

The Whole Person Tinnitus Relief Program

This effective tinnitus program is from the book by
Murray Grossan,
Stressed? Anxiety? Your Cure is in the Mirror.

The key to tinnitus relief is to engage the entire person in a program that changes the ringing in the ear circuits. In order to engage the whole person, the program consists of:

- **This Book**
- **The Ear Ringing Relief App**
- **The Grossan Tinnitus Caps**

DrGrossan's Tinnitus Caps are available at
www.drgrossantinnitus.com.
These products are enhanced by being in combination.

grossan

The Whole Person Tinnitus Relief Program WPTRP

By
Murray Grossan M.D.

Board Certified Otolaryngologist
Specializing in Tinnitus Therapy

Table of Contents

Chapter One

- Why the Whole Person Tinnitus Relief Program Works
 - Why this Program is Effective
 - Don't Just Learn to Live With It
 - Kinds of Tinnitus
 - How We Hear
 - Actions for Tinnitus
 - Summary

Chapter Two

- What Affects Tinnitus
 - Stress Does Not Cause Tinnitus
 - How Tinnitus Causes Stress
 - Reducing Stress Chemistry
 - Changing Your Brain
 - Cognition vs Knowing
 - Measure Tinnitus
 - Summary

Chapter Three

- Tinnitus From Noise and Illness
 - What Causes Tinnitus
 - Hypertension Diabetes
 - Trauma
 - Meniere's Disease
 - Otosclerosis
 - Noise – Rock Music and Industrial
 - Objective Tinnitus
 - Improving Sleep
 - Summary

Chapter Four

- Somatosensory Tinnitus
 - Whiplash and Neck
 - The Jaw
 - Therapy
 - Summary

Chapter Five

Therapies That Work

Therapies Combined

Automatic Therapy

Masking – Distraction

Using the Ear Ringing Relief App

Actions for Tinnitus Relief

Your Fresh Brain

Making Good Body Chemistry

Current Therapies

Good Sleep

Prevent Tinnitus

Healing Tinnitus

Summary

References

Chapter One | Why the Whole Person Tinnitus Relief Program Works

Why this Program is Effective

Tinnitus is *not* a sound generated by your ear, but rather the perception of a sound when no actual sound is present. It is caused by a series of undesirable connections, called neural circuits, that ultimately results in tinnitus. For example, if you cut the hearing nerve or remove the ear, someone could still develop tinnitus. If someone has tinnitus, and the hearing nerve is cut, sometimes the tinnitus will stop; other times, it continues or gets worse. In other words, tinnitus is in the circuits deep in your head.

For those who suffer from the condition, tinnitus can often have a devastating affect on quality of life, as it leads to severe stress and anxiety in addition to it's physical affects. Tinnitus is often considered to be a subjective phenomenon, as in some cases, the sound cannot be accurately measured. While little may be known about the cause of tinnitus, do not be fooled into thinking that nothing can be done to diminish its affects on you.

In order to heal tinnitus, one must use an approach that has been proven to work. There are programs that give significant relief to tinnitus. These programs include changing the way the brain interprets the sound, changing the anatomy of the circuits of tinnitus, and supplying elements known to aid hearing function (see www.drgrossantinnitus.com). Publications from the top tinnitus centers show that taking action on all the aspects that make up tinnitus is effective.

In the Whole Person Tinnitus Relief Program (WPTRP), the science of neuroplasticity is applied. In neuroplasticity, a “bad” or missing brain function is corrected by daily actions that build new circuits. These daily actions can recover lost speech, lost function of a hand, and even lost memories. Applying this program to tinnitus is actually much simpler and easier than changing brain functions to recover lost speech. My patients have benefitted from the program, and I believe you will, too.

Do Not Just Learn to Live with It!

“Learn to live with it.” That advice is 100% wrong; my WPTRP has been proven successful for patients with tinnitus.

When I speak at an American Tinnitus Association meeting, there are always new persons attending who are upset, because their doctors told them that nothing could be done for their ringing in the ear symptoms. They were told to “just live with it.”

Nothing could be further from the truth! Whether from the Portland, Maastricht, or other leading tinnitus centers, therapies have been used and validated to relieve tinnitus symptoms. The methods they use will be demonstrated here, methods that work for their patients, as well as my own. You will learn *why* these actions heal the effects of tinnitus; by understanding the why, healing is accelerated.

The need to engage the Whole Person and bring the healing power of the mind into the process is not just for tinnitus. Today, antibiotics are not as effective as they once were, and getting well is not just about taking a pill. A sore throat, for example, is best cured through rest and relaxation, drinking tea, lemon, and honey, and visualizing getting well. Otherwise, the healing may be delayed or even fail. With antibiotics not as strong as they once were, using the Whole Person healing method and engaging the brain for healing may save your life.

Every day, a doctor sees a patient with a painful shoulder. He was given the recommended pill and was told to exercise, apply heat, and avoid straining the joint.

Two weeks later, Patient A says the pills worked fine – he did the exercises. Patient B says the pills didn't work – he forgot to do the exercises. Patient C says his shoulder is better – he forgot to get the pills, but he did the exercises.

Similarly, tinnitus relief requires more than just a pill to be relieved. You will learn why relaxed muscles are important, how sleep habits enter into the healing, and why changing your brain through neuroplasticity – for the better – is needed for tinnitus relief. The more you understand why, the better your brain is able to perform its function. Today, we know that the brain is most important for any healing.

What Kinds of Tinnitus Are There?

a. Objective Tinnitus. The doctor can hear the same sound and record it.

b. Subjective Tinnitus. The doctor cannot hear the same sound, and there are no objective means of demonstrating the sound.

c. Migraine Tinnitus. When a severe headache is accompanied by tinnitus.

d. Tinnitus from Muscles. Also known as Somatosensory Tinnitus (Chapter Three).

e. Tinnitus from Drug Toxicity. This can be temporary or permanent.

f. Tinnitus from Central Nervous System Changes. Such as concussion.

g. Metabolic Tinnitus. Related to diabetes, hypertension, or fluid pressure in the inner ear.

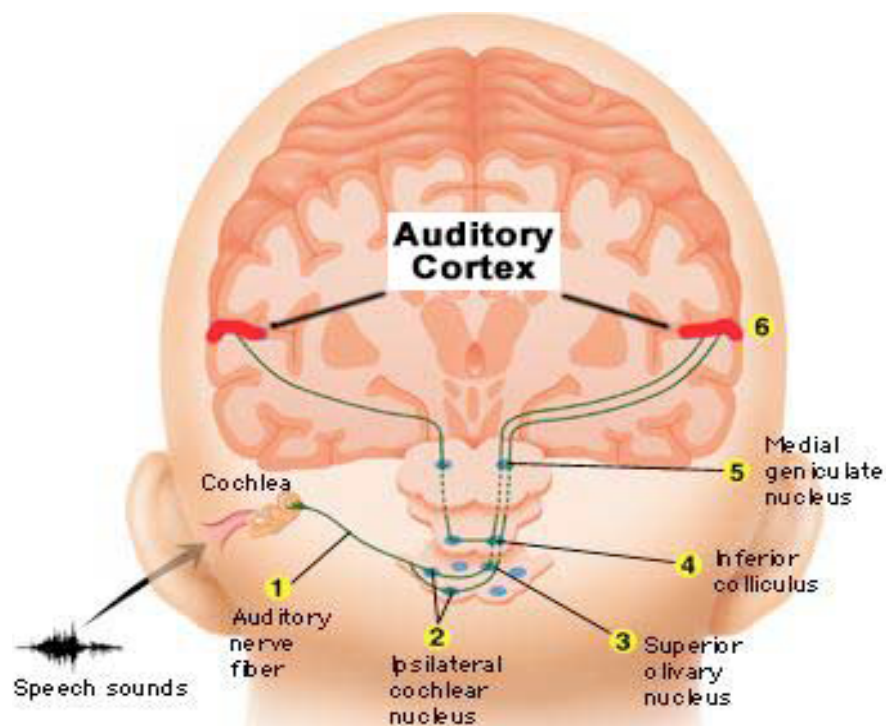
This is why an accurate diagnosis is vital: when you stop the excessive aspirin, the tinnitus may stop. When you correct the hypertension, the tinnitus goes away.

How Do We Hear?

Hearing consists of the ear canal, eardrum and three bones – malleus, incus and stapes. This conducts sound to the cochlea. The cochlea contains tiny hairs that make electricity based on fluid movement.

The auditory (or eighth nerve) conducts the impulses from the cochlea to the central nervous system. In this course, there are numerous connections with nerves from the face, neck, and jaw. There are connections to the areas of emotion, memory, autonomic nervous system, and stress. Finally, the impulse reaches the Auditory Cortex part of the brain where the impulses are translated into recognizable sound.

These connections explain why a certain sound can cause you to sweat – the autonomic nervous system. Or a certain sound makes you angry – the emotional or limbic system. These various connections show why the Whole Person program is needed to relieve tinnitus.



Anatomy of Hearing: Pathways to the Brain

What Will Work for My Tinnitus?

Fortunately, you don't need to learn how to spell neuroplasticity, cognition, or somatosensory. The actions you need to perform for healing are as simple as taking a breath and relaxing. However, you need to perform these actions often in order to change your neural circuits.

Actions That Help Tinnitus

You have built new circuits many times before. Your elementary school teacher spent the whole semester having you practice your handwriting, and now, you no longer scribble. You spent hours taking driving lessons, and now, you see the red light and automatically press the brakes. Your dentist finally convinced you of the importance of proper toothbrush use, and now, you spend a full two minutes brushing, instead of doing a ten second pass. In these and similar actions, you built up good neural pathways, connections.

It is important to note that you *did not* improve your handwriting by reading a book on penmanship. You *did not* improve your tennis by reading or watching a tennis movie. You accomplished those things with daily practice that built up new neural pathways.

Judy, age 30, had not been on a bicycle since high school. When her friends rented bikes for an outing, she “remembered” how to ride a bike; she had a neural pathway for this.

Throughout this book, I will be writing about using these actions to build the circuits that replace or repair the tinnitus circuits. Here is a summary of the actions that work for my patients, which I will explain in more detail later on. If you do these for ten minutes a day (or one minute each hour), you will develop good circuits with good chemistry.

1. **Breathe in** for four seconds.
2. **Breathe out** for six seconds. Relax as you exhale.
3. **Repeat.** Breathe in for four seconds and out six seconds.
4. **Watch** your face relax in a mirror as you keep repeating the breaths. Use the mirror to insure you relax fully.
5. **Watch** your jaw relax.
6. **Watch** your shoulders relax.
7. **Recall** before you had tinnitus. Recall using all five senses. You must use all five senses.

8. **Progressively relax** from your toes to top of your head.

9. **Do a finger drop.** Raise your index finger. Take three breaths on the above rhythm. After the third breath, drop your finger and let that be a signal for complete relaxation. Practice so that you learn to build up a conditioned reflex.

10. **Visualize** a place of healing. Throughout all of history, we have utilized healing places. Using guided visualization can produce a similar chemistry and experience.

These same actions work for any condition affected by stress, even for day-to-day anxieties such as a job interview. If you are already taking blood pressure medications, check your pressure daily, as performing these actions may lower your blood pressure and your medications may need to be adjusted.

What is the evidence that performing these actions changes the body chemistry? Persons who perform these activities lower their blood pressure as well as improve their diabetes and IBS. They have fewer headaches. Any pain or tinnitus is improved.

Walter, age 31, is a yoga teacher and a wellness instructor. He wanted to know why you needed to count four on inhalation and six on exhalation, which differed from his knowledge of “yoga breaths.”

