



Do You Hear What I Hear?

Protecting Yourself from Hearing Loss and Ear Problems

Hearing loss is common among the elderly and middle-aged folks, but today's youth are starting to experience hearing problems that used to belong only to the older generation. So, while Baby Boomers are now reaping the consequences of listening to rock 'n roll at loud volumes when they were young, today's youth are rapidly, yet sadly, joining their ranks. Ear buds, exotic car audio systems and high-output home theater components crank out tunes at unprecedented volume levels and most people are completely unaware of the damage they are inflicting on their delicate ears.

"It's a different level of use than we've seen in the past," states Robert Novak, director of clinical education in audiology at Purdue University. "It's becoming more of a full-day listening experience, as opposed to just when you're jogging." Novak says he's seeing an increasing number of young people with "old" ears—a trend that's been building since the portable Walkman became all the rage in the early eighties.

To document the trend, Novak and his colleagues randomly examined students and found a growing incidence of what is known as noise-induced hearing loss. Usually, it means they've lost the ability to hear higher frequencies, evidenced at times by mild ear-ringing or trouble following conversations in noisy situations.

Hearing specialists say they're also seeing more people in their 30s and 40s, many of them among the first Walkman users, who suffer from pronounced tinnitus, an internal ringing, whooshing or humming in the ears. "It may be that we're seeing the tip of the iceberg now," speculates Dr. John Oghalai, director of The Hearing Center at Texas Children's Hospital in Houston. "I wouldn't be surprised if we start to see even more of this."

Turn Down the Volume

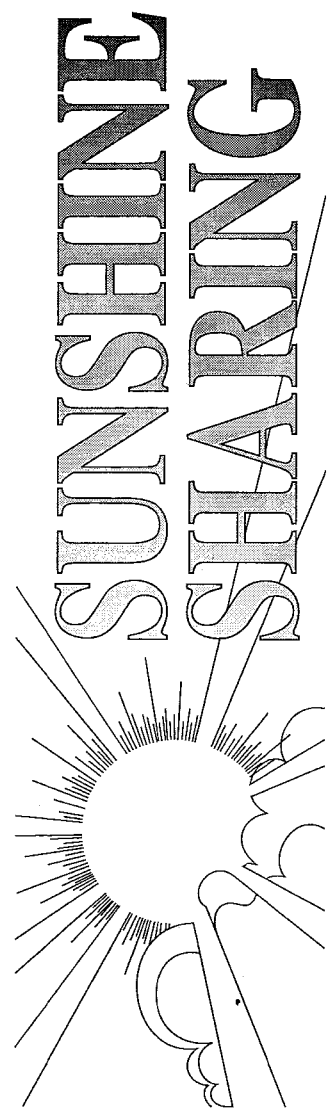
Of all the factors contributing to hearing loss, loud noise is generally the most common. Fortunately, this is something over which we have a lot of control. Noise levels are measured in decibels, or "dB" for short. The higher the decibel level, the louder the noise. Our hearing system can be injured not only by a loud blast but also by prolonged exposure to high noise levels. Sounds of 85 to 90 dB or higher can cause permanent hearing loss.

To get an idea of the decibels of various sounds, here are a few examples. Sounds over 120 dB can be acutely painful, such as a jet plane taking off or a siren (120 dB), a jackhammer (130 dB), firearms (140 dB) and fireworks at three feet (150 dB). Prolonged exposure to the following extremely loud sounds can also create hearing problems: a passing motorcycle (90 dB), a hand drill (100 dB), small gas engines like lawn mowers and snow blowers (106 dB) and a chain saw (110 dB). 110 dB is also the maximum output of most MP3 players.

In contrast, a vacuum cleaner or busy traffic is only 70 dB, and most kitchen appliances and hair dryers are between 80-90 dB. A typical conversation is only 60 dB.

If you have to raise your voice to be heard, can't hear someone three feet from you, have difficulty discerning speech after leaving a noisy area, or have pain or ringing in your ears after exposure to noise, your hearing has probably been damaged, so get your ears checked. Meanwhile, in this issue of *Sunshine Sharing*, we'll give you insights into how to take better care of the precious gift of hearing and how to solve common ear health problems like tinnitus and earaches.

