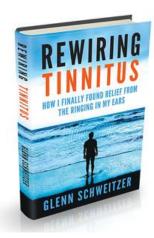
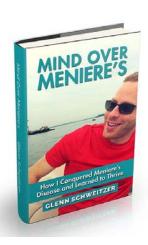
A Message of Hope for Tinnitus Sufferers

► A Presentation by

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Glenn Schweitzer Author of Rewiring Tinnitus and Mind Over Meniere's









Introduction

Before we begin, I want you to understand one thing, right now:

If you suffer from tinnitus, there's so much hope, even if you have hearing loss!

There may not be a cure for tinnitus, but you can get to a comfortable place where it stops bothering you and dramatically improve your quality of life.



My Journey with Tinnitus

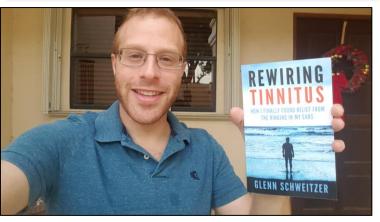
- What is Tinnitus?
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My Journey with Tinnitus







My Story

I've had tinnitus for as long as I can remember

- I thought it was normal
- It wasn't a problem when I was younger

First sign of trouble

• I was only 13 years old

Tinnitus: a temporary problem?

 Most people will experience mild tinnitus and hearing loss temporarily after exposure to loud sounds

But when you already have tinnitus... it usually gets much, much worse.



My Story

A Love of Loud Music

• Throughout my life, every loud concert or party I attended, ended the same way: tinnitus spike, hearing loss, panic, sleep deprivation, and a slow return to normal



Meniere's Disease

Most people will never know what it's like to stare down the barrel of a complex medical diagnosis

- For the unlucky few diagnosed with a rare disease, there are no certainties
- There is little understanding and much pain, confusion and despair

What is Meniere's Disease?

- An inner ear vestibular disorder with no known cause or cure. Symptoms include:
 - Violent attacks of rotational vertigo
 - Fluctuating and progressive hearing loss
 - A feeling of fullness or pressure in the ears
 - Loud tinnitus

An emotional roller coaster

- I suffered for months without any kind of understanding, getting worse everyday
- My second doctor changed everything
- · I'm happy to report that I haven't had a vertigo attack in a very long time.
- Want to learn more about Meniere's disease? Visit: MindOverMenieres.com

My Tinnitus

As my Meniere's symptoms improved, my tinnitus got worse

- It was the one thing I couldn't change
- It started to bother me more and more

The sound of sirens

- My tinnitus is a loud, high pitched tone around 3500hz
- When my Meniere's symptoms flare up, I often hear other tones too:
 - Whooshing, static and more
- During spikes, it would become unbearable

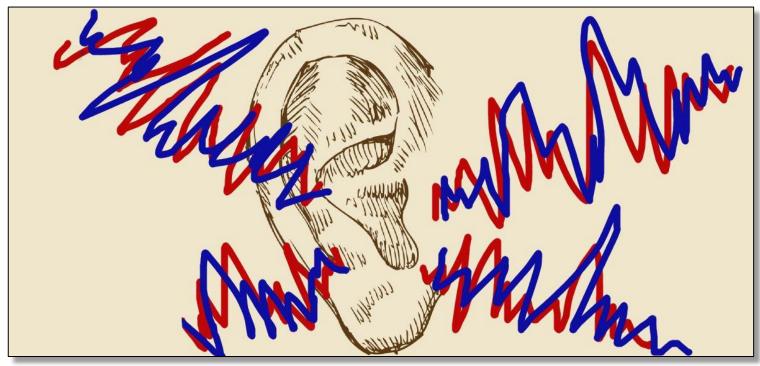
Nothing helped

- I avoided silence and listened to background noise at all times
- I tried every over-the-counter supplement I could find

Eventually, I found something that actually worked

A simple exercise changed everything for me

What is Tinnitus?







What is Tinnitus?

