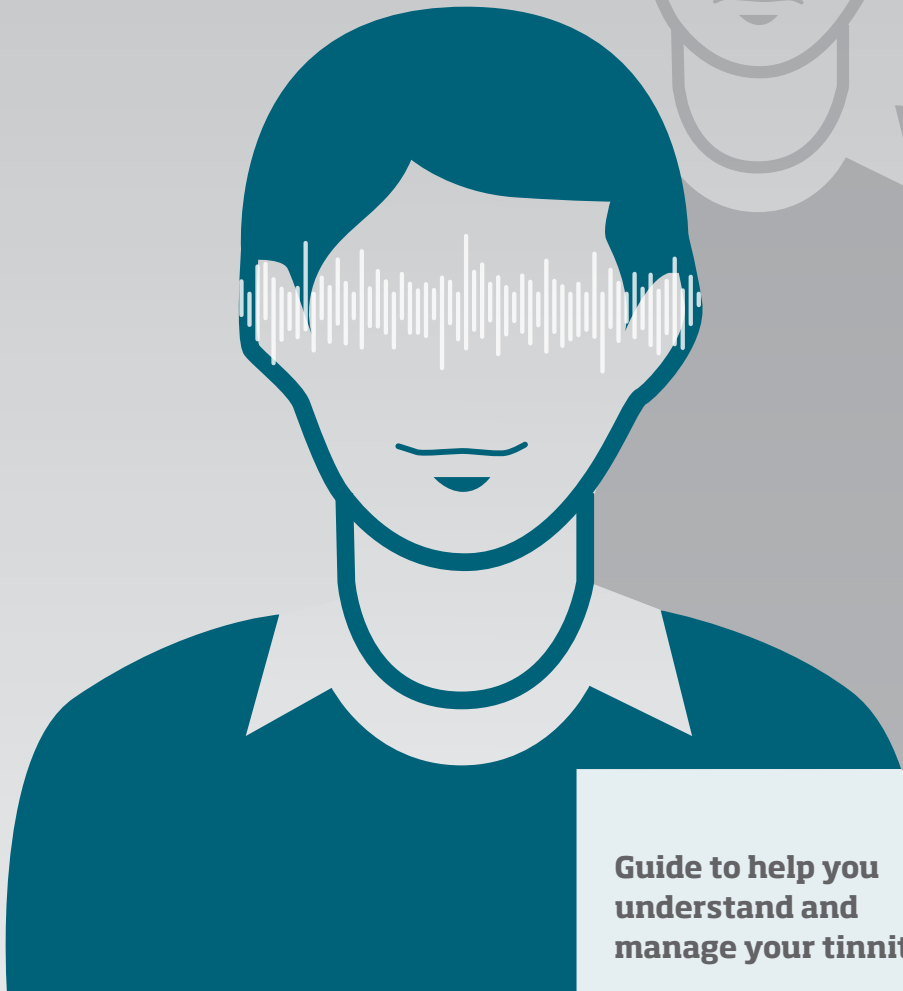


Learning about
Tinnitus



**Guide to help you
understand and
manage your tinnitus**



Content

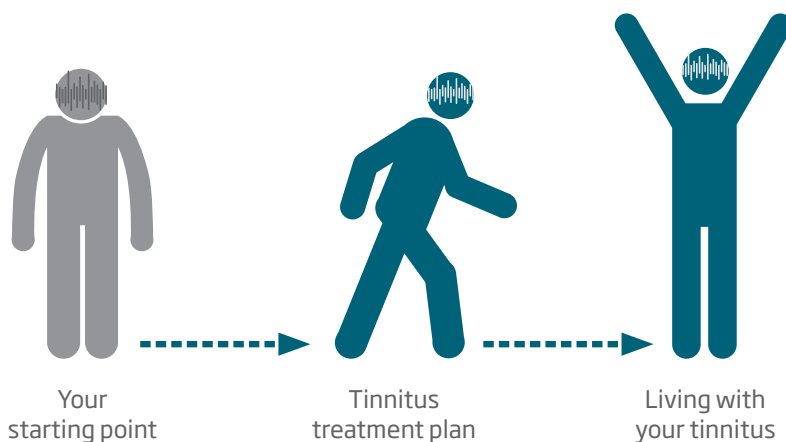
Your health and your goals!	4
What's that ringing in my ears?	5
What causes tinnitus?	6
Tinnitus and your brain	7
What does tinnitus have to do with hearing loss?	8
How is tinnitus affecting my life?	9
Goal of treatment	10
Gaining control, finding relief	12
You can do it!	14
References and useful links	15
Tinnitus dictionary	16
My notes	18

Your health and your goals!