“Walter,” I explained, “Tinnitus is like arithmetic. A tight jaw, plus no outside sounds, plus low level of magnesium, plus a newly formed neural pathway equals tinnitus. If you supply the magnesium and have outside masking sounds, then there is no tinnitus. Being fully relaxed as you breathe is fine; if you add the counting, you focus your brain on *you*. Your brain is no longer ruminating about the taxes that are overdue or the rent you forgot to pay. Counting is a non-stimulating brain activity that is non-judgmental. For the same reason, it works.”

Why the WPRTP Works - Summary:

- Do not learn to “just live with” your tinnitus!
- It is vitally important to know which form of tinnitus affects you, as that will guide your treatment program.
- A tinnitus action plan involving counted breathing and relaxation will help to relieve your symptoms.

Chapter Two | What Affects Tinnitus

Stress Does Not Cause Tinnitus!

All persons are stressed at some time, from running late to work to worrying about a partner. That does not cause tinnitus.

However, just as stress can make a scratch feel worse, it can also increase your blood pressure and exacerbate your headache (and tinnitus). Stress can result in poor sleep, symptomatic stomach issues, and a lower immunity to disease.

Stress can make any symptom (real or imaginary) worse. When **Jerry**, age 37, saw a black spot on his face, he thought of his friend recently diagnosed with melanoma and worried that it might be a cancer. He went on the Internet, and the more he read, the more stressed he became. By the time he saw the doctor a week later, he had all the symptoms of anxiety: sweating, increased pulse rate, and headaches controlled by aspirin. Finally, the doctor assured Jerry that it was just a minor pigment issue. His *lack of understanding (cognition)* had caused serious symptoms, even though the dark spot on his face was of little significance.

The Limbic and the Amygdala Systems

These are systems that humans have, that affect the emotional response to stimuli. Because the course of hearing pathways connects here, emotional makeup can have a significant affect on what you hear. Think of how the systems relax you when you hear relaxing music or perhaps excite you when you tap to jazz.

Why Does Tinnitus Cause Stress?

Some people can face strenuous situations – such as getting a bad cut requiring stitches, getting stuck in traffic, needing to give a speech – without getting stressed. Why is tinnitus different?

It is necessary to know that you are born with a fight/flight response to strange sounds. Our ancestors had an effective flight/fight response that developed out of survival, such as the incoming sounds of predators. This instinctual response to foreign sound still resides within each of us.

When you cut your foot, it may hurt, but your chemistry does not change. Even when you experience the extreme discomfort of tooth pain, you may not have an outpouring of stress chemicals. Yet, when you hear a strange sound, your body immediately recognizes it as a danger. Your chemistry changes; your body prepares to fight/flee the danger. When you suddenly have ringing in the ear, the response you inherited releases the stress chemicals. You are born to react this way to strange sounds; there are the circuits that need to be re-programmed.

It is the same when you hear scratching on your closed door at 3 AM. Until you realize it is your dog trying to come into bed with you, you may get that full instinctual stress response. On the other hand, if Browser does this nightly, when you awake you *know* – through *cognition* - that it is your dog, so there is no stress response. Though you throw your shoe at the door and curse the dog, you do not make the stress chemicals. Knowing about tinnitus removes the added symptoms that stress can cause.

More than the Ear

People commonly subject to excess noise, such as steel workers, machine operators and others, may develop hearing loss. With the hearing loss, they may have tinnitus, or in fact, they may not. Everyday, I see persons with identical hearing loss, yet Joe has tinnitus, and Bill does not.

There are several different scenarios that may occur with hearing loss and how it relates to tinnitus:

- a. Some patients may have normal hearing and develop tinnitus. Today, we understand why (see Somatosensory Tinnitus – Chapter Three).

- b. Some patients may have a growth requiring that the hearing nerve be removed. After the hearing nerve is removed (and thus no hearing capability in that ear), some develop tinnitus, and yet some do not.

- c. A patient says that when she chews or bites down, she gets tinnitus. Doctors show that she has a condition of the jaw joint, called Temporomandibular Joint Disorder (TMJ). When that is cleared, the tinnitus may go away, or it may remain. Why didn't it go away when the TMJ was corrected? Because certain neural circuits were built up. The cure? Create new neural circuits that replace these.

Jenny, age 29, was a clerk without noise exposure. Unfortunately, she developed a cranial growth that had to be removed. The doctor showed her the MRI that revealed a growth possibly infiltrating the eighth nerve and explained that it might be necessary to remove that nerve. He explained that if the nerve was removed, she would lose hearing in that ear, have dizziness, and might develop tinnitus. Jenny agreed to have the nerve removed but did not get tinnitus.

Why does one identical twin have tinnitus and the other one not?

This has to do with the fact that the central brain, or the Whole Person, is involved with tinnitus. There is some sort of sensitivity where the brain is aware of not hearing a certain sound, because the ear has lost inner ear cells that register a particular sound. For example, if you were to play a 4000 Hz sound (about middle C on the piano) Since the auditory cortex isn't hearing that sound, then sensations

are created in the absence of that sound. This is why playing a tone at 4,000 Hz can mask that sound from the brain.

Cognition

Persons who develop tinnitus may have great difficulty understanding what exactly the ringing is. Cognition Therapy for tinnitus explains what tinnitus is and what it is not. This takes away factors that cause symptoms, including poor sleep, fatigue, and stress. For example, when you play your tinnitus sound on your iPhone, you hear it, because it is simply a sound. It is not a tumor or a sign of weakness.

Biofeedback For Tinnitus

In golf or tennis, you have a coach to provide feedback if your grip is too tight. Biofeedback refers to instruments placed on your hand muscles that reflect to a large dial that registers the amount of electricity your muscles put out. If the dial provides feedback to you that you are too tight at 30, you loosen the grip until the dial says ten. Biofeedback using sensors has worked for years for tinnitus as well.

The mirror will be your healing tool to relieve stress every day, so that you are able to see which muscles are fully relaxed. So many illnesses are made worse by stress and anxiety reinforcement. Let us avoid these.

Being stressed...

- ...**lowers your immune factors** to infection and cancer.
- ...**exacerbates inflammation**, which is a disease.
- ...**exaggerates signs of aging**, such as facial lines and skin injuries.
- ...**ages you internally** as well.

Diseases caused by bad stress reactions include hypertension, anxiety, type 2 diabetes, as well as many gastrointestinal conditions and autoimmune diseases. The more the stress hormones infiltrate your body, the more you age. Here is how to avoid these outcomes.

Simple Facts That Reduce Stress Chemistry

- a. You cannot be stressed if **your muscles are relaxed**.
- b. You cannot be stressed if **you have counted breathing**.
- c. You cannot be stressed if **you are in a place of healing**, by using sensory imagination to be there.
- d. **You can control your muscles, your breathing, and your thoughts.**

Cognition: Who is Walking around at 4 AM?

In the middle of the night, you are awakened by sounds of someone walking around and closing the refrigerator. Although you are half-asleep, you recognize, through cognition, that this is your kid brother up for a snack. Without that cognition, you might have had a stress reaction. Through cognitive therapy, you can train your brain disregard the ringing in your ear as a danger, and thus reduce your stress. You engage your brain to know fully that the ringing in your ear is *not* a danger. Instead, you think of it as an itch.

Many people have severe stress reactions when tinnitus starts; the more the stress builds, the more prevalent the ringing becomes. These circuits get laid down and are difficult to change; it takes the Whole Person to change these strong circuits.

Neuroplasticity: Changing Your Brain

Patients who lose function in one part of the brain are often taught through therapy to regain the lost ability. For instance, those who have strokes and lose the ability to communicate can be taught to speak again by utilizing another part of the brain. This is called neuroplasticity, where a new part of the brain that formally was not used for the original function can accomplish it. In the example of the stroke patient, the MRI will show that an entirely new area of the brain is now completing the speech.

The WPTRP uses this neuroplasticity principle to develop new circuits that reduce tinnitus. By changing your brain, you find relief.

Biofeedback is a science that has been used in medicine for many decades. I was the first to publish findings related to utilizing biofeedback for tinnitus. Biofeedback simply means to demonstrate to a person a measurement. For instance, a patient who can be shown a value for the strength of his muscle at that moment can now lower or raise the output accordingly. Someone who is tense sees on a scale that his muscle is at 30 microvolts of electricity. With that information, his body then reduces that voltage down to two, no different than a runner who knows his speed can adjust his pace.

When you look in the mirror and see your face, jaw, and shoulders relax, the mirror provides feedback that these parts are loose. .

Geraldine, age 16, constantly slouched while sitting at her computer, much to the concern of her parents. They utilized a number of techniques to convince her to adjust – threats, rewards, reminders – but these all failed. Then, her brother set up a mirror that reflected Geraldine’s posture to her in real time. Now, she sits properly.

You can play your tinnitus sound from the Ear Ringing Relief app, reduce the volume, and then allow your body to reduce your tinnitus to match the lowered volume from the app. The lowered sound volume provides feedback to you concerning what you should do. Telling a person to relax does not direct her to any specific action. Looking in the mirror to see if the jaw opens in the midline, on the other hand, is a specific action for relaxing.

These actions work best if the essentials of hearing chemistry are available to you, such as *carnitine*, *alpha lipoic acid*, and others are supplied. The essentials of hearing chemistry are available in the Tinnitus Caps (see www.drgrossanstinnitus.com).

Using neuroplasticity, you can make a new brain for yourself. For this to be effective, it is necessary to engage the entire person for the healing. For instance, it is just as important to get a good night's sleep as it is to reduce any stress factors. I will give you examples of treatment successes from my own practice. When you understand why something works, you will be able to repeat it effectively in order to make new tracks in your brain. Psychologists report that people do not change when they read a list, but if there is a story, especially a true story, real change can occur!

The Error in Your Brain

Greta, age 35, was often on the road as a computer salesman, traveling away from her home in San Diego. While traveling in her trusty Prius to New Orleans for a wonderful and relaxing holiday, she decided to stop at a quiet motel. At about four AM, she heard a strange sound and became frightened. She turned on all the lights, but the sound, like a ringing, persisted. She even picked up the telephone, wondering if that was where the sound originated. She could not sleep worrying about that sound, and after a night of restlessness, it still persisted. Finally, she realized this sound was in her own head! She cancelled her trip, and headed back to San Diego, even though it meant missing out on a good time.

Unfortunately, all her doctor's appointments were slow. The more she waited, the more stressed she became. Finally, after six weeks of interminable waits and tests, she saw a specialist who told her that she had tinnitus and, like so many patients before her, she needed to "learn to live with it." Her friend referred the distressed Greta to me.

I explained that Greta had tinnitus, a sound between her ear and brain mechanism. The reason she was so stressed about the tinnitus, because, as I told her, "You are born with a reflex: when you hear a strange sound, your body recognizes it as probable danger, and you get flooded with adrenalin to either fight or flee. It is different if you break a finger or get something in your eye, as these

situations do not force that fight/flight reaction, but unfortunately, you are born with the sound fight/flight reflex. We are descendants of ancestors that had an effective instinct to flee when they heard danger.”

I showed Greta all the test results and assured her that there was no serious condition present. Now that Greta was relaxed, she felt much better.

Greta asked, “But what is it? Why do I hear it?”

I explained, “One theory is that in your brain, the way you hear, a ‘carrier wave is present. When the sound comes in from your ear, it acts on that wave and that action is translated into sound by the brain. When the sound is no longer coming in, the brain hears that carrier wave. This helps to explain when tinnitus is louder in a quiet place; you hear the vibration of the waiting string.”

