Consider the plight of the child with car-sickness. Sitting in a car may not look like movement in the way we normally think about it. In other words, the child isn’t running or spinning, or playing, but his body, particularly the inner ear, is sending signals that he is in movement. If he is looking down and reading while riding in the car, his eyes will signal that he is still, but his vestibular system is responding to every curve in the road. The sight doesn’t match the feeling and he will end up not feeling so good.
The cerebellum is the portion of the brain that is connected to the vestibular nerve, which transmits signals regarding balance to the brain. When a sudden loss of balance (such as missing a step on your way upstairs or stubbing your toe) occurs, the brain gets an instant message that there is danger to the system of balance. Involuntarily, you will move an arm or shift your weight to the other foot to keep your balance and avoid a fall. This is your vestibular system at work.

Your muscles are the final component in the system and when everything is working correctly, they receive the information from the brain to keep your body in line. Picture a child walking along a wall or a beam: the child will effortlessly know when to put a hand out to the side or how to correct his/her posture to keep balance and stay on the line. Now, picture an inebriated adult trying to pass a sobriety test. The person’s brain function is impaired by alcohol and the messages from the brain to the muscles are slow and fuzzy. No matter how much he/she tries, the person will be unable to walk a straight line by putting one foot in front of the other.
THE VESTIBULOCOCHLEAR NERVE

The nerve that takes the information, both auditory (sound) and vestibular (balance) to the brain is known as the Vestibulocochlear nerve. One of the 12 cranial nerves, this sensory nerve is responsible for the transmission of information about the sounds that enter the ear canal and the movement of the head or body.

Just imagine yourself on an amusement park ride, such as a roller coaster. Your ears are in overdrive as the sounds of the screams around you, and maybe your own, are entering your ears. At the same time, your vestibular system is working hard to make sense of all the input it is receiving in terms of both head position and movement. Your eyes are probably sending mixed signals to your cerebellum, and you will feel that jump in your stomach when you are going over each hill on the coaster. Your Vestibulocochlear nerve is taking all this information and passing it on to your brain, which in turn is making sense of it all and sending its own information to the muscles to compensate for all the competing signals it has been given.
HOW THINGS CAN GO WRONG

We've talked a lot about how your ears work, how they allow you to collect and interpret sound, and even how the fluid in your ears can help you maintain balance. Most of this happens every day, every minute of every day, and without much notice. You may remember certain sounds you have heard, your baby’s cry, your mother’s voice on the phone, or your children’s laughter, but you won’t be thinking about the mechanics of hearing or balance too much, unless there is something wrong and only when it is not working as it should.

There are many factors that influence your ability to hear and hear well, and your sense of balance. Even the smallest thing, like an overabundance of earwax, can undermine your hearing. Of course, there are also serious hearing and balance problems that need to be treated medically. Let’s take a look at the most common hearing and balance difficulties.

Swimmer’s Ear

This has been named swimmer’s ear because it generally occurs when the ear has been exposed to water or humidity for an extended period of time. This condition is also known as acute external otitis because it is an infection of the ear canal. When the ears are frequently submersed
in water, the production of cerumen, or earwax and its acidity (that normally protects the canal) are diminished. This leaves the ear canal vulnerable to bacterial infection.

While swimmer’s ear is not generally serious, it should be treated by a physician to avoid a chronic condition or even cellulitis, which is a deep tissue infection that can become very serious. A person with swimmer’s ear will experience pain, especially when the outer ear (pinnae) is touched or moved. A reduction in hearing is normal as the sufferer will hear sounds in a muffled way, because the sound funneling capability of the ear canal is diminished. Usually treated with a topical ear drop, swimmer’s ear is a common, but usually not severe, condition of the ears.

_Earwax Impaction_

One of the most common causes of a decrease in hearing is the overabundance of ear wax in the ear canal. Some people just produce more earwax (a condition that is medically known as cerumen) than others and their ears do not easily rid themselves of the skin cells and other foreign matter that the earwax collects. Also, many people mistakenly use cotton swabs in an effort to remove troublesome earwax, unknowingly making the problem worse by pushing the wax back into the canal to the ear drum. Your doctor will tell you that you should never put anything into the ear canal. You should rather use a
A washcloth on the external portion of the ear. This should be enough to keep your ears clean.

There are many over-the-counter remedies that can help in earwax removal. Most of them depend on a combination of peroxides and oils to soften and remove the earwax slowly. If the problem becomes too difficult to handle, a doctor should be consulted to thoroughly remove the impacted wax. Many people with this problem don’t even realize that their hearing has been impaired by it until they have the wax removed.