Medical definition (from the Mayo Clinic):

• "Tinnitus is the perception of noise or ringing in the ears...Tinnitus isn't a condition itself - it's a symptom of an underlying condition"

What conditions cause tinnitus?

| Hearing Loss (Age related & noise induced) | Injury (to the ear, head, or neck) | Temporomandibular Joint Disorder (TMJ/D) | Circulatory System Disorders |
|--|--------------------------------------|---|-------------------------------|
| Meniere's Disease | Migraine Associated Vertigo (MAV) | SCDS | Other Vestibular Disorders |
| Infection | Traumatic Brain Injury | Certain Medications | Certain Supplements |

Many roads lead to tinnitus. Now what?

- 1. Find a great local doctor via Healthgrades.com
- 2. Rule out potentially treatable underlying causes
 - a. Treat hearing loss when possible

But wait, what exactly is tinnitus??

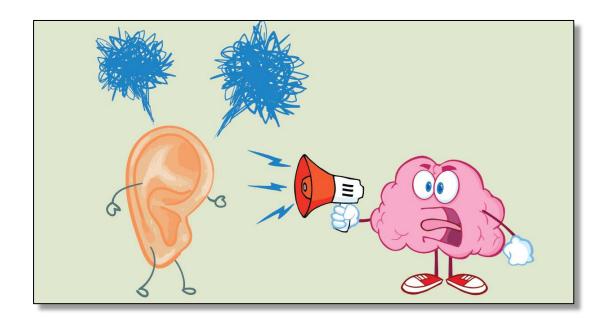
It's an Emotional, Psychological, and Physiological Problem

Hearing and memory are linked

- When we hear a sound, we assign meaning, and react accordingly
- We remember what it means and how it made us feel

An evolutionary purpose

- We use sound to monitor our environment for threats
- Sounds we perceive as threatening, trigger a stress response fight or flight
- Sounds can also carry a deeply positive meaning



It's an Emotional, Psychological, and Physiological Problem

An automatic response and vicious cycle

- Activates the limbic system and triggers an emotional response
- Activates the autonomic nervous system and triggers a physiological response
- · We react automatically, without thinking at all

When tinnitus is perceived as bothersome, an annoyance, or as a threat, our body reacts automatically as if we were in danger, triggering a stress response.

But tinnitus is no more threatening or dangerous than the sound of a ceiling fan.

So again, what exactly is tinnitus?



The Neurophysiological Model of Tinnitus

Developed by Dr. Johnathan Hazel and Dr. Pawel Jastreboff

- The predominant model of tinnitus since the early 90's
- Has lead to beneficial treatments such as tinnitus retraining therapy (TRT)

The cochlea is a noisy place

- Contains 17,000 tiny hair shaped sensory organs called hair cells
- The mechanical and electrical activities present within the cochlea produce measurable noises called otoacoustic emissions

Under the right conditions, everyone can hear the sounds of tinnitus

- Heller and Bergman proved this in 1953 with a clever experiment
- Students with no history of tinnitus reported buzzing, pulsing and whistling noises



The Neurophysiological Model of Tinnitus

Tinnitus is the result of the brain turning up the volume of natural sounds present within the body

- Typically occurs in as the brain attempts to compensate for changes in the sound environment such as silence, hearing loss, or exposure to loud noise.
- Hyperacusis (extreme sensitivity to sound) is a closely related phenomenon.

We still don't fully understand why tinnitus occurs, or the mechanisms and pathways involved in the brain

Some theorize that that tinnitus is akin to phantom limb syndrome

KEY TAKEAWAY:

The sounds of tinnitus are harmless, no matter how loud they seem or how intrusive they are.

Habituation is the Answer to Tinnitus

We're very good at eliminating annoying background noise from our conscious awareness

• In a very real sense, the brain can turn down the volume of sounds that are not important, so we can focus on the ones that are

But there's a BIG problem:

- It's impossible to habituate to a sound that we interpret as annoying, threatening, dangerous, or if it carries a negative association of any kind
- You wouldn't't want to miss the sound of something actually dangerous

Our reaction to tinnitus is the root of the problem

- We react to the sound emotionally as if we were in danger. Our brains can't tell the difference between real and imagined threats, so the reaction is the same
- We have a stress response, and it never ends, because our tinnitus doesn't go away

Habituation is the Answer to Tinnitus

How did this happen?