Many people are partially deaf after attending a rock concert. The inner ear mechanisms, the tiny hairs that vibrate with the sound to make currents that signal the brain for sound, may be so swollen and traumatized that they can no longer make signals. This is why many develop tinnitus after a rock concert. Fortunately for most people, this is only temporary, and they do not end up with tinnitus. But exposure to excessive noise may damage those “hairs” in your ear, causing them to hear the carrier waves, as fewer impulses are coming in. This is all complicated with oxidative stress and chemical balances. For example:

The reason N-Acetyl L-cystine and Acetyl L Carnitine are in my Tinnitus Caps (www.drgrossantinnitus.com) is that studies have been reported that hearing recovers faster following excess noise when these products are given. It turns out that Greta had a virus infection that affected her ear, and her tinnitus cleared with medication.

Frank, age 35, worked in a bank and lived near train tracks. Every night at 2 and 4:30 AM, trains came by his house, accompanied by loud noises and house shakes. Sometimes, the conductor would even blow a whistle. The trains used to bother him, but now he sleeps soundly. His brain knows that this sound is okay and not a threat.

But yet, Frank developed tinnitus. He sleeps fine with the train sounds, but the tinnitus wakes him up, keeping him awake the whole night. Again, this is a matter of cognition. When tinnitus is new, you get the fight/flight response you are born with. With cognition, you *fully* understand that the ear ringing is not a threat or “bad.” With experience, he knew, through cognition, that the train was not a threat. When the tinnitus suddenly began, his DNA reflex was to be stressed, until, through cognition, he changed his brain to register a no stress response.

Cognition: When Is a Scar a Good Thing?

In 1910, Captain Hans Schultz of the German Army, at age 24, had a three-inch deep scar on his right cheek from a fencing match. As he was one of the wealthier officers, the scar on his face meant he had bravely fought fencing duels, and became a source of pride and macho manliness. He physically and emotionally “cognized” the scar into becoming a badge pride and manliness.

Now, in 2014, a facial scar no longer means that you are a handsome macho German officer. It is physically and mentally “cognized” as “bad.”

What is the Difference between Knowledge and Cognition?

In the newspaper this morning, **Patricia**, age 43, reads a purse she would like to buy is 20% off. Her sister, Bernadette, reads about this sale as well, and she gets excited and flushed, as her heart beats faster and faster. She *wants* that particular purse, and her brain is actively planning how to get the money to make that purchase. She is too excited for breakfast, because Bernadette has cognition that there is a sale. Both sisters read of the sale, but they physically and emotionally react differently.

With cognition, your entire body, including your nerve pathways, cognizes. It “knows” that the sense of tiger roar, there is a danger nearby.

In the soldier with post-traumatic stress, the loud sound is a signal to drop to the ground. He cognizes that a loud explosion means danger. It is in his “body.”

A boy scout knows that all guns are considered dangerous and should never be pointed at a person.

The woman who survived a terrible car accident cognizes that driving a car is terribly dangerous and is fearful on the highway.

Cognitive therapy consists of making new circuits so that the reaction to loud sounds, driving, or even tigers become replaced by new and better pathways. When **Delphina** was 16, she cognized that snakes were dangerous, to the point where poking a toy snake at her elicited a fright reaction. Then, she joined the circus and learned to perform with live snakes. Her cognition changed, she knows that her snakes are harmless and help her to earn a salary. Delphina no longer gets a stress/fear chemical reaction when she handles encounters snakes.

Measuring Tinnitus

Although there are no objective ways to measure tinnitus, it can be effectively identified. The audiologist first performs an audiogram where she records any drop in hearing between the low tones (500 Hz) and the high tones (8000 Hz). Then, the audiologist will ask the patient which of the audiometer

sounds resembles their tinnitus. Then, they are asked to approximate the volume of that tinnitus, comparing it to measured volume from the audiometer.

After this, various measurements are made as to how long their tinnitus disappears after hearing his or her particular tinnitus sound for a minute. This is called *residual inhibition* – the patient does not hear his or her own tinnitus sound, because the neurons have been discharged. This is similar to when a person cannot see after a bright light shines.

The audiologist then measures for masking. In masking, since you hear the outside sound, you no longer hear your inside sound. This is similar to being in a room with a loud clicking grandfather clock. You clearly hear the loud tick-tock, but once you turn on the radio, you can no longer hear that clock.

With the Ear Ringing Relief app, you are presented with these same tones from the audiometer. You can select the tone of your tinnitus, as well as the volume. This is very useful in measuring the effectiveness of any treatment. For instance, before starting the Grossan Tinnitus Caps, use the Ear Ringing Relief app to record tone and volume. Then, measure again in three months.

The benefit of measuring the tinnitus is that, instead of telling the doctor or family, “I have a noise in my head,” you now can play the sound approximated with pitch and volume. You can measure your progress. The therapist can now measure the results of the treatment.

What Affects Tinnitus - Summary:

- Use cognition to have a full understanding of your tinnitus.
- You can control your tinnitus by reducing stress and anxiety, correcting the treatable conditions, and utilizing the daily actions that are proven to reduce symptoms
- Use a coach to ensure you perform the actions correctly, such as a mirror to see your jaw relaxed.
- By improving your brain and hearing chemistry, you can gain control of your condition.
- Masking and distraction techniques can relieve tinnitus.

Chapter Three | Tinnitus from Noise and Illness

Why Did I Get Tinnitus?

Tinnitus can follow noise exposure – the rock concert – or systemic diseases like diabetes, hypertension, drug toxicity, thyroid dysfunction, or trauma to the head (concussion), or trauma to muscles (somatosensory). Any interruption of normal pathways to the part of the brain that processes hearing – the cerebral cortex – can result in tinnitus. Either the brain no longer hears a certain tone and proceeds to generate that tone to make up for the loss, or a drug interferes with hearing metabolism.

Penelope, age 21, had developed a painful shoulder after a few days at a tennis clinic. The doctor told her she had an inflammation in the shoulder and prescribed Celebrex. Penelope, before filling the prescription, went on the Internet and read that Celebrex has side effects. She decided, therefore, not to take it, but she recalled previously taking aspirin for a headache. Taking no chances, she purchased a name brand aspirin. Because she had pain, she continued to up the dose and soon was taking four five-gram aspirin, four times a day.

She came to see me, when she developed ringing in her ears. I asked her if she was taking any drugs, and she said, “No, only natural stuff like vitamins.” But her test results were strange and did not show a specific pattern suggestive of Meniere’s disease or increased fluid level in the inner ear. I asked her to write down *everything* she was taking, even non-drugs. Finally, I saw the aspirin, and then learned of the huge dose she was taking. I asked her why she had not told me or the other ear specialist about the aspirin! She replied, “ Well, aspirin is sold without a prescription, so there is no harm to it.” Fortunately, when she stopped the aspirin and took the tinnitus caps, her symptoms cleared.

Almost any drug you are take can be a cause of tinnitus, especially the anti-inflammatory ones like ibuprofen. Why one person gets tinnitus from ibuprofen and millions do not may be due to a certain DNA makeup.

In any patient, the doctor seeks the cause of the tinnitus. When I do not find a cause for the tinnitus, such as diabetes, hypertension, drug, muscle spasm, or hearing loss due to noise, it is then necessary to do a full work up. Any new drug, including some antibiotics, can cause tinnitus in some patients. Therefore, a careful medical history is the most important part of the examination of any person with ringing in the ears.

I Am Never Stressed

Sometimes you build a vicious circle. The more you stress, the more you are bothered by the ringing noise. The more you are bothered, the more you stress, and

so on. No different than an itch, the more you are stressed, the more the itch. The more the itch, the more you scratch. The more you scratch, the more you are stressed.

A similar thing happens in sinus conditions. The more you blow your nose hard, the more it plugs up! The pleasant feel of the Hydro Pulse Nasal/Sinus Irrigation actually helps by having those people relax at the pleasant sensation, like a massage.

Since ringing in the ears can affect many people, it is not unusual to have tinnitus listed as a *possible* side effect of almost every drug. Even the medications I use to treat tinnitus list tinnitus as a possible side effect!

Merinda called me, because her sister has tinnitus. She looked up the drug I prescribed for her sinuses, and one of the side effects was tinnitus. I explained that tinnitus was listed as a possible side effect, because one in a thousand reported it when they took that drug. Since this side effect was listed in almost every drug, I advised that her sister continue my prescribed medication. It was important to clear the sinus condition.

I am Quite Healthy, except for Diabetes, Hypertension, and Cholesterol

Leticia, age 33, developed tinnitus when her diabetes and hypertension were poorly controlled. She also had elevated cholesterol. Fortunately, her doctor got her fully controlled and kept her healthy. After three months of well-controlled diabetes and hypertension, her tinnitus cleared. Leticia was fortunate, because occasionally, those who develop tinnitus from these conditions remain uncured, even when their metabolism is under control. Leticia took my Tinnitus Caps at the same time of her other treatments, as control over these medical conditions was necessary to treat the ringing in her ears.

Kid Loves Rich Ice Cream

One of the causes of tinnitus in children is an elevated cholesterol and lipid level, but this can clear with correction of these levels. Several metabolic conditions seen in children, such as diabetes, can cause tinnitus, but fortunately, some respond to therapy. Tinnitus is difficult to diagnose in children, because they do not know enough to complain about it, but the numbers can still be high. Fortunately, most of the common children's ear infections do not result in tinnitus.

He Has a Hole in the Head? Rupture of the Round Window

Veronica, age 28, was a scuba diving instructor. In her class one day, a student lost his weight belt that kept him at a proper depth level. The student suddenly started accelerating to the surface. Veronica raced up to stop the ascent

and rose from a 100 ft depth much too rapidly. When she reached the student, she felt a pop in her left ear. Veronica correctly brought the student down to the correct depth and made a slow ascent, equalizing pressure correctly. But when she got to the surface, she realized she had a hearing loss and ringing in the ear.

When I examined Veronica, I found a left hearing loss, and when I put air pressure on her left eardrum, she became dizzy. I diagnosed a rupture of the round window of the cochlea. She had surgery to close that rupture and most of her hearing returned, and her tinnitus improved. She was instructed to discontinue diving, and although she ignored this recommendation, Veronica has not had difficulty since then.

Leonard, age 29, was an athlete devoted to exercise and health food. When they offered him health insurance at his bank, he almost refused it, because with his healthy lifestyle, he would never get sick. Luckily, he did sign up for it. One night, he did his usual hour at the gym, deciding to try out a new machine called the inversion. The coach said he should invert (be upside down) for no more than ten minutes, but as Leonard was in perfect shape, he inverted for thirty minutes while performing some abdominal exercises.

That night at about 3 AM, he awoke to a loud noise in his left ear. At first, he thought it might be an alarm, but no matter what he did, it remained. Finally, he realized it was coming from his own ear. Fortunately, he saw me the next day. His hearing test showed a hearing loss and tinnitus sound at 6,000 Hz, 40 decibels in intensity. I explained to Leonard that due to the inversion, he had increased fluid pressure too excessively in his ear. What I did not know was if he had Round Window Blow Out, or a hole in his inner ear, from the round window that connects with the fluid system of the inner ear, called the perilymph fistula. When the round window ruptures, the fluid from the inner ear flows out, which causes hearing loss and dizziness. Leonard had a 34% hearing loss, did not complain of dizziness, and did not show extreme nausea.

I ultimately diagnosed Leonard as having excessive fluid in his inner ear, and after treating him, his hearing mostly returned. Unfortunately, however, his tinnitus persisted. Apparently, there was damage in the inner ear, and his hearing mechanism was damaged. Because he did not hear well from the outside, he was now hearing sounds on the inside.

He was placed on the Whole Person Program, and instructed to take the Tinnitus Caps. Leonard did the counted breathing described earlier. He did the mirror biofeedback exercise of using a mirror to see his face, jaw, and shoulders relax and performed the action seven of visualizing before he had the tinnitus (see Chapter Five).