To learn more about protecting your ear health naturally, look inside...



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Your guide to better health the natural way.

Important Notice

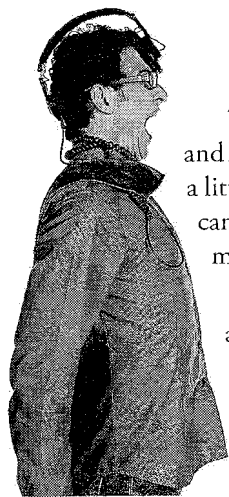
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Ear Problems and Solutions



To understand various problems with our ears and how to correct them, it's helpful to understand a little bit about the structure of the ears. The ear can be divided into three parts: the outer ear, middle ear and inner ear.

The outer ear consists of the ear canal and eardrum. Sound travels down the ear canal, striking the eardrum and causing it to move or vibrate.

The middle ear is a space behind the eardrum that contains three small bones called ossicles. This chain of tiny bones is connected to the eardrum at one end and to an opening to the inner ear at the other end. Vibrations from the eardrum cause the ossicles to vibrate which creates movement of the fluid in the inner ear.

The middle ear is connected to the throat by a tube called the Eustachian tube. This tube allows the air pressure in the middle ear to equalize with the pressure on the eardrum in the outer ear. When there are sudden changes in pressure, our ears may "pop" when the pressure is able to adjust properly.

Movement of the fluid in the inner ear (or cochlea) causes changes in tiny structures called hair cells. This movement of the hair cells sends electric signals from the inner ear up the auditory nerve to the brain. The brain then interprets these electrical signals as sound.

Basic Tips for Ear Health

The ear is often referred to as the most energy-hungry organ of the body. All parts of the ear require high quantities of nutrients to function properly and to avoid degenerative problems such as hearing loss or tinnitus. Only if the right minerals and enzymes are present can the nerves successfully fire the precise signals at millisecond intervals required to accurately transmit sound. The delicate balance of the hearing system can be upset by:

- Insufficient oxygen due to poor circulation in the inner ear
- A deficiency in the trace minerals needed for enzyme activity
- A toxic overload being carried by the body
- Excessive free radical activity

The electrical stability of the cochlea depends on the presence of minerals such as magnesium and calcium, as well as a correct balance of necessary enzymes, fatty acids and amino acids. The tiny hair-like cells called cilia are the final stage of sound transmission before the charge is relayed to the auditory nerve. Slight disturbances in the equilibrium of enzymes can lead to the death of some of the cilia.

Trace minerals like those found in **Mineral-Chi Tonic** and **Ionic Minerals with Açai** are important for maintaining ear health. The adaptogens in Mineral-Chi Tonic and the antioxidant Açai berries in Ionic Minerals are also helpful for keeping ears healthy. Antioxidants like those found in **Thai-Go** and **Super ORAC** are important to general health, including the health of the ears.

Relieving Earaches

Earaches can be extremely painful and the infection and inflammation involved can result in complications such as tinnitus and loss of hearing if they are not properly treated. Typically, what happens with an earache is that something causes the Eustachian tube and the inner ear to become inflamed, usually some kind of allergic reaction or infection. The official name for this condition is otitis media.

When the Eustachian tube becomes inflamed, it swells, just like any other tissue in the body. This swelling causes the Eustachian tube to close, which prevents normalization of pressure on both sides of the eardrum. This can prevent fluid from draining out of the inner ear and cause pressure to build up inside the ear. If the pressure builds up enough, the eardrum may rupture.

The outer ear, the ear canal and eardrum, may also become inflamed and swollen. The medical term for this is otitis external, but the condition is also called "swimmer's ear."