**Ear Infection**

Otitis Media, or a middle ear infection, seems to be part of childhood, and indeed, this is one of the most common childhood illnesses. The National Institute on Deafness and Other Communication Disorders estimates that three out of four children have had at least one ear infection by the age of three. Untreated, ear infections can lead to permanent hearing loss. Many children who suffer from chronic ear infections will experience some loss of hearing. The first line of defense against ear infection will be the use of antibiotic. When a child either becomes resistant to the medication or simply continues to suffer with ear infections regardless of treatment, a myringotomy is performed. This procedure, done under general anesthesia, involves the placement
of drainage tubes in the ear canal that remove the fluid buildup associated with frequent ear infections.

Middle ear infections are rarely a problem for adults, but they can still happen. This treatable illness should not lead to long-term hearing loss if it is diagnosed on time and treated appropriately.

*Meniere’s Disease*

A serious condition of the inner ear that affects both hearing and balance, Meniere’s Disease affects about half a million people in the United States. Commonly attributed to an imbalance in the fluid in the inner ear, which is responsible for hearing and to maintain balance, this disease is most common in middle aged people. The main symptoms of Meniere’s Disease are vertigo, loss of hearing, Tinnitus and aural fullness.

Vertigo is the term for the sudden feeling of a loss of balance that is inconsistent with your actual surroundings. Tinnitus (which we will revisit in the next section) is the sensation of ringing in the ears. Aural fullness refers to a blocked feeling in the ear canal. With Meniere’s Disease, the symptoms are generally one-sided in respect to the hearing problems. The disease can cause lifestyle complications as the sufferer would be battling hearing loss and dizziness. It also shares some
symptoms with other more serious conditions such as high blood pressure, or heart disease, and so a doctor should be consulted to rule out other serious conditions and to treat the illness.

Common treatments for Meniere’s Disease include anti-nausea medications and diuretics, as well as lifestyle changes such as reducing salt intake and avoiding caffeine. In severe cases, surgery may be the only option to regain balance.

Tinnitus

Of course Tinnitus is the reason why you’re reading his book, so let’s take a quick peek at the condition. Commonly experienced as a ringing in the ears, Tinnitus is a condition that affects many people, and the causes can vary from something as simple as ear wax blockage or stress, to the serious condition of atherosclerosis or hardening of the arteries. A person with Tinnitus will complain of ringing, whistling, buzzing or other persistent noise, in the absence of a source of this noise. For some people it is a constant sound, for others it comes in short spurts. In either case, it is an annoyance and can be a signal of underlying problems in the ear or elsewhere. Subjective Tinnitus is the condition where only the person suffering with the condition can hear the sounds; and objective Tinnitus can be heard by a doctor when examining a patient.
Some of the causes of Tinnitus include:

- Earwax buildup
- Age related hearing loss
- Extended exposure to loud noises
- Inner ear damage
- The presence of tumors in the head and neck
- High blood pressure
- Hardened arteries
- Use of some medications such as antibiotics and diuretics as well as aspirin

Tinnitus can develop in people of all ages, but is most common in men over the age of 65. You are also at risk of developing the condition if you have been repeatedly exposed to high noise levels over a period of time, such as working on a construction site without ear protection.

There are few medications that can safely and effectively treat Tinnitus - lifestyle changes and ear wax removals are good first steps toward alleviating the symptoms of Tinnitus. Changes in medication or addressing such issues as high blood pressure may help, as well as a thorough cleaning (by your doctor) of the ear canal. Hearing aids may
be of assistance, as well as white noise machines that help to mask the constant noise occurring in the ears. Doctors have found that certain anti-depressants may help with Tinnitus, but the side effects make them a last resort. Prevention may be the best defense against Tinnitus, of course, if you don’t have it already. Protecting the ears from loud noise, whether you are using the lawnmower or going to a concert, will go a long way toward ensuring your auditory health in the future. Keeping your cardiovascular system healthy is another indirect way to protect yourself against a myriad of illnesses, even those that are not directly associated with the heart.

The Amazing Ear

From the outer ear to the inner ear, this small sensory organ does a big job, and one we usually take for granted as long as everything is working as it should. On taking a closer look however, it should amaze us when we find just how perfectly and ingeniously our ears really function. As you are reading this, your ears are responding to the sound waves in the air around you - maybe you have the radio on and music is playing, or maybe someone in your family is talking on the phone. You are able to make sense of that input even as you are able to concentrate on reading this article.

Your ears collect sound and transfer it as mechanical energy to the brain, where it is translated and understood as language, music and
sound. You are able to tell the difference between people's voices and even tell if your best friend has a cold when you are talking to her on the phone. The human ear is an amazing organ that is able to control both sound and balance and keep the entire body on an even footing.
CHAPTER TWO:
EVERYTHING YOU NEED TO KNOW
ABOUT TINNITUS

If you suffer with Tinnitus, you're not alone. Nearly 66 million people in the U.S. alone will experience some degree of Tinnitus in their lifetime. For most, the sudden onset of noise in their ears will go away relatively quickly. Unfortunately for one in 10 people, it will not. If you are indeed one of the unlucky ones who find the noise in your head continuing to grow worse, you will need to learn more about this crazy condition. You will need to know why this buzzing and ringing in your ears appear out of nowhere and drives you crazy day and night without end.