As Leonard continues daily repetition of the tinnitus actions, he is building up a new, better track that helps his tinnitus symptoms. He uses the sounds of Broadway Musicals to mask his tinnitus.

If there is a rupture of the round or oval window, then surgical repair is the best treatment. **Bernardo**, a retired accountant, suddenly lost hearing in his right ear. His doctor told him to remain in bed with his head elevated and his head turned to the left. He remained this way for five days, and his hearing returned to “normal.” In retrospect, it became clear that he had a ruptured round window that resealed.

Scuba divers who undergo severe pressure changes may get a rupture of the membrane of the round window. In such cases, early closure of the rupture is usually therapeutic. Since I treat scuba divers, I see these conditions all the time. Even a pool dive might result in rupture of one of the membranes of the inner ear. *Note: In the inner ear, you have two membranes: over the oval window and the round window. In sound, the eardrum (tympanum) vibrates and the three bones move in, called malleus, incus and stapes. The stapes moves the oval window membrane in, and the pressure goes through the inner ear and comes out at the round window membrane.*

Meniere's Disease

A patient awakens in the middle of the night with a spinning sensation, wondering immediately if it is an earthquake. One ear feels “full” with ringing and hearing loss. The attack may clear by itself, or it may recur. These are all signs of Meniere's Disease.

1. Hearing Loss
2. Vertigo
3. Full feeling of pressure in the ear
4. Tinnitus

These symptoms are caused by an increase in fluid pressure in the inner ear, and can be treated by lowering the fluid pressure. Recovery may be complete, depending on how long the symptoms persisted and how severe the fluid pressure was. There is no mechanism short of surgery to actually measure this fluid pressure.

Some patients have all four symptoms; some have only one, leaving the clinician to decide on the treatment. Often with only one symptom, a diuretic such as acetazolamide is given as a test for the diagnosis.

Otosclerosis

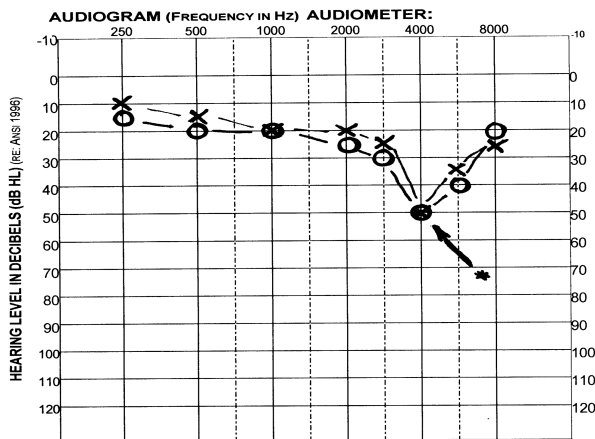
The word Otosclerosis comes *oto*, meaning ear, and *sclerosis*, meaning hardening. It is a condition where an extra bone is deposited in areas of the stapes bone. This impairs the ability of the three bones of the middle ear to vibrate properly. They no longer conduct sound properly from the eardrum to the fluid of the inner ear. The nerve of hearing may be completely normal, but the patient does not hear well, resulting in a conductive hearing loss. When the bone impairment is corrected, the hearing may return to normal.

Identical twins may both have Otosclerosis, with identical, or conductive, hearing loss. Yet, even with this shared diagnosis, one has tinnitus and the other does not. In another report, identical twins had otosclerosis without either developing tinnitus. They had identical surgery that corrected the hearing in both, and yet one twin developed tinnitus following the surgery. Here, the pathways were affected in one twin and not the other. For various reasons, the connections in the neural pathways differed between the twins.

Below is a typical audiogram of a person with hearing loss due to a noisy occupation, showing a loss at 4,000 Hz. His tinnitus is matched as sounding like that 4000 Hz sound, and when he was masked with a 4000 Hz sound, he no longer heard his tinnitus.

NAME: JOHN DOE TEST DATE: 05/29/12

AGE/DATE OF BIRTH: 50 REFERRED BY: DR. GROSSAN



KEY:

RIGHT	STIMULUS	LEFT
O	AIR	X
Δ	AIR - MASK	□
<	BONE	>
[BONE - MASK]
NR	NO RESPONSE	NR
R	AIDED SOUND FIELD	L
S	SOUND FIELD	S
VT	VIBRO-TACTILE	VT
NR	NO RESPONSE	NR

TEST TYPE

STANDARD	<input type="checkbox"/>
PLAY	<input type="checkbox"/>
VRACOR	<input type="checkbox"/>
BOA	<input type="checkbox"/>

TRANSDUCER

INSERT	<input type="checkbox"/>
SUPRA-AURAL	<input type="checkbox"/>
SOUND FIELD	<input type="checkbox"/>

RELIABILITY

GOOD	<input type="checkbox"/>
FAIR	<input type="checkbox"/>
POOR	<input type="checkbox"/>

RETEST THRESHOLD @ 1K HZ

RIGHT EAR ☐

LEFT EAR ☐

SPEECH AUDIOMETRY									
	PTA (dB HL)	SRT/SDT (dB HL)	Speech Recognition		Speech Recognition		MCL (dB HL)	UCL (dB HL)	
RIGHT (AD)		20	96 %	50 dB SL/HL	%	dB SL/HL			
Masking (dB HL)									
LEFT (AS)		15	96 %	50 dB SL/HL	%	dB SL/HL			
Masking (dB HL)									
MLV <input type="checkbox"/>	CD/tape <input checked="" type="checkbox"/>	W-22 <input checked="" type="checkbox"/>	WIPI <input type="checkbox"/>	PBK <input type="checkbox"/>	SPECIAL:		SPECIAL:		
SOUND FIELD			%	dB HL	%	dB HL			
RIGHT AIDED			%	dB HL	%	dB HL			
LEFT AIDED			%	dB HL	%	dB HL			
BINAURAL			%	dB HL	%	dB HL			

TINNITUS EVALUATION

Tinnitus Matching: **AD: 4KHz Pure tone @ 56 dB**

Tinnitus Masking: **AU: 4 KHz Narrowband noise @ 50 dB**

RI:

Notes: *Tinnitus matches the frequency of the maximum hearing loss i.e. 4 KHz

OTOSCOPY: AU - WNL

HEARING AID INFORMATION

RIGHT AID: None

LEFT AID: _____

IMPRESSIONS/RECOMMENDATIONS: SEE REPORT

Sol Marghzar, AuD ✓

Miguel Avila, AuD

9702 Venice Blvd. Suite # A Culver City, CA 90232 (310) 559-4884

8920 Wilshire Blvd. # 404 Beverly Hills, CA 90211 (310) 659-1212

The Noisy Fax Machine Caused My Tinnitus

There is a standard percent of workers in similar industries that develop hearing loss. It follows a standard statistical curve with some workers more and less affected than the average. Fortunately, not all persons who develop hearing loss from noise trauma develop tinnitus. There are neural pathways that differ from the tinnitus person and the one who has no tinnitus.

There are definite genetic factors whereby certain persons get hearing loss after noise and some remain unaffected. Note that in one of the loudest

occupations, that of jet engine mechanic, using ear protection has worked to avoid hearing loss.

Long shore workers present a special problem. Dangerous machinery is moving all around them. If they wear noise-cancelling earmuffs, unheard approaching vehicles might hurt them. Another problem arises if they are inside the steel hull of a ship. If workers are fixing the hull on the outside, that sound is magnified significantly.

Presbycusis: I Am Much Younger than My Picture

It is common to lose hearing with aging. Generally this begins about age 45, and is noted in ages above 50. This is called Presbycusis, a condition somewhat analogous to change in vision with aging called Presbyopia. (Presbycusis from Latin, *presby*, meaning elderly, and *cusis*, meaning hearing.) Not all elderly persons complain of tinnitus, and it is unknown why certain persons have it and others do not. Recent studies indicate that taking magnesium and antioxidants may reduce presbycusis.

Why I Don't Wear Ear Protection

Reynaldo, aged 60, had worked as a long shore for 40 years. He had hypertension and diabetes and a high tone hearing loss due to excessive noise exposure. Recently, the noise in his head was bothering him. His doctor saw him regularly, and his hypertension and diabetes were well controlled. The specialist he saw for the ringing in the ear told him to “just live with it.”

I spent time explaining to Reynaldo how the tinnitus was caused by the noise exposure, and that since his brain was not hearing certain sounds, it made up the difference. I told him about the theory that there is an FM-type carrier wave in the brain, and it acts on the sounds coming in. “It is like the old time TV sets,” I told him. “When you turned them on, before the station came on the air, you heard a hum. That was the carrier wave waiting for the signal from the television station. Once the station came on the air, you no longer heard the carrier wave. Because of the hearing loss, you are now hearing the carrier wave.”

I explained that Reynaldo could use a hearing aid to bring in the missing sounds, or he could use music that he liked to cover the tinnitus. I recommended Tinnitus Caps, not only for his tinnitus, but also to try to forestall future hearing loss. He was satisfied, because no one had ever explained tinnitus to him before. Reynaldo could play soothing music that he and his wife both liked for his tinnitus, which also helped him to sleep.

I asked Reynaldo if his employer had provided him ear protection. He replied, “Of course they provided ear protection, but I need to hear danger sounds in order to stay alive.”

When Reynaldo returned for his visit, he had done lots of research. He said he read that there was a brake in the brain, and when that brake did not work for some reason, like with a concussion, you heard unwanted sounds.

“Yes, Reynaldo,” I replied, “That is another theory to explain why some people hear ringing in the head or ear. That brake is similar to when you are at a shooting range. You see the guy next to you about to fire a 44-caliber gun. As he is firing, your brake is set so that the damage from that loud sound is reduced. But if someone behind you starts shooting without warning, that sound will seem much louder, and you are likely to jump. More importantly, when there is an unexpected noise, such as a tray dropping, a gunshot, or a whistle, the damage to the inner ear is greater.

Tinnitus Is Macho!

Phillip, age 24, started working construction and was put on jackhammer duty to break up the concrete. After a week, he noticed ringing in his ears. He asked his supervisor, Adolpho, about this, and Adolpho laughed. “Hey, we all get this. It’s part of the job. Use your ear defenders when you hammer, but sorry to say, everyone still gets it.” Here, there was cognition that this sound was not a danger, a stressor, or “bad.” Therefore, the tinnitus could be ignored or even thought of as being a badge of belonging to the group. Now, when he hears the ringing, he is reminded of being “macho,” or one of the experienced workers. His cognition (physical/mental reaction) has changed.

Action Program for Tinnitus

Here is my action program from eliminating tinnitus:

1. **Inhale** energizing air.
2. **Exhale** toxins and waste products.
3. **Become fully relaxed** as you breathe. Inhale for four seconds, and exhale for six. You are not in danger mode.
4. **Relax your face.** There is no threat of danger. The tinnitus is simply another kind of itch.
5. **Relax your jaw.** There is no battle or fight coming. The tinnitus is not a threat.
6. **Relax your shoulders.** The tinnitus is just a minor annoyance like nasal buggers.
7. **Keep a positive attitude** about your tinnitus. Think about before you had it.

8. **Relax your whole body**, because there is nothing to worry or fear.
9. **Squash your tinnitus** if you think about it with three breaths.
10. **Envision** things that tinnitus is not. It is not a car accident. It is not a knife wound. It is not a high fever or a bleeding ear. It is not an amputation. It is just a minor itch.

Objective Tinnitus: When the Doctor Can Also Hear Your Tinnitus

Hearing Your Circulation

Miguel, age 32, was an office worker who had very little contact with noise. As far as he could tell, his hearing was normal, but lately, he had this noise in his left ear. It was much louder during the quiet nighttime hours. Sometimes, it would go away when he turned his body to back his car out of his driveway.