Think of this brochure as basic information about tinnitus to help you better understand and manage it. By reading the brochure you have taken the first steps towards finding relief, so you can get back on track with the activities that matter the most to you!

We hope that the brochure will answer most of the frequently asked questions about tinnitus, its causes and treatment.

Of course, no brochure is a substitute for individual medical advice, diagnosis and treatment. The best tinnitus treatment plan begins with a consultation with a physician or an audiologist.



What's that ringing in my ears?



Many people experience tinnitus as a ringing in their head or ears but, in fact, it can take a variety of forms. You might experience it as a buzzing, humming, or whistling sound. Some people even describe it as the sensation of a roaring ocean.

It can be constant or intermittent and you may experience it in one ear or both. And you may even hear it when you are sleeping.

For the vast majority of people, tinnitus is a subjective sound which means that only the person who has it can hear it. It can be soft or loud. Tinnitus originates inside the head and the onset may be gradual or sudden.

Did you know?



22.7 million adult Americans experience tinnitus for more than three months. This is roughly 10 percent of the adult population in the United States.



Tinnitus is one of the most common service-related disabilities among veterans returning from Iraq and Afghanistan. An estimated 3–4 million veterans experience tinnitus. 1 million require some degree of clinical intervention.

What causes tinnitus?

Tinnitus is a symptom, not a disease. There are many possible causes including exposure to loud sounds, earwax blockage and reaction to medications. But some people can develop tinnitus for no obvious reason.



Exposure to loud sounds



Injuries to the head or neck



Reaction to medication



Natural aging process



Sudden impact noises

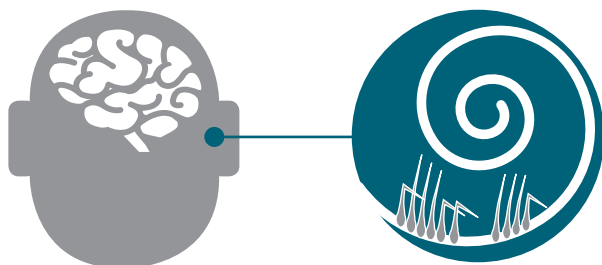


Untreated medical conditions

Tinnitus and the brain

So what is it that creates that perception of sound when there is none present?

Sound waves travel through the ear canal to the middle and inner ear. Hair cells in the inner ear help transform the sound waves into electrical signals which then travel to the brain. The brain translates the signals into meaningful information so you can interpret the sounds you hear. When hair cells get damaged, the brain doesn't receive the accurate signals it needs. As explained on the previous page, there can be different causes to why your hair cells get damaged.



Hair cells in the inner ear

Experts suspect that tinnitus relates to the brain trying to adapt to a loss of hair cells. The brain misinterprets the reduced signals from the ear, resulting in a perception of sound, or tinnitus.

How you think about your tinnitus can influence your emotional reactions. The brain may interpret the sound of tinnitus as something harmful to your well-being. When you respond to tinnitus as a threat, you become stressed and anxious.

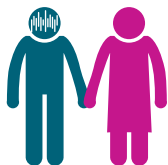
The stress and anxiety you feel can make the sound of tinnitus seem even more bothersome. This is an understandable and human reaction.

What does tinnitus have to do with hearing loss?



Tinnitus and hearing loss often co-exist. An estimated 90% of tinnitus sufferers experience some degree of hearing loss. Some people with tinnitus may think their trouble hearing is caused by the tinnitus, but in fact it can be due to a hearing loss. The hearing loss is often caused by damaged hair cells in the inner ear.

Hearing aids are helpful for many people who have tinnitus. The better you hear, the less you may notice your tinnitus. With hearing aids, your brain has other sounds to listen to, making your tinnitus less noticeable.



If you have tinnitus symptoms, a hearing evaluation is recommended. You may want to bring a spouse or other close family member since they can be an important source of support.

Did you know?

Tinnitus typically decreases when people with severe tinnitus and hearing loss use hearing aids.

Exposure to loud sounds can make tinnitus worse and may contribute to additional hearing loss.



How is tinnitus affecting my life?

Whatever its cause, tinnitus can often have a significant impact on day-to-day activities. Some people who experience tinnitus can ignore it most of the time and not allow it to disrupt daily activities.