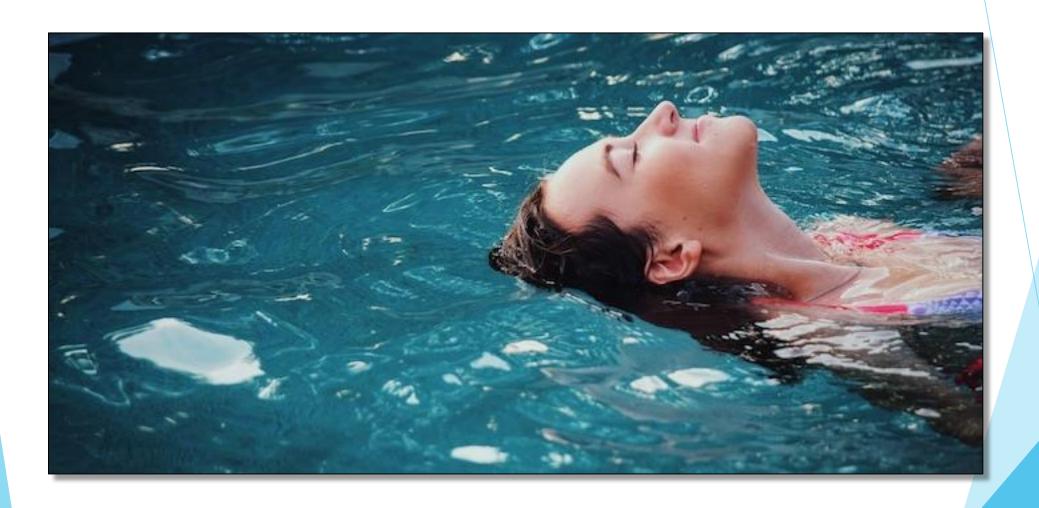
- It starts with fear: the sudden onset of a loud noise can be terrifying
- · Many people are told they just have to live with it
- Our first reaction is to try to ignore it by force of will or background noise, but it never works, especially with hearing loss

Emotional, physical, and psychological problems all get worse when we ignore them. So why do we think it will be any different when it comes to tinnitus?

We can change the way we react to the sound of tinnitus

- It's the one thing we actually have the power to change
- When we accomplish this, it stops bothering us, and the habituation process can occur we can tune it out naturally

Finding Relief



Some Background and Context

A desperate need to lower my stress levels

- Stress is a big trigger, and I needed to find better ways to manage my anxiety
- I suffered from anxiety for most of my adult life

Meditation was the only thing that helped me calm down

- I was skeptical, and it was very difficult initially
- I experimented with many forms of meditation

"Meditation suffers from a towering PR problem, largely because its most prominent proponents talk as if they have a perpetual pan flute accompaniment. If you can get past the cultural baggage, though, what you'll find is that meditation is simply exercise for your brain."

-Dan Harris, Author of "10% Happier"

What is Meditation?

Meditation is the practice of quieting the mind

- Typically involves focusing your attention onto a single point of awareness like breathing or a mantra (mentally repeated word or phrase)
- It's an incredibly simple practice, but it's not easy

The benefits of meditation:

- Short term:
 - Triggers a physiological relaxation response that calms the nervous system
 - Lowers stress levels
- Long term:
 - Overall decrease in stress load
 - Increased ability to cope with stress
 - Dramatic improvement in focus and concentration
 - Improves ability to fall asleep

Tinnitus makes meditation difficult

- I would never have coped with Meniere's disease as well I was able to were it not for meditation.
- As my Meniere's symptoms improved, my tinnitus grew worse and it disrupted my meditation practice, making it impossible to focus

My Breakthrough!