On examination, he showed normal jaw and equal facial movements. He had a hearing test that was slightly below average on the left, and I also had a tympanogram done. With that test, the ear canal is sealed, and the movement of the eardrum is tested. It is tested for no pressure, less pressure, and then more pressure. If there is fluid behind the eardrum, then the drum cannot move with pressure. The drum movement was recorded on a graph, which showed movement of the eardrum in and out. His tympanogram was normal, meaning that there was no obstruction to movement of the eardrum.

I looked again at the eardrum to see if I could make out any movement behind the drum. I could make out a bulge in the floor of the middle ear. With MRI visualization of his circulation, a larger than normal blood vessel was identified, called an aneurism. On his next visit, I connected an earpiece into his ear with tubing connected to an earpiece in my ear. Now, I could hear that pulsing as well. When the aneurism was removed, the pulsation stopped, and I diagnosed Phillip with objective tinnitus. The aneurism was fixed, and his tinnitus cleared.

Sometimes, with the tympanogram recording, pressure in the middle ear can be detected and is indicative of an aneurism.

Tympanic Muscle Spasm

Josephina, age 42, visited me because of fluttering sounds in her right ear. They came and went with no significant timing. On the tympanogram, the eardrum moved due the muscle contracting. Her described flutter sound was due to a spasm of her tensor tympani muscle. This is a muscle that connects to one of the bones of the middle ear, the malleus. She observed that fluttering sound due to her muscle being spastic.

There are two muscles in the middle ear: the stapedial and the tensor tympani. These splint the eardrum when sound is too loud, such as when someone

starts firing on the shooting range. These are innervated by nerves of the face, so using a mirror for biofeedback to relax the face, jaw, and neck muscles is effective for this condition. This condition responds to relaxing the face.

Actions Program for Tensor Tympani Spasm

1. **Inhale** for four seconds.
2. **Exhale** for six seconds.
3. **Practice** these breaths.
4. **Study** the facial movements. Wrinkle your face and smile. Try to contract the right and left sides separately. Now, concentrate on relaxing all the facial muscles as you exhale. Mentally divide the face into three regions – upper above the eyes, middle below the eyes, and lower third below the mouth. After a minute or two, turn the face slightly to the right, and relax that area in front of the ear and the ear itself. Now, turn slightly to the left side.
5. **Relax the jaw** to reinforce the face relaxation.
6. **Relax the shoulders** to signal the ear muscles to relax.

Hyperacusis: I Would Rather Be Deaf

No one likes to lose hearing, but there is a condition where the ear becomes too sensitive to sounds. Ordinary doors closing, footsteps, and car engines become too loud! Worse yet, this hyperacusis can be present simultaneously with hearing loss.

Gilbert, age 48, sustained a serious concussion from an industrial explosion, and his audiologist referred him to me. His problem was that a hearing aid would nicely amplify his hearing and also mask his tinnitus. But, in addition to his hearing loss, he also had hyperacusis (*hyper* meaning excessive and *acusis* meaning hearing).

Hyperacusis is a condition where ordinary sounds – doors closing, dishes placed on tables – suddenly become painfully loud. Those with hyperacusis cannot go into restaurants or active offices. Some with hyperacusis say they would rather be deaf than have this condition. Imagine your world where the TV was always too loud.

Gilbert felt he needed the hearing aid for his job, but he was already pained when phones rang. If he had a hearing aid, those “too loud sounds” would be much too painful to bear.

I explained that there is a braking mechanism in the ear. When you see a waitress trip and a big platter of dishes about to hit the floor, your brain lowers your hearing mechanism and protects you from the loud sound. But if the same

tray is dropped behind you and you do not see it coming, it is much louder for you. I asked Gilbert to practice the measured breathing and mirror relaxation. Additionally, I instructed him to listen to music he likes and gradually increase the volume. Over time, his brain, using neuroplasticity, built up new circuits, and he was able to stand normal, everyday sounds.

It is difficult for a person afflicted with hyperacusis to explain to others how much it affects their day-to-day life. When a boy breaks his arm, he has a cast placed on it, and everyone understands his problem. With hyperacusis, you essentially have to sit a person down in front of the TV and turn the volume up until it is unbearable.

Television for Sleep: The Shopping Channel

Falling asleep to The Shopping Channel works for many tinnitus patients. Getting good sleep is one of the most important parts of the WPTRP. There are the **essentials for sleep**:

- **Wind down.**
- **Avoid eating** three hours before sleep.
- **Create a routine** for sleeping, such as a regular time for bed.
- **Find a comfort trigger**, such as a stuffed animal, a heating pad, a special satin pillow, or even socks.
- **Find a comfort sound**, such as birds, nice music, waterfall, or white noise. Try the sounds from the Ear Ringing Relief app.

Action Program for Better Sleep

1. **Have a routine.** Set the sleep clock. Have a regular time for sleep. The more complicated the routine, the better – same pajamas, set room temperature, special light, some pleasant oil, etc. Taking a shower and allowing the hot water to run on the back of the neck to remove built-up lactic acid helps.

2. **Think positive thoughts**, such as “I will fall asleep” or “I am getting sleepy.”

3. **Dispel negative thoughts.** Never think, “I can’t fall asleep. This isn’t going to work.” Imagine descending the staircase into sleep and repeating the positive words while breathing. This is not a two-sided contest; simply avoid any negative thoughts or statements.

4. **Limit the bed to sleeping.** Eating in bed or watching favorite movies prevents you from setting your sleep clock.

5. For those with tinnitus or pain, **have a distraction** where the brain is engaged, such as a dull, monotonous book on tape or watching TV. That way, the brain is distracted from the tinnitus or bad thoughts. When all else fails, there is always a good algebra book. Avoid a bestseller novel.

6. If the nose is stuffy, **try lifting up the tip of the nose** to see if that opens it. If it does, tape it in place. Recall a time when you were so sleepy you could not stay awake.

7. **Gently tighten and relax** the body from the toes up.

8. **Do a finger drop** and take three breaths. With each breath, try to become more relaxed. When the finger drops and hits the bed or pillow, that signals to your body to get more relaxed.

9. **Imagine** other time where you slept well. Be sure to use all the senses.

Olga, age 27, asked how a neck condition could affect the ear. I explained that people are hooked up with strange connections. For example, pain from the neck or the jaw joint (known as the temporomandibular joint) can connect with nerve centers of the ear. Normally, this center receives impulses from the ear, but now it is getting signals coming from the neck or jaw. The center does not understand that this is not the ear and sends signals to the hearing center of the brain. Clearing the neck or jaw usually clears the condition.

Emelio, age 63, told me that what works for him is to put on a DVD of old movies, movies he knows by heart. Since he already knows the plot, his mind readily is attending this movie, ignoring the tinnitus, and since it is boring, he falls asleep.

There are many causes of tinnitus, hyperacusis, and hearing loss. The most important thing is to prevent hearing loss. Unfortunately, as pointed out by Reynaldo, sometimes he cannot wear ear protection while working because he needs to hear the sounds of danger. Today, everyone can download a soundmeter on his or her smart phone. When the sound is above 85 db, then it is time to protect your ears.

Tinnitus from Noise and Illness - Summary:

- Tinnitus can be caused by a number of different stimulus, so it is important to identify the source.
- Ear protection and healthy living are the best ways to avoid tinnitus.
- A good night's sleep can do wonders for controlling symptoms. The more routine, the better!

Chapter Four | Somatosensory Tinnitus

Here Come the Big Words

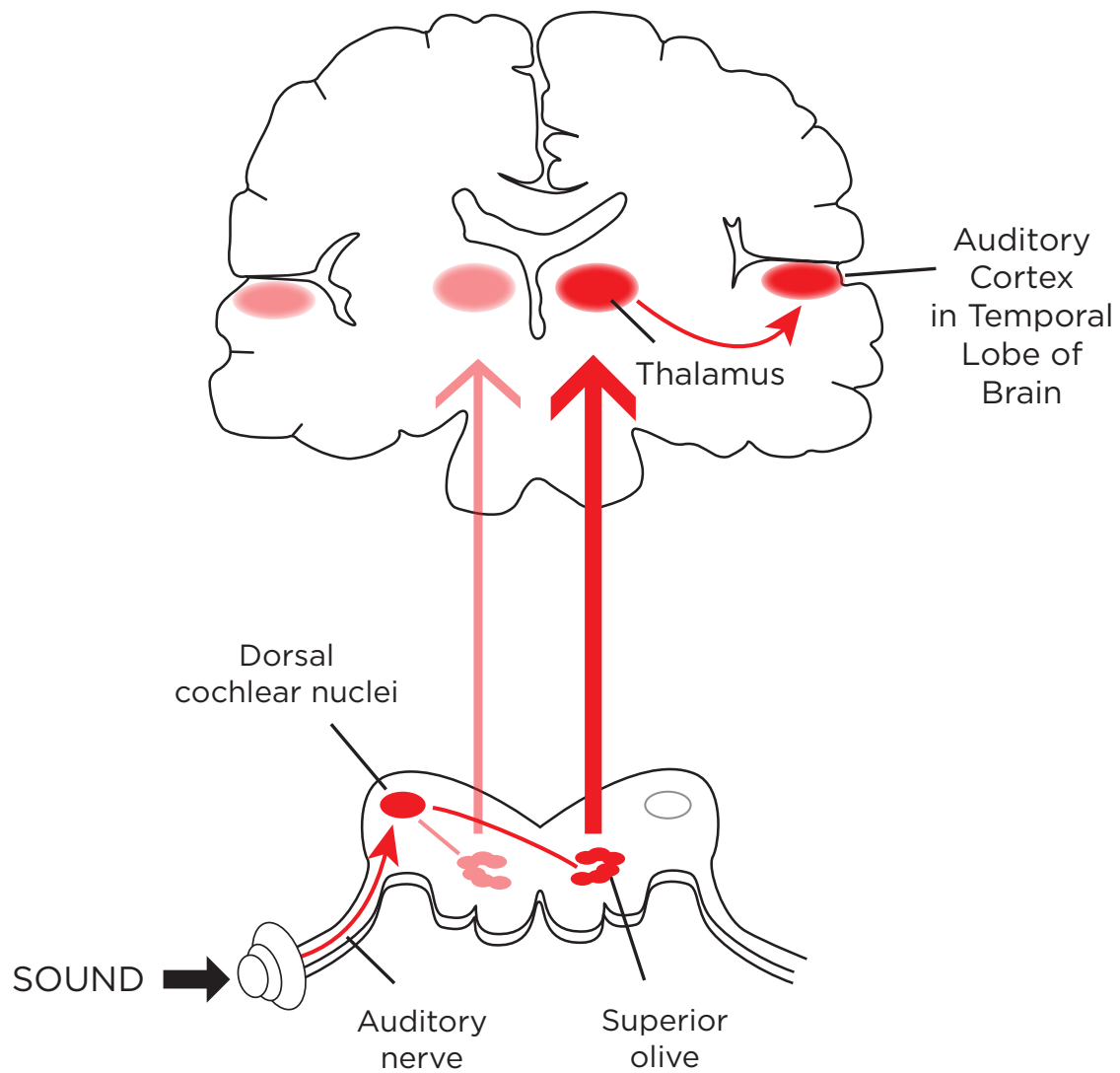
The auditory nerve (eighth cranial) goes directly to the center, like a train station. This train station is called the Dorsal Cochlear Nucleus (DCN). However, other impulses from the trigeminal nerve also go here. The muscles of the jaw, neck, and face also connect to the DCN via branches of the trigeminal (fifth) nerve. In laboratory tests, when animals are exposed to a loud noise, there is an increase of fibers from the trigeminal nerve into the DCN.

