

TINNITUS/HYPERACUSIS SUPPORT GROUP

Christina Shields, Au.D., CCC-A #01300



Topics of 2022

Sound Sensitivity

Anhelina Bilokon, Alexandra Papanicolaou, & Sydney Hancock

Sound Sensitivity can be defined as discomfort for sounds that would be acceptable to most normal hearing people (Tyler et al., 2014). *Hyperacusis* is a way we describe sound sensitivity.

Tinnitus Treatment Devices

Danielle Schopf & Allie Vance

Treatment devices may help alleviate tinnitus symptoms. Devices may range from on-ear devices like hearing aids or sound generators to smart phone applications.

Sleep Hygiene

Danielle Schopf & Marjan Davoodian

Sleeping problems can be extremely frustrating, especially if you have tinnitus. In order to help overcome sleep disturbances caused by tinnitus, we discussed *sleep hygiene* and some *tried-and-true strategies*.

Sound Pillow

Guest Speaker: R. Scott Armbruster



Resources

The American Tinnitus Association (ATA) is a wonderful resource for those with tinnitus and sound sensitivity. The website has up-to-date topics relating to hearing loss, tinnitus, and sound sensitivity.

 <https://www.ata.org>

Need Help?

Call or text **988** to connect with a trained crisis counselor. This service is confidential, free and available 24/7/365

Hearing & Speech Clinic



0100 Samuel J. LeFrak Hall
University of Maryland
College Park, MD, 20742



301-405-4218



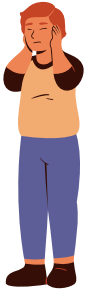
shields3@umd.edu

Sound Sensitivity

Sound sensitivity can be defined as discomfort for sounds that would be acceptable to most normal hearing people (Tyler et al., 2014). When exposed to bothersome sounds, different reactions or emotional responses can take place (fear, pain, irritability, annoyance). Assessment by an audiologist involves a hearing test, where the auditory system is assessed. Loudness discomfort level (LDL) testing may also be completed to determine loudness tolerance. Treatment for sound sensitivity includes sound therapy and/or cognitive behavioral therapy (CBT).

Sound therapy can be self-managed, where an audiologist provides specific recommendations, or formally, where an audiologist provides specific recommendations and the patient is followed in intervals to ensure treatment goals are met.

Protecting your hearing with earplugs may sound like a good idea, but protecting your ears in quiet situations or all the time may actually make the sensitivity worse. Protecting your ears appropriately (mowing the lawn, attending a concert, etc.) is always recommended. If you have questions about protecting your ears, or questions regarding sound sensitivity, it is recommended that you schedule an appointment with a licensed audiologist.



Sleep Hygiene

Sleep hygiene is a set of behaviors and environmental recommendations intended to improve sleep quality. It is important to keep control of sleep habits so that the body maintains healthy circadian rhythms. Circadian rhythms are the internal body clocks that permit wakefulness during the day and sleepiness at night. Light and dark are the primary cues for these natural processes, which affect animals, plants, and microbes alike. Sleeping at night and waking up during the day are examples of circadian rhythms.

There are several stages to a normal night's sleep, including light sleep, deep sleep, and several awakenings. These stages can be affected by aging. Consequently, sleep becomes lighter and fragmented, and naps during the day become more common.

Generally, it is not tinnitus that wakes people up; it may be something else that prompts someone to awaken during sleep. Many people with tinnitus sleep well and believe sleep is their escape from tinnitus. In those who sleep well, tinnitus is not different from that of those who have trouble sleeping. The only difference is people with tinnitus who sleep well worry less at night than those who sleep poorly.

Beliefs and worries about sleep, the effects of not sleeping, or tinnitus in general are more likely to contribute to sleep problems than actual tinnitus sounds. As a result, it becomes a vicious cycle.

Insomnia among people with tinnitus is usually accompanied by anxiety. Tinnitus may be more noticeable in the quiet environment of bedtime, which can lead to unhelpful worrying thoughts like, "I won't be able to sleep!" When this occurs, stress is generated, which may result in insomnia. As a consequence, poor sleep can increase your anxiety, resulting in another cycle of sleeplessness, worry, and tinnitus awareness.

The strategies and recommendations include, but are not limited to, a healthy and consistent sleep routine. During the day, exercise, completing tasks early, and writing down stresses every day can help alleviate anxiety and tension. At night, take time to relax and wind down. However, avoid watching TV or using electronics too close to bedtime.

Another way to improve sleep quality is to control the environment. Setting a comfortable temperature and reducing the lighting in the room are two ways to increase the chances of a good night's sleep. Another way to improve sleep is to implement neutral or soothing noise at night. Lastly, mindfulness before bed can be helpful in disengaging from events and improving sleep.