One night, struggling to meditate, I had an idea:

- What would happen if I focused on the sound instead of my breathing?
- It seemed crazy, but I tried it anyways, and it changed everything

Context

- Anything can be used as the object of meditation
- In mindfulness meditation, one is encouraged to explore pain or boredom in this way

"The advice here is similar to how you should handle pain and fatigue: Investigate. What does boredom feel like? How does it manifest in your body? Whatever comes up in your mind can be co-opted and turned into the object of meditation. It's like in Judo, where you use the force of your enemy against him."

-Dan Harris, Author of "10% Happier"

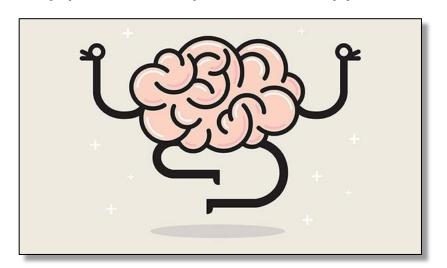
My Breakthrough!

A flash of insight

- At first it was difficult and my mind wandered immediately
- This happens to everyone, especially new meditators
- The goal of meditation is to catch your mind wandering, and start again
- This time, my mind wandered away from the sound

When it was over, my tinnitus didn't seem as loud

- It wasn't quieter, it just wasn't bothering me as much, so it didn't seem as loud
- I didn't understand it at the time, but my brain was beginning to associate the calm of meditation with the sound of my tinnitus
- Within a week or two of daily practice, my tinnitus stopped bothering me entirely



Tinnitus Focused Meditation: The Technique

Sit or lay down in a comfortable place

- You don't need to sit cross legged on a yoga mat chanting "Om"
- Just get comfortable
- Set a timer (5-10 minutes initially)

Physiological Relaxation

- The mind and body are intimately connected
- Progressive muscle relaxation: consciously work your way through your body, relaxing muscle groups one at at time

Focus attention on the sound of your tinnitus

- Maintain a mindset of curiosity, as if you were a scientist observing something interesting for the first time
- Breathe naturally

When your mind wanders, begin again

- Everyone's mind wanders during meditation
- Catching yourself when it happens and starting over is the exercise

Tinnitus Meditation: The Basic Practice

An evolution of an idea

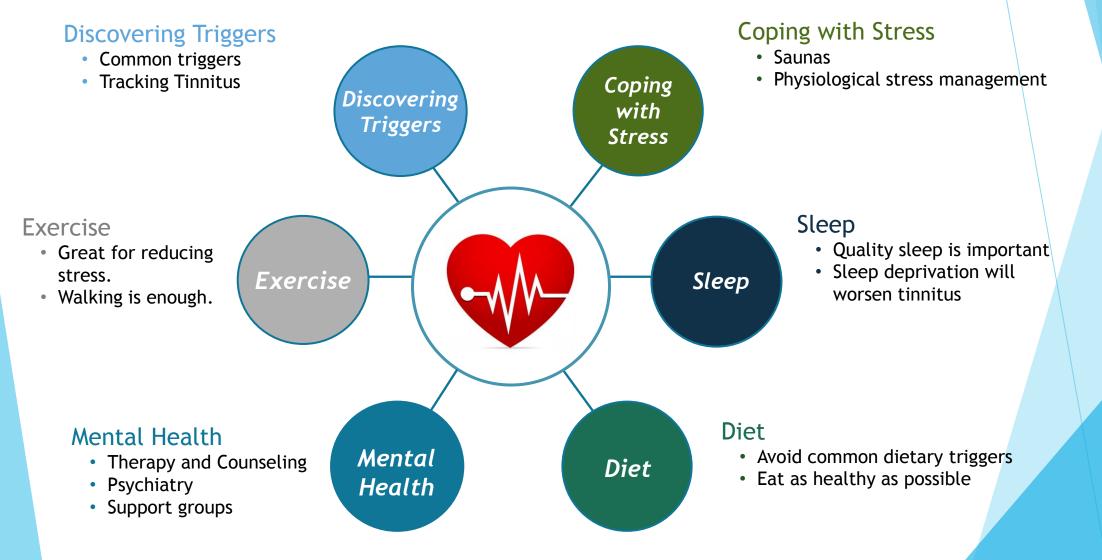
- What started as a lucky accident evolved into a more structured practice
- Normally, I would suggest using partial masking, or other audio based strategies to make tinnitus meditation easier to approach
- This won't work for the hearing loss community