WHAT IS THIS NOISE IN MY HEAD?

To truly understand Tinnitus, you must understand how the ear works. That’s why we took so much time to discuss your hearing in the last chapter. Here are the basics: sound is carried though the ears like a moving wave. When this wave hits the eardrum, it makes it and the tiny bones throughout the ear vibrate. These vibrations create sound. If
something interferes with normal vibrations, the brain may think it hears sound when it doesn’t. This is Tinnitus.

A lot of things can cause this breakdown between your ear and your head, but for now, we’re only going to talk about the three main causes of Tinnitus:

1. **Brain Lesions**

Now before you panic, it is important to understand that the brain lesions we are talking about here are not deadly. These lesions just cause Tinnitus. Such brain lesions do not (and will not) cause other malfunctions within your body.

It has been estimated that more than 90 percent of people suffering from central Tinnitus -- which originates from the brain and not the ear -- will have side to side perfusion asymmetries involving the medial temporal lobe system when scanned by advanced SPECT imaging.

Most neuroscientists believe that it is this area of the brain where memory and stress meet, and this is the area that is probably linking emotions and the memory – including the memory of sound. The key here is to remember that Tinnitus is simply the re-running of sound
memories that are already heard in an unending loop. Therefore, when the emotion linked to a certain sound is felt, the patient will hear the sound again, even if it doesn’t exist at the moment. By breaking the emotional tie of Tinnitus, some researchers believe that the sufferer can stop the noise altogether. We will discuss a variety of ways you can break both the emotional Tinnitus tie and the memory loop. But first, there’s more to learn about Tinnitus.

2. Damage to the Cochlea

As we’ve already discussed, the Cochlea is the small part of the inner ear that looks a lot like the shell of a snail. Although small, it is essential because it helps us hear properly. Within this shell-like tissue are tiny sensory hairs that tell the brain when sound is heard. Any damage at all to these miniature sound detectors can severely affect your hearing. Something as simple as exposure to a one-time loud sound (like gunfire or an explosion) or even sitting at a loud concert for a few hours can cause temporary hearing problems. But sometimes, if the noise damage is more severe, it can cause the tiny Cochlea hairs to bend or even break, thus permanently damaging them.

When Tinnitus is caused by excessive noise, it is due to the breakage of these sensory hairs, which results in a misfiring of electrical impulses that randomly tell the brain that sound is being heard when it isn’t.
3. Stress

We all know that stress can play havoc with our hearts, immune systems and other vital organs. But did you know that it is also a main culprit that causes Tinnitus?

The Hypothalamus controls many systems in your body, including the pituitary gland, which oversees the endocrine organs and the autonomic nervous system. One of the main jobs of the Hypothalamus is to produce chemicals that are needed by the body to function normally. Unfortunately, it is very susceptible to stress, shock and grief, and these causes may interfere with its chemical production. When this happens, there may be a breakdown in communication between the ear and the brain, causing the brain to respond as if sound has been heard, even when all is quiet. This is Tinnitus.
One day you seem to be hearing normally, and the next you experience an uncanny buzzing, pounding or screeching in your ear that only you can hear. At first you may think that you are the only one on planet Earth hearing these things. But, you’re not! You’re in good company. It has been estimated that one in every 10 people is walking around hearing similar Tinnitus noises, and some of them are quite famous including the former President Ronald Reagan; the famed singer Barbara Streisand and actors Peter Townsend, William Shatner and Tony Randall.

Want to learn more about the others out there who are suffering from Tinnitus? Here are a few facts that have been compiled by researchers at the Oregon Health Sciences University:

- 42% of Tinnitus sufferers can link no direct cause to their symptoms
- 51% of sufferers noticed their Tinnitus coming on gradually, while 39% reported a sudden onset of symptoms
- 53% of sufferers only report hearing one noise; while the rest may hear three or more noises at a time
• 44% of sufferers report sleeping problems, at least on some nights due to the noises they constantly hear

• Only 2% of Tinnitus sufferers report a reduction in noise without any type of therapy

DETERMINING YOUR TIN NITUS TYPE

There are many different types of Tinnitus, and your treatment can depend a great deal on which type you have. For instance, while most sufferers actually hear noise that is not present, some people can actually experience an exaggeration of both external noises in their environment, as well as internal noises that their body constantly makes.