Tinnitus Treatment Devices

While there is no cure for tinnitus, there are various tinnitus treatment devices that can help ease the symptoms. Tinnitus devices can be used as a part of tinnitus sound therapy or to mask the tinnitus with a sound that is less bothersome for the listener. These therapy sounds vary from white noise, nature noise, musical noise, etc. The listener can pick a sound that is most comfortable for them!

One presumed reason for tinnitus in the presence of hearing loss is that the brain is 'filling in the gaps' for the lost information. Virtually all hearing aids now have a tinnitus feature that allows the listener to use "neutral" sounds while the hearing aids amplify external sounds. Studies even show improvement in tinnitus with amplification alone in cases in which hearing loss and tinnitus are present.

The Sound Pillow is device that plays soothing sounds to help facilitate sleep. The speakers are embedded in the pillow so volume can be set lower.

Neuromonics and ReSound Tinnitus Relief are both apps that can ease symptoms of tinnitus. Neuromonics is a therapy subscription that is managed by an audiologist. The ReSound app provides relaxing therapies, customized sounds, multisensory activities, and tips for stress relief.

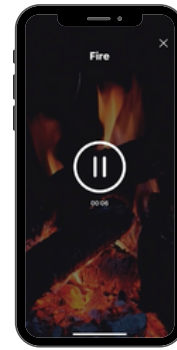
Linere is a treatment that is not available in the United States. However, participants have reported benefit from the device. This device has two parts: electrical stimulation delivered to the tongue and an acoustic stimulus, in which sounds are delivered to the ears. Research has shown that this pairing may rewire the brain and alter its perception of tinnitus.



Choose from a variety of sounds



Combine sounds



Pair sound with a visual component

Guest Speaker: R. Scott Armbruster

Mr. Armbruster, inventor of the Sound Pillow, was welcomed to our December 2022 meeting. He has a longstanding history of tinnitus due to a history of occupational noise exposure. Mr. Armbruster discussed why he created the sound pillow and how the sound pillow works. He reviewed the benefits of using sound for tinnitus management. Mr. Armbruster also answered questions from our members. If you are interested in learning more, please visit <https://www.soundpillow.com/> for more information.



The Sound Pillow has an MP3 player that can provide soothing sounds to mask tinnitus during sleep.

How To Do Progressive Muscle Relaxation (PMR)

From: anxietycanada.com

Step 1: Tension

The first step is applying muscle tension to a specific part of the body. This step is essentially the same regardless of which muscle group you are targeting. First, focus on the target muscle group, for example, your left hand. Next, take a slow, deep breath and squeeze the muscles as hard as you can for about 5 seconds. It is important to really feel the tension in the muscles, which may even cause a bit of discomfort or shaking. In this instance, you would be making a tight fist with your left hand.

It is easy to accidentally tense other surrounding muscles (for example the shoulder or arm), so try to ONLY tense the muscles you are targeting. Isolating muscle groups gets easier with practice.

Step 2: Relaxing the tense muscles

This step involves quickly relaxing the tensed muscles. After about 5 seconds, let all the tightness flow out of the tensed muscles. Exhale as you do this step. You should feel the muscles become loose and limp, as the tension flows out. It is important to very deliberately focus on and notice the difference between the tension and relaxation. This is the most important part of the whole exercise.

Note: It can take time to learn to relax the body and notice the difference between tension and relaxation. At first, it may feel uncomfortable to be focusing on your body but with time it can become quite enjoyable.

Remain in this relaxed state for about 15 seconds, then move on to the next muscle group. Repeat the tension-relaxation steps. After completing all of the muscle groups, take some time to enjoy the deep state of relaxation.

Helpful Hints:

- **Realistic expectations:** set aside 10 minutes and work your way up
- **Physical Space:** find a place where you won't be disturbed
- **Head Space:** implement this exercise when you are calm, that way it will be easier to do when you are stressed or anxious
- **Sound:** play a relaxing sound in the background

Muscle Groups:

Start with your feet and move up towards your head.

- Foot (curl your toes)
- Lower leg and foot (tighten calf by pulling toes toward you)
- Leg (squeeze thigh muscles while engaging your foot and lower leg/foot)
- Hand (clench your fist)
- Arm (tighten biceps by "making a muscle" while clenching fist)
- Buttocks (tighten buttocks together)
- Stomach (suck stomach in)
- Chest (take a deep breath)
- Mouth (open your mouth wide to stretch your jaw)
- Eyes (close eyes tightly)
- Forehead (raise your eyebrows)

EVALUATION

- Case History
- Pure Tone Assessment
- Ultra High Frequency Testing
- Loudness Discomfort Level (LDLs) Assessment
- Tinnitus Pitch/Loudness Matching
- Otoacoustic Emissions

COUNSELING

- Tinnitus education
- Management options
- Individualized recommendations/plan

FOLLOW-UP

- Monitor progress
- Testing as needed
- Individualized recommendations

Check Out
Our Clinic!