For others, tinnitus symptoms can worsen to the point that getting a full night's sleep is not even possible. In turn, a poor night's sleep affects you negatively the next day and a vicious cycle may start. Seeking help with your tinnitus when the symptoms occur is important for your overall health.

Although your tinnitus may not go away entirely, small changes in your life can make life with tinnitus more manageable. On the next pages, we will present some of the possible options for treating tinnitus.

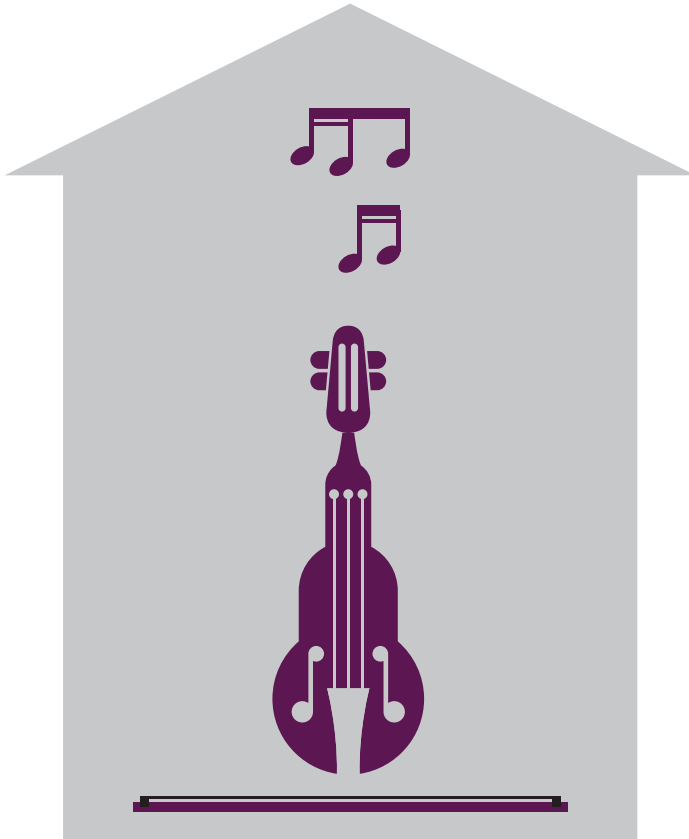
Did you know?



Nearly **four** in ten people with tinnitus experience tinnitus **80%** or more of the time in a typical day.



Goal of treatment



Imagine a solitary violin playing in an empty room. It is the only sound you hear. Tinnitus can be like this violin attracting your entire attention.

When you see an audiologist, he or she will help create a course of treatment that suits your needs. The treatment goal is to manage your tinnitus.



Over time, through sound treatment, the tinnitus becomes less noticeable. This is like the violin when joined by a room full of other instruments. If you listen hard you can identify the violin, but otherwise it does not stand out.

Gaining control, finding relief

Our goal is to help you understand and gain control of your tinnitus rather than letting it take control over you. There is no cure for tinnitus, but having a better understanding of how to manage your tinnitus can help you feel better.

No single approach works for everyone. You may need to try different combinations of techniques before you find out what works best for you.

The benefits of sound

You may find that listening to different types of sound can move your attention away from your tinnitus and provide relief. This is what your audiologist will refer to as sound therapy or a treatment plan. This can include:



White noise machine: a device for your bedside that can play various sounds to reduce tinnitus.



Music: soothing music or nature sounds can reduce the contrast between tinnitus and quiet environments.



Hearing aids: small devices for the ears that amplify sound. More sound makes your tinnitus stand out less.

Combination devices: hearing aids with special programs for tinnitus.

Additional solutions

There are additional things you can do to change the way you think about and react to tinnitus.



Relaxation and mindfulness exercises can help reduce the intensity of tinnitus for some people. Practicing yoga and meditation can be helpful, especially under the guidance of a health care professional.



A healthy diet and exercising can have a positive impact on your life.



Wear hearing protection when hunting, operating power tools, lawn mowers and other noise-producing devices.



Listen to music at a moderate level, especially when using audio headsets.



Think positively. Negative or angry feelings can make tinnitus seem worse. Focus on the things that makes you happy.



Maintain good sleep practices. For example, keep a regular bedtime routine and avoid big meals, alcohol, caffeine, and exercise before sleeping.

You can do it!

Learning to manage the tinnitus is the first step to maintaining your health and regaining hope.