This helps to explain why tightening the jaw or a severe whiplash may result in tinnitus. In an auto whiplash, particularly with air bags, there is considerable noise as well as neck pain. Based on the animal model, more “fibers” go into the DCN and stimulate the sound sensation.

TMJD: Temporomandibular Joint Disorder

Patrick, age 38, felt that he had a stressful job selling insurance. When Patrick was a teenager, he was forced to wear braces in order to get a “Hollywood look.” However, after the braces came off, he complained of pain in his jaw near the temporomandibular joint (TMJ), and he developed tinnitus in his left ear. A hearing test showed his hearing to be normal. He had his tinnitus measured, and it was reported to be at a 3000 Hz sound, 30 decibels in intensity. He opened his jaw to the right and there was a noise, a grinding (crepitation) that you could hear and feel.

For treatment, I had him follow my tinnitus action plan (outlined in Chapter One). I also had him take Clear.ease™ four times a day to reduce inflammation. Furthermore, I placed him on tinnitus caps. In two weeks, his jaw was balanced, and his tinnitus improved. I stressed the importance of practicing the counted breathing daily as well as performing the mirror biofeedback on his jaw in order to keep the muscles balanced.



PATHWAY OF SOUND TO THE BRAIN

Harold told me that he could increase his tinnitus in the left ear by clenching his jaw. On examination, he opened his jaw in a crooked manner, and he

showed crepitation in both jaw joints. He had Temporomandibular Joint Disorder (TMJD).

He was instructed to use a mirror with a straight vertical line, to practice relaxing his jaw so that it regularly opened on the midline once his muscles were balanced. He performed this in combination with the measured breathing, and his tinnitus improved significantly.

Somatosensory Tinnitus: Cervical Muscles

Robert, age 30, was driving at about 30 mph, when a large SUV ran a red light and slammed into him. His chin took the front air bag in full force, and his head rocked back and forth for what seemed like a minute. When the ambulance took him to the ER, he complained of neck, back, and headache pain. He was given pain pills and told to rest, but that night, he awoke with ringing in both ears. When he tried to chew his breakfast, the ringing worsened. When he saw the doctor, he was told that his hearing was normal, but that he did have tinnitus. Physical therapy improved his neck, and his tinnitus decreased significantly.

In many cases of whiplash, the tinnitus may come on days later, when the “fibers” of the 5th cranial nerve (Trigeminal) increase into the Dorsal Cochlear Nucleus. It should be noted that there was considerable sound when the air bags deployed.

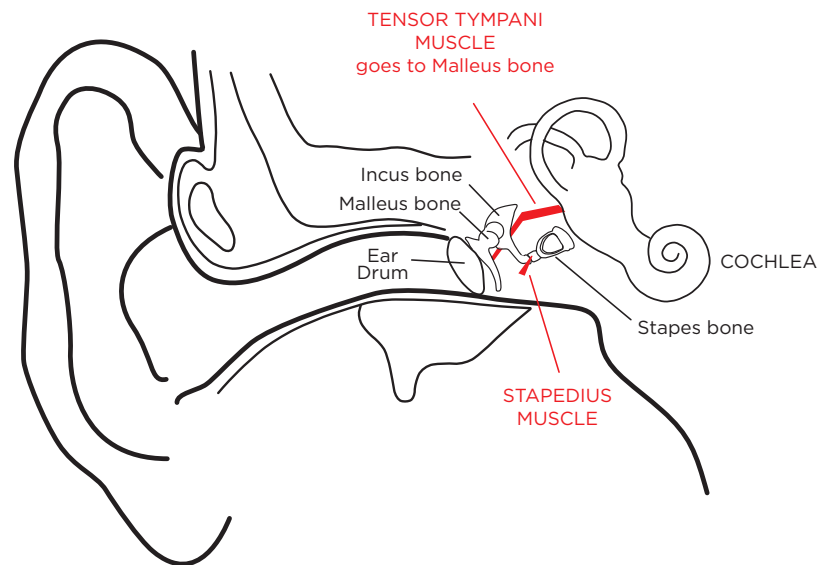
When I Eat My Ear Rings

Roberta was in a highly stressful job as a Hollywood press agent, which caused her to grind her teeth most of the time. Over time, she developed ear pain, especially while chewing. Even worse, she would grind her teeth in her sleep and keep her husband awake. Then, she developed tinnitus.

On examination, she opened her jaw severely to the left. Her hearing test was essentially normal, and her tinnitus was identified at the 1000 Hz tone, at the lower end of the scale. On further examination, her joints, where the mandible connects to the head, were tender on both sides, and I could hear and feel the joints cracking.

Roberta was placed on Clear.easeTM to reduce the joint swelling and on the breathing/relaxation exercises to help with the tinnitus. She was instructed to draw a straight vertical line on the mirror and practice the measured breathing and relaxing the jaw so it would adjust to the midline. When her jaw problem was corrected, her tinnitus changed from constant to occasional.

With this therapy, now her husband could sleep through the night.



**TENSOR TYMPANI MUSCLE
STAPEDIUS MUSCLE**

Tensor Tympani Muscle Spasm

The Tensor Tympani Muscle is part of the mechanism that reduces the impact of loud noise on the inner ear. When the Artillery Officer orders “Fire,” his tensor tympani muscle contracts, which stabilizes the ear drum, so that the ear drum vibration is reduced.

However, this muscle, like any muscle, can become spastic. The patient hears this incessant drumming and thumping in his left ear, which came on suddenly without trauma. Despite a lack of pain or dizziness, it was terribly distressing. The audiologist performed a tympanogram by sealing the ear canal with a connector to a sensitive pressure device. A recording showed the eardrum moving in and out rapidly. He was instructed to use the biofeedback techniques, which positively affects most patients.

Somatosensory Therapy

The more the jaw, neck, face, shoulders are relaxed, the less impulses go to the hearing center, which in turn reduces the tinnitus. It is important to massage

muscles of the neck, like a toothpaste squeeze, so that you remove any lactic acid or other products that may be irritating the neck muscles. In the neck, you massage in the direction towards the heart. This pushes the toxic products out of the area.

I was the first to publish on using biofeedback for tinnitus. Here, sensors were placed on the muscles above the eye – the frontal area. Patients looked at a large dial that showed the actual electrical output of these muscles; when the dial read 30, they were asked to relax and lower the dial. As it relaxed, it lowered the electrical output of the muscle. Thus, the stimulation from the trigeminal (fifth) nerve was reduced, which reduced the input into the nerve nuclei, and the tinnitus was reduced.

This is still an excellent method for somatosensory tinnitus. It is the basis of my Ear Ringing Relief app, where the patient uses the mirror as the feedback in order to ensure that he or she is completely relaxed.

Good therapy for somatosensory tinnitus begins with finding the trigger points, the places from which the trigeminal nerve is generating significant sensory output, and then blocking these by injecting cortisone, lidocaine or botox. The sooner the somatosensory input is reduced or eliminated, the less chance there is of permanent tinnitus taking place.

Somatosensory Tinnitus - Summary:

- Clear.easeTM can be taken to reduce inflammation from somatosensory tinnitus and relieve symptoms.
- A combination of biofeedback and somatosensory therapy can reduce the prevalence of tinnitus.

Chapter Five | Therapies That Work

Therapies that work combine these elements:

- **Cognition**
- **Reduction of stress chemicals**
- **Neuroplasticity**
- **Masking**
- **Conditioned reflex**

Conditioned Reflex

When your hand detects heat on the stove, you quickly withdraw your hand. You need to develop the same reflex with regards to your tinnitus.

Develop, by repetition, a reflex when you first hear tinnitus. Let that be a signal to relax:

1. **Inhale** for four seconds.
 2. **Exhale** for six seconds.
- And so on...

It takes practice to develop this special reflex. It is necessary, because tightening your muscles when you first hear the sound can chemically add to the tinnitus, while relaxing the muscles can chemically reduce or stop the tinnitus.

Peter, age 23, was a young police officer in training. One day, he practiced with shotguns, and shortly thereafter, he heard ringing in his ears. He told his training officer, who replied, “Forget about it. We all get it. It is part of being a police officer.” Now, whenever Peter felt the noise in his ear, he no longer tightened his muscles and ignored it. Whether he had it or not, there were no significant symptoms. He was more careful to use ear defenders in shooting practice, but he avoided the stress reaction if his tinnitus started.

Masking

Magdalena, age 27, listened when her parents warned her about playing her music too loud at home or in the car. However, later, she had managed against all odds to get tickets to a big rock concert. Boy, were her friends jealous! Not only did Magdalena get the concert tickets, but her seats were also in the very first row. However, unfortunately for Magdalena, her seat was directly in front of the 12-foot speakers. That night, she had hearing loss and tinnitus.

After a week, her hearing returned, but she continued to have ringing in both her ears. She had seen other doctors and been given medication for inflammation

without improving. Upon examination, I could not find any medical or muscular problem. My audiologist measured her tinnitus and found it to be in the middle range, a 3000 Hz sound. When he played the sound for two minutes, her tinnitus stopped for four minutes. I used the same 3000 Hz sound for four minutes at a very low volume and stopped it. She felt free of tinnitus for several minutes. and then, it came back.

I recommended that she use my Ear Ringing Relief app and play the sound at a comfortable volume. Then, relaxed with measured breathing, adjust the volume from the app. Lower the volume of the app sound, then relax and match that lowered volume from your own tinnitus. Over time, keep lowering the volume of the app sound and this lowers your own tinnitus volume. I placed Magdalena on my tinnitus caps. After a month, she was rechecked, and her tinnitus was almost unnoticeable.

When you are in a quiet room, you can hear the tick tock of an old Grandfather Clock. But when you turn on the TV or the music system, the tick tock sound “goes away.” It is masked by the other sounds. Masking can be effective if it is combined with the WPTRP. Your tinnitus may be effectively masked by sounds of birds, waterfalls, children, or any kind of music. In one study, it was reported that classical Mozart music worked best. In another, it was Broadway Musicals. At least once a month, a new kind of sound generator is presented. It is necessary to try them to see what works for you. The best masker for someone with a hearing loss is usually a hearing aid.

There is a difference between masking and distraction. In distraction, a person walks into the room and you talk to them. You no longer hear the loud clock ticking, not because it is masked, but because your are distracted.

For sleep with tinnitus, I generally advise having the TV on with a dull uninteresting program, such as the Shopping Channel.

Residual Inhibition

Masking that is done with the same tinnitus sound can result in residual inhibition. It can be done with short exposure of a minute or more to the same sound. Some people find that the sound stops for several minutes or longer. Here, certain neurons are discharged and take a while to recover. It is analogous to shining a bright light in your eye. Some persons take minutes to “recharge” and some take less time.

Another method of masking is to play the same tinnitus sound constantly “all day.” The theory here is that the brain recognizes that this is an “okay” sound, not one that triggers fight/flight. Since the brain hears it from outside, it finds no reason to make it inside.

Whether you are into classic music or not, listening to Mozart music soothes tinnitus. If that does not work, you can try a variety of other noises, such as the sound of a waterfall, white noise, or any kind of relaxing music. With other systems, you listen to music where that tinnitus tone is omitted. Another system is to listen to music that stresses your tinnitus sound. Then, there are various programs where the music is altered to train the brain to reduce the sound. Which system works best varies enormously with each person. In my experience, these systems are not effective without the Whole Person approach.

For my patients, I find it best to follow the Ear Ringing Relief action steps daily, use the tinnitus sound from the app to see how much it suppresses the tinnitus, and try matching the volume as it is lowered. Here you definitely learn, through cognition, that there is no threat and no reason for fight/flight chemicals. Using this system, patients tend to report good results.