Addressing the challenges of hearing loss

- Tinnitus meditation can be very challenging early on, especially with more severe cases
- Utilize your other senses to make the practice easier:
 - Setting up your room with relaxing scents, candles, and images can be helpful
 - Recall a soothing memory of someone you love
- Taking a hot bath, sauna, or any other physically relaxing activity prior to tinnitus meditation will make it easier



Lifestyle Management



Tracking Tinnitus and Discovering Triggers

Spikes and fluctuations

- The sounds of tinnitus are rarely constant
- They may change in sound, volume, and number of sounds
- These fluctuations are typically referred to as tinnitus spikes
- Identifying the variables that exacerbate your tinnitus is important

Common tinnitus triggers

- Certain noises
- Loud sound exposure
- Stress
- Sleep deprivation
- Certain medications, supplements, and vitamins
- Dehydration
- High sodium diet
- High sugar diet
- Caffeine

- Nicotine (All forms)
- Alcohol
- Recreational drugs
- Food sensitivities
- Allergies
- Pollution
- Temporomandibular Joint Disorder (TMJ)
- Specific changes in the weather
- Changes in barometric pressure

Tracking Tinnitus and Discovering Triggers

Journaling is the answer

- If your tinnitus spikes in the afternoon because of something you ate for breakfast, you probably won't make the connection
- With the right information in front of us, it's very easy to find the patterns

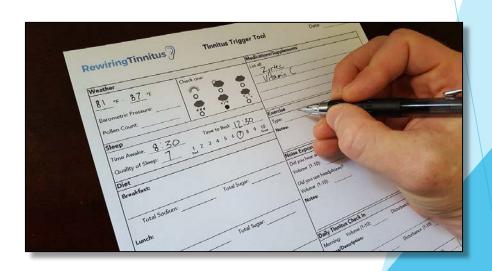
What to keep track of:

| Tinnitus Severity | Diet | Weather | Medication/Supplements |
|-------------------|----------|---------|------------------------|
| Noise Exposure | Exercise | Sleep | Stress Levels |

The Tinnitus Trigger Tool

- One page printable PDF tool to help you track all the right variables
- Fill one out each day and compare the days when your tinnitus is at it's worst (and best)

Free download at Rewiringtinnitus.com/journal



Coping with Stress - The Universal Trigger

Counseling and therapy

- Tinnitus can be traumatic, especially if you've suffered for a long time
- Finding the right therapist is key
- Therapy is an excellent tool for managing stress
- Support groups can be helpful too

Physical stress management

- Stress finds it's way into our bodies as physical tension, aches, and pains
- Helpful practices include:
 - Professional massage
 - Trigger point massage with a lacrosse ball or foam roller
 - Acupuncture
 - Hot baths
 - Saunas

Exercise

- Doesn't have to be intense to reap the benefits walking is enough
- Exercise outside whenever possible
- Try yoga

Improving Sleep

Improve your sleep routine

- Go to bed and wake up at the same time every day
- Instead of the typical "8 hours", aim for 7.5 hours or 9 hours of sleep
- Do the same thing every night before you go to bed
- Avoid caffeine for at least 8 hours before bed time

Turn off back-lit screens 90 minutes before bed

- Blue light blocking glasses
- Blue light blocking apps

Optimize your bedroom

- Make your room pitch black
 - Blackout curtains
 - Sleep masks
- The ideal temperature is 62-68 degrees Fahrenheit
- Use background/white noise if you have some of your hearing left



Will there ever be a cure?



Question and Answer!



Want to learn more?

www.Rewiringtinnitus.com www.Mindovermenieres.com