When dealing with earaches, it is important to identify the cause of the irritation. It may be due to a cold, where mucus drainage in the head gets into the Eustachian tubes causing inflammation. When earaches are chronic and reoccurring they are often due to food allergies, particularly to wheat and dairy products. Spinal misalign-

Protect Your Hearing

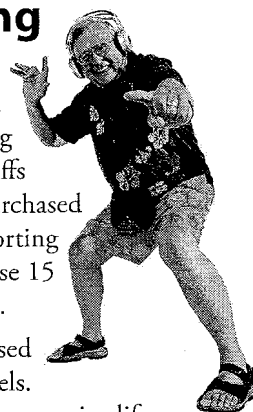
Wear hearing protection when working with power tools or when exposed to other loud noises. Putting cotton in your ears won't work. Earmuffs offer excellent protection and can be purchased at drugstores, hardware stores, or sporting goods stores. Earmuffs can reduce noise 15 to 30 dB depending on quality and fit.

Earplugs and earmuffs can be used together to further reduce sound levels. Earplugs block incoming sound. They come in different shapes and sizes, or they can be custom-made by taking an impression of the ear. Earplugs can reduce noise by 15 to 30 dB depending on how well they fit.

Do not listen to loud sounds for too long. If you don't have hearing protection, give your ears a break by moving away from the loud sound. Plug your ears with your fingers as a quick way to protect them when you are exposed to extremely loud noises.

Reduce the loudness of the sound. Keep personal listening devices set to no more than half volume. Don't be afraid to ask others to turn down the volume of their speakers if it is hurting your ears. If a movie theater's sound system is too loud, ask the projectionist to reduce the volume.

Be a good consumer. Look for noise ratings on appliances, sporting equipment, power tools and hair dryers. Purchase quieter products. This is especially important when purchasing toys for children.





ment may also contribute to ear problems. Most ear infections are viral, not bacterial, which is why antibiotics, although frequently prescribed for earaches, typically have very little effect.

Fortunately, there are a number of very effective herbal remedies for earaches. The first is garlic

oil. Simply sterilize a pin and poke a hole in a gel cap of **Garlic Oil** and squeeze the oil into the ear. The antiviral and antibacterial sulfur compounds in garlic are readily absorbed through the eardrum and into the middle ear to reduce inflammation and fight any infection. Any remedy you are going to put into the ear should be warmed to body temperature before use.

Another great remedy for ear infections is **Silver Shield**. Drop warm Silver Shield into the ear. It is even more effective when you add a drop of **Lavender Essential Oil** to about 20 drops of Silver Shield. The lavender oil helps ease the pain and penetrates into the middle ear better than the silver.

Lobelia Essence and/or **CBG Extract** have also been used as ear drops. Lobelia, in particular, relaxes the Eustachian tubes and helps the middle ear to drain, which can ease pain.

Where earaches are recurring, it is very helpful to screen for food allergies. Many children's chronic ear problems have cleared up by avoiding wheat and other gluten-bearing grains like oats and rye in favor of rice, corn and millet. Dairy foods can also contribute to frequent earaches in children.

Eyebright can be given as a single herb to help counteract these allergic reactions. It helps reduce swelling in the Eustachian tubes. **EW** can do the same thing for adults.

Earaches can also occur when infections in nearby regions of the ear affect the ear nerves. This is known as "referred pain" and may be caused by dental conditions, jaw disorders or infections in the upper digestive tract and throat area.

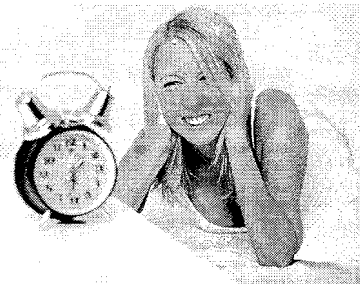
Tips for Tinnitus (Ringing in the Ears)

Tinnitus ("TIN-a-tus") refers to a sound in the ears when no outside sound is present. Tinnitus can sound like ringing, hissing, roaring, pulsing, whooshing, chirping, humming, whistling or clicking. One third of all adults experience tinnitus at some time in their lives. To see if you have problems with tinnitus, start by answering yes or no to the following questions:

- Do you have a problem hearing over the telephone?
- Do you hear better through one ear than the other when you are on the telephone?
- Do you have trouble following conversation when two or more people are talking at the same time?
- Do people complain that you turn the TV volume up too high?
- Do you have to strain to understand conversation?
- Do you have trouble hearing when there is a lot of background noise?
- Do you have trouble hearing in restaurants?
- Do you have dizziness, pain or ringing in your ears?