Use the Ear Ringing Relief App

- **Mask** your own tinnitus sound by playing that sound.
- **Play your tinnitus sound** at low level for habituation.
- **Play the sound at a lower volume** and match that volume.
- **Play the sound, and then stop.** See how long you have silence, or residual inhibition. Practice increasing that inhibition.

Ten Actions for Tinnitus Relief

Every wellness program stresses that you need to follow certain actions for success. One for weight loss might say to record the calorie value of what you eat. Another one may say to visualize and repeat to yourself, “In every way, I am getting better and better.”

These programs do not work, however, when people ignore the *actions* – The movement or attention that makes new neuronal circuits. Here are the ten actions that my patients follow to change the neural circuits.

In order to make these actions automatic, I have suggested colors to associate with the actions. For example, by associating red with inhalation, you will automatically begin to inhale whenever you encounter the color red, such as at a stop sign.

Action Program for Tinnitus

1. **Red.** Draw your attention strongly to inhalation, using a count of four. Think of oxygen going to your ear, nerve, and brain. Think of elements entering your body that will heal you.

2. **Orange.** Use a count of six on exhalation. You want to relax as you exhale so that you do not reinforce the tinnitus. Then, the unwanted elements come out.

3. **Yellow.** Breathe a four-count inhale with good oxygen coming into the hearing system and unwanted elements going out during a six-count exhale with relaxation. This is therapeutic. Then, inhale, pause, and exhale. Here, when you pause, tell your body to relax because the tinnitus is not a threat. This is important, because you are changing your cognition as to what tinnitus is.

4. **Green.** See your face relax in the mirror. Relaxing your face in the mirror affects your facial (seventh cranial) nerve, which is involved with your ear. When you pause at the end of inhalation, say to yourself that you can fully relax your face, because there is no danger from the tinnitus.

5. **Blue.** Relax your jaw. Use the mirror to *see* the jaw relax. The jaw can be a factor in the tinnitus situation and relaxing it helps your tinnitus. Draw a straight vertical line down the center of the mirror. Line up your face to make sure that the jaw opens in the midline. If it is not opening in the midline, practice this exercise until your muscles are balanced for the jaw, and you always open in the midline.

6. **Indigo.** Relax your shoulders while looking in the mirror. Relaxed muscles are the key to healing. Tight neck muscles can be a factor in tinnitus. Use this mirror action to relieve and release tight cervical muscles.

7. **Purple.** Recall before you had tinnitus. This may direct the body to change chemistry back to before the tinnitus. Visualize with all your senses a happy time without tinnitus. Take Ear Aid™ so that all the enzymes and vitamins you may need are available. See www.earaid.info.

8. **White.** Progressively relax. The more your muscles are relaxed, the less you reinforce your tinnitus. Using the counted breathing, relax from your toes to the top of your head.

9. **Silver.** Take three measured breaths. On the third breath, drop your finger to quash the noise. This can be on the ear or the temple where the eighth nerve runs. Or, imagine the finger as a baton leading the orchestra. When the finger drops, the orchestra stops the sound. Use the onset of tinnitus as a signal to do the finger drop relaxation.

10. **Gold.** Imagine that you are going on a trip to a tropical forest. The sounds are muffled, and there is no traffic noise. Imagine how quiet everything is, except for the patter of rain. Spend time experiencing the quiet

forest and the sound of the gentle rain. Another visualization is to go to a future city where they use cure-beams of light to cure you of your tinnitus. Get in the habit of relaxing whenever you are aware of the tinnitus. Let the tinnitus be a signal to relax as in this program

Trading in Your Old Brain

Marcus, age 55, had severe tinnitus because of an injury to his right ear when he was 18. At that time, a very large firecracker went off next to his right ear, resulting in hearing loss and tinnitus.

He originally had seen me for his chronic sinusitis condition and used the Hydro Pulse Nasal/Sinus irrigator any time he felt his sinuses action up. He saw me because he had been trying all kinds of “miracle” pills and was investigating my Tinnitus Caps. Marcus said, “I have taken so many vitamins, flavinoids, and antioxidants that my wife suggested we use my urine for therapy for sick people! Will your tinnitus caps cure me?”

A hearing test confirmed his hearing loss, and that his tinnitus was high pitched, in the 6,000 Hz range. It was also quite loud as measured by the audiologist. I explained to Marcus that he should do a process called “nerve enhancement.”

You play the 6,000 Hz tinnitus sound in your good ear using my Ear Ringing Relief app. Then, you adjust the volume from the app so that it is lower than the volume in your right ear. Spend 20 minutes trying to match the app volume to your tinnitus. Gradually over a period of time, the right ear volume will reduce because it hears the reduced volume from the app played into the left ear.

I checked Marcus in three months, and he was significantly better. He was now regularly taking ten minutes a day to lower his left ear volume by performing the ten actions for tinnitus relief. He performed at least one action for a minute every hour.

Marcus asked, “Why does this work?”

“Because it is a biofeedback process,” I replied. “Your brain sees what is the right sound and proceeds to go that right way. It is based on neuroplasticity of the brain.”

I continued to explain to Marcus that the reason he should take the Tinnitus Caps, one or twice a day, is that certain products utilize the hearing chemistry. When you are using the Whole Person Program, it is best to have all those products available, because the Tinnitus Caps work in synchrony. One product supports the action of another.

Make a Fresh Brain

We can show with an MRI that new parts of the brain can be used when other parts are damaged. We can demonstrate that when a person learns a new game, and plays it repeatedly, that a new part of the brain is working that game. The key is repetition. When someone is injured and loses a brain function, a new part of the brain can be changed to perform that same function. This is done by *repetition*. This is why it is necessary to repeat the tinnitus actions daily in order to make new brain circuits.

Geraldine, age 30, was anxious to lose weight, so she doubled up on her weight loss pills and developed a stroke as a result, losing her speech ability. For six months, she had regular and speech therapy and eventually did regain her speech. An MRI showed that a new part of her brain was functioning for speech, because the original speech center had been damaged. During her therapy she was given Magnesium – one of the products in Tinnitus Caps in order to support nerve function in the auditory system. In neuroplasticity, a new part of the brain takes over the function of a part of the brain that is no longer functioning.

Currently, Mayo Clinic is conducting a study to show magnesium use for tinnitus therapy in the dose currently used in my Tinnitus Caps formula.

Neuroplasticity is needed to fix tinnitus. When you perform the breathing ritual daily, then you create new circuits to replace “broken” or negative circuits. In tinnitus, something is not working right, so you do repetitions to make another area of the brain become a working part that fixes the tinnitus.

Because so many complex processes are involved, it is best to understand the elements that are known to aid hearing function and repair. See www.drgrossantinnitus.com for more information.

When you perform the mirror biofeedback for your relaxation, you create an improved circuit that is important in relieving tinnitus. Use the Ear Ringing Relief app to repeat the actions that build the better circuits.

A major advantage of using a mirror to relax face, jaw, and shoulders is that we also relax muscles of the middle ear that often are involved in tinnitus.

When You Had Fun at the Beach

Recalling the use all five senses works in relieving tinnitus, because with tinnitus, you have one set of chemistry in your body. But before you had tinnitus, you had a different chemistry. The day you were at the beach having a great time, that chemistry is different than today with your tinnitus.

If you replicate that chemistry, that can aid in changing the tinnitus chemistry, especially if the elements of the Tinnitus Caps are added. However, this visualization works only if you use your five senses plus relaxation plus a little humor. By taking Tinnitus Caps at the same time, you provide the elements that can help correct the chemistry. For example Co-enzyme Q-10 helps maintain circulation to the ears, supports energy production in hearing cells, and helps protect against free radical damage in metabolism.

Deloris, age 31, was a physical trainer heavily into meditation and yoga. In her job, they played music much too loud, and she had developed some hearing loss and tinnitus. Although she no longer did those loud music classes, her tinnitus remained. I recommended to Deloris that she visualize using all her senses before she had the tinnitus. This was particularly easy for her to do because she had done meditation. This practice, daily, plus the Tinnitus Caps significantly improved her symptoms. Deloris noted that she was already taking Folic Acid while planning to become pregnant. She asked if the Folic Acid she was currently on to protect against certain fetal conditions might be excessive added to the Folic Acid in the Tinnitus Caps. I explained that when it comes to pregnancy, it is best to check with her doctor, because new information is published all the time.

Time Travel: Help the Mind Make Good Chemistry

Jacob, age 27, was a leading scientist at California Institute of Technology, He developed tinnitus during his military service aboard a submarine. He was familiar with tinnitus theories and practices and was not aggravating his tinnitus by stress or anxiety.

I recommended time travel.

He looked at me blankly. I explained that the goal was to utilize the power of the brain for healing. Now, you visualize this time travel scenario:

Go into a time machine, and step out into the future. A guide takes you to the house of healing. In one room, you are bathed with strange liquids, and in another, there is a kind of vibration. In another, you are sprayed with strange smelling mists, and in another, there is a screen where all kinds of colored lights flash. In yet another room, you are given a strange tasting liquid, and in another, you hear strange vibrations. Think and imagine all of these future-healing methods so that your tinnitus – or any health problem for that matter – gets healed. It is important to use sight, smell, taste, sound, and feel.

I examined Jacob two months later. He had practiced the time travel visualization, and his tinnitus was almost gone.

Jacob said, “Incidentally, as long as I was getting my tinnitus healed, I visualized my tennis shoulder being healed, too!”

Whether it is being relaxed to allow healing or to improve the function of the tinnitus caps, giving the brain free reign to provide healing is most effective in affecting brain chemistry. Jacob also mentioned that he was already taking Centrum... Did he need to stop it and take my Tinnitus Caps instead?

I explained that I had put most of the factors known to help ear mechanism into Tinnitus Caps so that they would work synergistically. Centrum, a good product, is not the same as my Tinnitus Caps formula. For example acetyl L carnitine is being studied to rehabilitate NFL players with reduced cognition. Acetyl-L—carnitine and N-acetyl-L-cysteine have been studied to prevent hearing loss after very loud noise exposure. Acetyl-L-carnitine is known to restore mitochondrial function in old mammals and is suggested for keeping young. These plus the other Tinnitus Caps content are needed to assist best function to the ear.

Actions Program: Cognitive Therapy

The cognitive program explained below reduces the tinnitus symptom so that it is merely an annoyance that can be ignored. Most important is that it is not magnified or amplified by anxiety.

1. **Inhale** energizing air.
2. **Exhale** toxins and waste products.
3. **Relax** so that you do not feel in danger mode.
4. **Relax your face**, because there is no threat of danger. The tinnitus is simply another kind of itch.
5. **Relax your jaw**, because there is no battle or fight coming. The tinnitus is not a threat.
6. **Relax your shoulders**, because the tinnitus is just a minor annoyance like nasal buggers.
7. **Adjust your attitude**. Think about before you had tinnitus.
8. **Relax you whole body**, because there is nothing to worry or fear.
9. If you pay attention to your tinnitus, **take three deep breaths to squash it**.
10. **Envision things that tinnitus is not**. It is not a car accident. It is not a knife wound or a high fever or a bleeding ear. It is not an amputation. It is more like a minor itch.

Tinnitus Retraining Therapy

Tinnitus Retraining Therapy (TRT) was developed by Pawel J. Jastrebof, who has taught this method to therapists worldwide. It is the tinnitus therapy that is the gold standard, just like the WPT.

TRT is a form of habituation using counseling and sound enrichment to stop the negative reactions to tinnitus. It utilizes a combination of low-level, broadband noise and counseling to achieve the habituation of tinnitus, so that the patient is no longer aware of their tinnitus, except when they focus their attention on it. TRT relies on habituation of reactions to tinnitus. Treatment consists of passive extinction of the conditioned reflexes. Sound therapy consists of creating a background of neuronal activity. The tinnitus can be reclassified as a neural stimuli through counseling. Sound therapy decreases the strength of the tinnitus by increasing the level of background sound by providing an enhanced sound background.