	Yes	Sometimes	No
Because of your tinnitus, is it difficult for you to concentrate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Because of your tinnitus, do you have trouble falling asleep at night?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Because of your tinnitus, do you feel frustrated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your tinnitus make it difficult to enjoy life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you feel as though you cannot escape from your tinnitus?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Newman, C. W., Jacobson, G. P., & Spitzer, J. B. (1996).

If you can answer yes to just one of the questions above, then it would be a good idea to contact a medical professional or an audiologist.

If you answer sometimes to several questions, a conversation with a professional might also be valuable.

Your audiologist can partner with you to set goals and develop a treatment plan that is best for you.

References and useful links

Here are our recommendations for resources on useful and reputable tinnitus information. We have also included a dictionary of helpful terms on the next page. Please consult your audiologist before exploring tinnitus resources on your own since not all information will be relevant for your course of treatment.

Oticon

www.oticonusa.com

American Tinnitus Association

www.ata.org/for-patients/about-tinnitus

Better Hearing Institute

www.betterhearing.org/hearingpedia/hearing-loss-prevention/tinnitus

Hearing Health Foundation

www.hearinghealthfoundation.org/tinnitus

Academy of Doctors of Audiology

www.audiologist.org

American Academy of Audiology

www.audiology.com

American Academy of Otolaryngology - Head and Neck Surgery

www.entnet.org/HealthInformation/tinnitus.cfm

American Speech-Language-Hearing Association

www.asha.org/public/hearing/tinnitus

Medline Plus

www.nlm.nih.gov/medlineplus/tinnitus.html

National Institute of Deafness and Other Communication Disorders

www.nidcd.nih.gov/health/hearing/pages/tinnitus.aspx

National Health Service

www.nhs.uk/conditions/tinnitus/Pages/Introduction.aspx

Tinnitus Practitioners Association

www.tinnituspractitioners.com

Tinnitus dictionary

- Amplification:** The process of increasing the intensity or loudness of sound, for example, when using hearing aids.
- Auditory system:** The sensory system related to your sense of hearing. It is made up of the outer, middle and inner ear.
- Cochlea:** The snail-shaped part of the inner ear that plays an important part in hearing. Hair cells in the cochlea help transform the sound waves into electrical signals that then travel to the brain.
- Combination device:** Hearing aids with special programs for tinnitus.
- Hair cell damage:** (see page 7) Hair cells are located in the inner ear/cochlea and transmit sound to the brain where the sound is transformed into meaning. When the hair cells become damaged, hearing loss occurs and it becomes difficult to make sense of the sounds you hear.
- Hearing aids:** Small devices for your ears that amplify sounds to enhance particular hearing range problems.
- Hearing loss:** A decreased sensitivity to sounds that are normally heard which can be caused by different factors such as genetics, age, and noise exposure.
- Limbic system:** The limbic system is made up of a group of structures in the brain that translate and process how things affect you emotionally. While the auditory system produces the noise, it is the limbic system that keeps you alert to tinnitus.
- Ménière's disease:** A disorder of the inner ear that typically affects hearing and balance and can cause tinnitus.
- Middle ear:** The part of the ear responsible for turning sound waves into vibrations and sending them on to the cochlea or inner ear. It is made up of the eardrum and three tiny bones (ossicles) that help move sound along on its journey to the inner ear.
- Noise-induced** Hearing loss caused by a one-time exposure to very loud noise.

Hearing loss:	(for example, an explosion or loud rock concert) or by exposure over time to loud sounds (such as workplace noise, traffic, personal stereos/MP3 players, etc.).
Objective tinnitus:	A type of tinnitus that can be heard with a stethoscope or even by listening in close proximity to the ear.
Otosclerosis:	A genetic disease that causes the bone tissue in the middle ear to become frozen in place or fixed. This prevents sound waves from reaching the inner ear and impairs hearing.
Sound masking device/sound generator:	A device that generates steady, soothing background noise (such as white noise or nature sounds) to reduce the perception of the sound of tinnitus.
Sound therapy:	A listening program designed with your audiologist that focuses on stimulation and retraining of the brain to provide relief from tinnitus.
Tinnitus:	A condition that creates that perception of sound when there is none present. It is a subjective sound that can vary from person to person. It can sound like a ringing in the ears, but can also be perceived as humming, buzzing, whistling or other sounds.
White noise:	A static or steady sound that sounds like a radio that is not tuned to a specific station or a TV with no signal. It is often used to mask or distract from unwanted sounds.

People First

People First is our promise
to empower people
to communicate freely,
interact naturally and
participate actively

144304/09.14

www.oticonusa.com



oticon
PEOPLE FIRST