- Do you find yourself asking people to repeat themselves?
- Do family members or coworkers comment about your missing what has been said?
- Do many people you talk to seem to mumble (not speak clearly)?
- Do you misunderstand what others are saying and respond inappropriately?
- Do you have trouble understanding the speech of women and children?
- Do people get annoyed because you misunderstand what they say?

If you answered "yes" to more than two of these questions, you should have your hearing evaluated by a certified audiologist. He or she will perform an audiogram, which shows the results of pure-tone hearing tests. Based on the type, degree and configuration of your hearing loss, the audiologist can make appropriate recommendations.



Tinnitus may be caused by ear infections, circulatory problems or nerve damage. It can also be caused by chronic tension in the muscles holding the bones of the middle ear. These muscles tense to reduce vibration when we hear loud noises and like any other muscle can fatigue from chronic tension.

CBG Extract mixed with Lobelia Essence and warmed to body temperature to use as ear drops may be helpful in treating tinnitus as they help to relax these tiny muscles. **Gingko Biloba** and **Mega Chel** may be helpful when the problem is due to circulatory problems, and **St. Johns Wort** may be helpful when the problem is due to nerve damage.

Dizziness (Vertigo) and Light-headedness

If you experience light-headedness, loss of balance or an unsteady feeling, you may be one of the millions of Americans who experience dizziness. Dizziness affects 20% to 30% of the general population, and it is a common reason adults seek medical attention.

When your balance is impaired, you may feel woozy or disoriented. You may have blurred vision or experience a sensation of movement. It may seem that the room is spinning (vertigo). You may not be able to walk without staggering, or you may not be able to get up. Severe cases can cause nausea, vomiting, diarrhea, faintness, changes in heart rate and blood pressure, fear and anxiety.

Continued on Page Four

Additional Help and Information

For more information about natural solutions to problems with ear health, contact the person who gave this newsletter to you. Their contact information should be found at the top of page four. They have additional handouts and resource materials to help you. You can also consult some of the following sources:

The Comprehensive Guide to Nature's Sunshine Products by Tree of Light Publishing



How's Your Hearing?

Millions of Americans are at risk for hearing problems. Learn what you can do to protect your hearing, and treat earaches and other ear problems naturally, in this month's Sunshine Sharing.

Continued from Page Three

Dizziness can be caused by a viral or bacterial infection in the ear, damage to the inner ear, foreign objects in the ear canal, changes in blood pressure, vascular problems, Ménière's disease, toxic medications, glandular or nervous system imbalances, Multiple Sclerosis, visual disorders, tumors or head injury. Other possible causes include poor circulation to the brain and low blood sugar.

Ginkgo Biloba is helpful for cases caused by circulatory issues and **Licorice Root** and **Super Algae** can be helpful for cases involving low blood sugar. CBG Extract used as ear drops is also helpful.

Ménière's Disease

Ménière's disease affects the inner ear. The cause of Ménière's remains unknown, although it usually begins between the ages of 30 and 50. In Ménière's disease, a part of the inner ear, called

the endolymphatic sac, becomes swollen. This disrupts a person's sense of balance.

A person with Ménière's disease will often have a combination of sensorineural hearing loss, dizziness (vertigo), ringing in the ear (tinnitus), and sensitivity to loud sounds. This type of hearing loss should be managed by a doctor and audiologist. Some people with Ménière's disease report mild symptoms, but for others the symptoms are more severe, transient and even permanent.

There is no specific natural therapy for Ménière's disease, but Ginkgo Biloba, Mega-Chel and CBG drops in the ears may be helpful in some cases. Consult the person who gave you this newsletter for more help and information about this, and other, ear health problems. Their contact information should appear at the top of this page.