Neuronomics Therapy

Neuronomics is a means of altering nerve pathways. Here, with counseling, the patient listens to altered sounds that engage the central nervous system and alter the tinnitus pathways. It uses tailored music to relax you as well as turn your attention away from your tinnitus. It aims to decrease the limbic/amygdala involvement. Whether you should use TRT or Neuronomics generally depends on the therapist. Whichever is selected, you still need to use the WPTRP approach given here.

Why You Should Watch The Shopping Channel

Poor sleep is one of the most significant side effects of tinnitus. The more the poor sleep, the more the negative effects from tinnitus. Falling asleep with The Shopping Channel works for many tinnitus patients. With The Shopping Channel on, the brain is halfway distracted from thinking about the tinnitus; listening to the same pitch over and over puts you to sleep, as well as makes new circuits. One of my patients puts on old movies that he loves. The idea is to engage the brain.

Getting good sleep is one of the most important parts of the WPTRP. Here are some essentials for sleep:

- Wind down.
- Avoid eating three hours before sleep.
- Go to sleep at same time each night with same routine.
- Find a “comfort” trigger, such as a stuffed animal, a heating pad, a special satin pillow, or even socks.
- Try a sound for sleep, such as birds, nice music, waterfall, white noise. Try the sounds from my Ear Ringing Relief app.

Action Program for Better Sleep

1. Set the sleep clock. Have a regular time for sleep. The more complicated the routine, the better – same pajamas, room temperature, special light, pleasant oils, etc. Taking a shower and allowing the hot water to run on the back of the neck to remove built-up lactic acid helps as well.
2. Relax using the inhales and exhales.
3. Use your imagination. Never think, “I can’t fall asleep. This isn’t going to work.” Imagine descending the staircase into sleep while repeating the positive words on exhalation.
4. Limit the bed to sleeping. Eating in bed or watching favorite movies prevents setting your sleep clock.
5. For those with tinnitus or pain, a distraction where the brain is engaged helps, such as a dull, monotonous book on tape or watching TV. That way, the brain is distracted from the tinnitus or thoughts of “I can’t sleep.”
6. When all else fails, there is always a good algebra book. Avoid a best-seller novel.
7. If your nose is stuffy, try lifting up the tip of the nose to see if that opens it. If it does, tape it in place. Recall a time when you were so sleepy that you could not stay awake.
8. Gently tighten and relax the body from the toes up.
9. Do the raised finger and the three breaths. With each breath, imagine that you are getting more relaxed. When the finger drops and hits the bed or pillow that signals to your body to get more relaxed.
10. Go to other places where you slept well. Be sure to use all the senses. Recall a hotel or place, falling asleep there. Did you hear ocean waves? Were you on a boat? Recall such places, whether real or imaginary.

Tinnitus Prevention

Curing tinnitus is fine, but preventing it is much better.

Of course, avoid loud sounds. If you personally cannot tell if the sounds are too loud, you need a sound meter. These are free. You can download a free sound meter on iTunes. Use it so that you can avoid noise louder than 85 decibels.

Good health is also essential. Avoiding high blood pressure and diabetes helps to dodge tinnitus and presbycusis. Keep your cholesterol normal and get regular exercise. There is a reason why some people at age 80 have excellent hearing. While for some people tinnitus is genetic, it is often correlated with health in some way.

At this time, doctors do not know if a single vitamin product will prevent tinnitus. If there is hearing loss and a suspicion of tinnitus, there is some indication that products like magnesium, Vitamin B12, B6 and other elements in my Tinnitus Caps can be significant in becoming healthy once again.

The products I have formulated in the Tinnitus Caps are based on research from the study of brain pathology in sleep apnea where patients develop tinnitus and are treated with certain products. In sleep apnea, you can identify the brain changes, and how to treat them. If you have sleep apnea, please visit www.ent-consult.com for recommendations.

Healing Your Tinnitus

Why is it so difficult to clear tinnitus?

It is primarily due to the fact that we do not have an objective measurement, in addition to the complex factors that go into your sense of hearing. To date, there simply is no one factor that is known to cure tinnitus. This is why you need the brain and the Whole Person to engage in the healing. But, by incorporating all of these techniques, we can get healing.

When you show up at the senior prom with a cast on your leg from skiing, everyone comes over to offer you a drink or a cookie. When you complain that you are bothered by a noise in your ear, no one comes to offer you a cookie.

This is why you must use your Whole Person for therapy. Doctors know that when the person takes charge is fully engaged in their therapy, they heal better and faster, whether it is frivolous teenage acne or cancer. There is nothing new about this.

For example, **George**, age 33, went to the doctor for a painful shoulder. The doctor gave him pills and instructions to take one twice a day as well as get good sleep, avoid alcohol, exercise, and eat right. George did all the recommendations of the doctor and when he returned two weeks later, he told the doctor that the pills worked. George took charge of his healing by engaging his Whole Person.

Robert, age 28, played a week's worth of tennis every weekend. He came to the doctor about shoulder pain and received the same pills and instructions as George did. When he saw the doctor two weeks later, he said the pills did not work. Yes, he had skipped a few of the doses, and no, he had not had time to do the exercises or the heat pack, and unfortunately he had some social engagements and did not get much sleep. Robert was not using his Whole Person for the healing.

My friend is an oncologist. When he gives his patients, an anti-nausea pill, the pill works. He has a wonderful caring manner, explains what the pill does, and how it works. He engages the Whole Person in his therapy. His patients perform

the visualization and exercises and follow his strict diet. But when he is asked to do a study on a new pill against a placebo, his patients may get the same results as the real pill, because they are taking charge and engaging the Whole Person. This allows the healing power of the mind to be engaged. This does not mean that the nausea or symptoms are mental. It means that for any symptom, you must engage the Whole Person in the healing.

The need to engage the Whole Person and bring the healing power of the mind into the process is not just for tinnitus.

In a recent study of persons severely addicted to smoking, they proudly announced that 44% of the patients who took a new medication for smoking cessation were free of smoking for a full year. Considering these were heavy smokers, those results are considered good. All the subjects were given complete information about the drug. They were told to avoid smoking company and to take a candy instead of a smoke when a craving struck. They were instructed on how to get good sleep and various other wellness activities. Obviously, the ones who quit followed the program and took their pills on time. However, 20% took a placebo and achieved the same results! Those taking the placebo got well because the mind and the Whole Person were fully engaged.

What about the 56% of patients who did not get well but were on the real pill? Did they follow the daily routine as instructed? Did they fully engage the Whole Person in the healing? I believe some of them did not. Certainly, the pill can work, but the Whole Person needs to be engaged for best results.

This is why the WPTRP has been successful.

Is it necessary to read this booklet? **Yes.**

Is it necessary to repeat the actions that engage the Whole Person? **Yes.**

Do you need to follow the sleep routine? **Yes.**

Do you need to try masking and biofeedback routines? **Yes.**

The more you engage the Whole Person and follow the recommendations, the better the results. Taking the Tinnitus Caps twice a day on a regular basis helps engage the Whole Person, and because the Tinnitus Caps elements aid in healing, the Whole Person program aids that healing.

With any medication, the more you understand, the more opportunity there is for the brain to participate in the healing, and this does not mean you need to know the complex biochemistry. When you engage the Whole Person this way, you can be assured that you are taking charge and utilizing the entire body for the healing process.

These recommendations are from my book Stressed? Anxiety? Your Cure is in the Mirror. Further details on using the Whole Person therapy for hypertension, general anxiety and creativity are presented with over 50 specific exercises. The book is on Amazon and at Barnes and Noble.

Therapies that Work - Summary:

- Using cognition to understand your tinnitus will relieve symptoms.
- Neuroplasticity, or making a new brain, will help your body to rewire and adjust to the ringing, resulting in less prevalence.
- By setting up conditioned reflexes, such as a bedtime routine, you will train your flight/fight response to disregard your tinnitus, thus lowering anxiety.
- By identifying and then masking your specific tinnitus sound, you will be able to reduce it's effect.

References

- Amen DG, Wu JC, Taylor D, Willeumier K. *Acetyl L carnitine is part of the important rehab program to NFL players with reduced cognition.* J Psychoactive Drugs. Jan – Mar 2011, 43 (1). 1 – 5.
- Attias, J., Weisz, G. *Oral magnesium intake reduces permanent hearing loss induced by noise exposure.* Am. J. Otolaryngology. 1994. 15, 26 – 32.
- Brigo F, Storti M, Lochner P, Nardone R. *Transitory stapedial myoclonus in a patient with benign fasciculation syndrome.* J. Laryngol Otol. Mar 2013, 12.1 – 2.
- Cevette, M. J.; Vormann, J.; Franz, K. *Magnesium and hearing.* J. Am. Acad. Audiol. 2013, 14. 202–212.
- Derekoy, F. S.; Koken, T. *Effects of ascorbic acid on oxidative system and transient evoked otoacoustic emissions in rabbits exposed to noise.* Laryngoscope. 2004, 114. 1775 – 1779.
- Du, X.; Chen, K.; Choi, C. H.; Li, W. *The importance of the pharmaceutical form and the routes of administration of B-group vitamins for the efficacious treatment of neurosensorial hearing loss.* Vestn Otorinolaringo. 2012 (2). 57 – 60.
- Forloni, G; et al. *Neuroprotective activity of acetyl-L-carnitine: studies in vitro.* J Neurosci Re. 1994, 37 (1). 92 – 96.
- Geocze, L.; Mucci, S. *Systematic review on the evidences of an association between tinnitus and depression.* Braz J Otorhinolaryngol. Feb 2013, 79 (1). 106 - 111.
- Grossan, M. *Stressed? Anxiety? Your Cure is in the Mirror*. 2012. Amazon.
- . *A Brief Introduction to Biofeedback for Otolaryngologists.* O.R.L. Digest. Feb 1975, 60 (2). 14 – 20.
- . *Treatment of Subjective Tinnitus with Biofeedback.* Ear, Nose and Throat Monthly. 1976, 55 (10). 14 – 17.
- . *Chapter 18: A. Diseases of the temporomandibular apparatus. Treatment of Temporomandibular Joint Disease with Biofeedback.* 1982. St Louis. C.V. Mosby. 327-334.
- . *Free yourself from Sinus and Allergy Problems Permanently.* Mission Hills, Ca. 2009, Hydro Med Pub.
- Guitton, M. J.; Wang, J.; Puel, J. L. *New pharmacological strategies to restore hearing and treat tinnitus.* Acta Otolaryngol (Stockh). 2004, 124. 411 – 415.

- Hagen, T. M., et al. *Acetyl-L-carnitine fed to old rats partially restores mitochondrial function and ambulatory activity*. Proc Natl Acad Sci USA. 1998, 95. 9562 –9566.
- Le Prell, Colleen G. *Mechanisms of noise-induced hearing loss indicate multiple methods of prevention*. Hearing Research. 2007, 226. 22 – 43.
- McFadden, S.L.; Woo, J.M.; Michalak, N.; Ding, D. *Dietary Vitamin C supplementation reduces noise-induced hearing loss in guinea pigs*. Hear Res. 2005, 202. 200 –208.
- Moller, Aage. R Textbook of Tinnitus. 2011, Springer.
- Orv, Hetil. *Hearing impairment and tinnitus in patients with type 2 diabetes*. Occup Environ Med. Mar 2013, 154 (10). 363 – 368.
- Seidman, M. *Biological activity of mitochondrial metabolites in age related hearing loss*. Am J Otol. Mar 2000, 21. 161 – 167.