To see what type of Tinnitus you may have, let’s take a look at some of this affliction’s main categories:

Objective Tinnitus

You may not be aware of it, but your body makes a lot of noise throughout the day. Your heart thumps, your lungs extract, and your arteries pulsate among other things. Although these sounds are
constant, few of us ever notice them. So, if our bodies are so noisy, why don’t we hear what’s going on? There are several reasons for this. Firstly, most of our organs are insulated by protective tissues, muscles and skin, and because of this the noise is kept down. But, the most important reason why we don’t normally hear our body at work is because our brain filters out (or simply ignores) these normal noises. Until they change, thus signaling trouble, the brain simply doesn’t let us “hear” the noises within. That’s a good thing too, since they would likely drive us mad if we did notice every sound our internal organs made.

There are people, however, who can hear the sounds within their bodies. This is called objective Tinnitus.

For those with objective Tinnitus, these internal bodily noises become more acute (and noticeable), causing hearing distress, and it seems that there is no way to get away from the constant noise.

One way to better understand objective Tinnitus is to become aware of the most common sound culprits within the human body:

1. The Circulatory System – one of the most common causes of objective Tinnitus is the flow of blood through larger
vessels in the head or even small arteries in the ear, or those that lead to the ear.

2. The Heart – the heart can beat quite loudly at times, so people with an acute awareness of sound may easily pick up on the noise it makes.

3. The Skeleton – you may have thought that your skeleton remains relatively silent throughout the day, but that’s wrong! Next to circulation, the skeleton (usually the bones in the jaw, neck and back) is the biggest source of objective Tinnitus. The most common cause includes some type of injury, deterioration or arthritis. Of course some people report clicking joints in other parts of the body as well, but in Tinnitus, what affects most are the ones that are nearest to the head and ears.

4. The Soft Palate. While muscles rarely cause any type of Tinnitus noise, the contraction of the soft palate has been reported to be a source of Objective Tinnitus.

Subjective Tinnitus

All-too-often, a patient describes the sounds he/she hears only to be told that it is merely in the head. When no outer or internal noises can be found to be the root cause of a patient’s Tinnitus, it is considered subjective. This in no way means that the patient isn’t
hearing these sounds, or that they are only imagined. The sounds of Tinnitus are real. It’s just that, sometimes, no one else can hear them, or is able to find a reason for them.

Whether a reason can be found for the malfunction or cannot be found, it does not mean that the brain is not recording or replaying previously heard sounds in the sufferer’s head. As a matter of fact, most subjective Tinnitus is eventually linked to some sort of malfunction within the body, including the auditory center and the nervous system. When this happens, the malfunctioning organ or system may actually send sound impulses to the brain, telling it that a sound has been heard, even when it hasn’t. This can cause confusion with the medical community regarding what is really being heard, and what sounds are only perceived.

Another source for subjective Tinnitus is all those unknown internal sounds that originate deep within the body itself. If no one else has ever reported hearing a certain sound before, it may be considered subjective, when in reality, it is actually objective. This is because it is indeed a real sound that is being made by the body, and one that only the patient can hear.
Stereo vs. Mono Tinnitus

Tinnitus presents itself in a lot of different ways, but the most common are in relation to how loud the noise that the person hears is (their frequency); how often they are heard (their duration); and how many are heard. While the majority of Tinnitus sufferers report only hearing a single noise at a time, as many as 26% report hearing two noises and 6% can hear three or more at a given time.

In addition, sufferers may hear noises in one or both the ears at a time; or the noise may move from one ear to another in a type of stereo effect. In rarer cases, it has been noted that some sufferers experience the sensation of noise without really hearing it per se.

These types of stereo Tinnitus may be even more severe if such noises feature an especially high frequency on an ongoing basis.

Significant vs. Insignificant Tinnitus

It can be especially difficult to determine how significant an individual’s Tinnitus is due to the simple fact that different people react to the noise created by the disorder in different ways. While one person may be able to tolerate several different noises at a lower frequency, others hearing just one continuous buzz at a higher volume may find the disorder disabling.
Generally speaking, if the Tinnitus is more sporadic, despite its volume and frequency, the patient will be able to deal with its symptoms better. Many sufferers admit that it isn't necessarily the loudness of the noise that they find so distressing, but the constant nature of it. “If only I could get a break,” many report, “I could handle it.”

For diagnosis purposes, insignificant Tinnitus is simply Tinnitus that is experienced occasionally, and the patient is able to “live with” it during an attack. Significant Tinnitus on the other hand is considered more debilitating, and can cause other serious problems such as depression, immune system deficiency and even hearing loss.

THE NOISES YOU HEAR

Tinnitus can be experienced by hearing any type of ongoing noise, but the most common include:

- Ringing Sounds. The most common Tinnitus symptom, which is ringing in the ears, usually refers to a constant shrill telephone-like ring that patients hear.