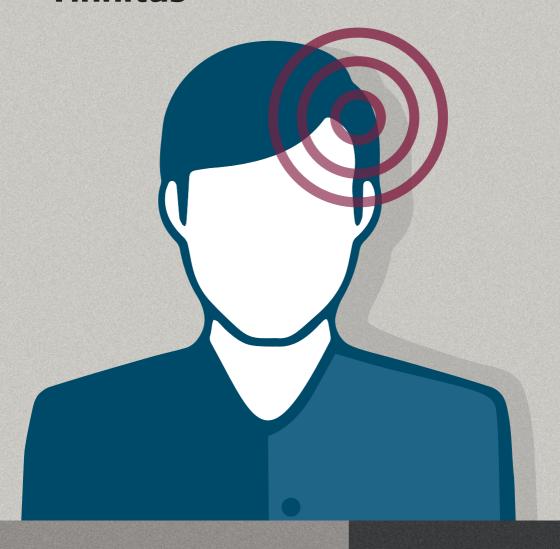
# Learning about **Tinnitus**



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





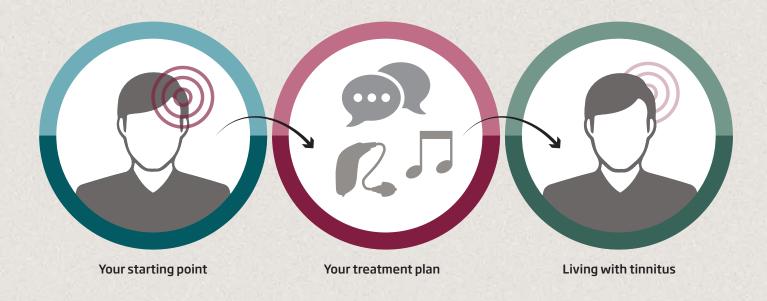
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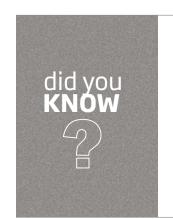
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#### Your health and your goals

This brochure is an introduction to tinnitus. It will help your understanding of tinnitus, its causes and its treatment. By reading the brochure, you have taken the first step towards finding relief, so you can get back on track and enjoy the activities that matter the most to you.

Although tinnitus is a common condition, the causes and symptoms vary. It is crucial to understand that each tinnitus case is unique and requires a personalized treatment plan. We firmly believe that the best tinnitus treatment plan begins with a consultation with a hearing care professional.





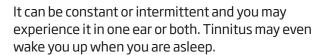
Mild tinnitus is common - about 10% of the population have it all the time and in up to 1% of adults, this may affect their quality of life.



(British Tinnitus association, 2014)

#### What is that sound in your 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.

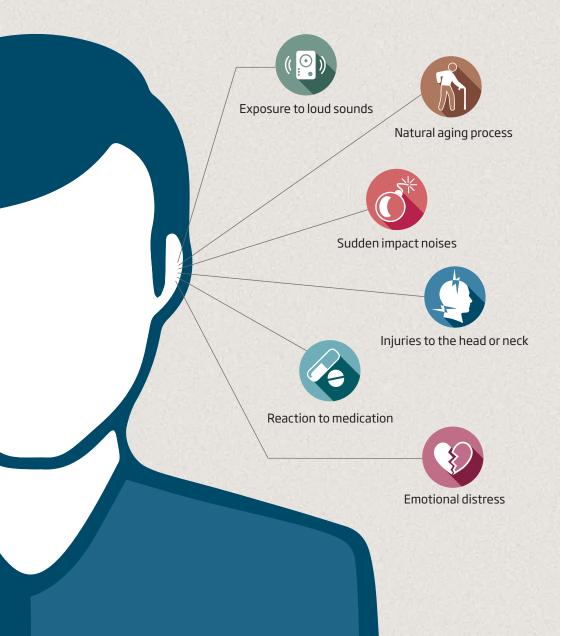


For the vast majority of people, tinnitus is a subjective sound which means that only the person who has it can hear it. It can be soft or loud. Tinnitus originates inside the head and the onset may be gradual or sudden.



#### What causes tinnitus?

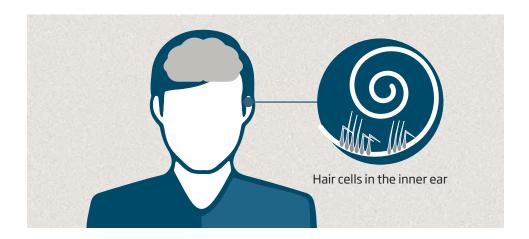
Tinnitus is a symptom, not a disease. Although there are many possible causes, some people can develop tinnitus for no apparent reason.



#### 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 seen on the previous page, there can be different causes to why your hair cells get damaged and subsequently lead to tinnitus. Sometimes, the cause is not related to inner hair cells.



Experts suspect that, in many cases, 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?



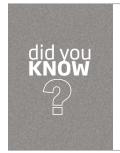
Tinnitus and hearing loss often co-exist. An estimated 90% of tinnitus sufferers experience some degree of hearing loss. Some people with tinnitus may think their trouble hearing is caused by the tinnitus, but in fact it can be due to a hearing loss. The hearing loss is often caused by damaged hair cells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

Hearing aids are helpful for many people who have tinnitus. The more 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 another close family member as they can be an important source of support.



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



## **How is tinnitus** affecting your life?

Whatever its cause, tinnitus can often have a significant impact on day-to-day activities.

Some have taught themselves to ignore it. For others, tinnitus symptoms can worsen to the point that getting a full night's sleep is barely possible. In turn, a bad 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.



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#### **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.

Over time, through sound treatment, the tinnitus becomes less noticeable. Similar to a violin being joined by a classical orchestra. You can still identify the sound of the violin, but it does not stand out.

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

## 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. Yet understanding tinnitus and how to manage it, are the first steps in order to take back control.

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:



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



**Nature sounds and music:** can reduce the contrast between tinnitus and quiet environments.



**Combination devices:** hearing aids with built-in sound generators that emit specific tinnitus relief sounds.



**Audio books:** can for some, provide just the right mix of sound, brain stimulation and comfort.

#### **Additional solutions**

Evidence suggests that the following solutions can also have a positive effect on your tinnitus.



**Relaxation and mindfulness** Yoga and meditation have proven to be particularly effective tools of relief.



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



**Wear hearing protection** when you find yourself in loud environments or in close proximity to other noise producing devices such as power tools or lawn mowers.



**Sound generator** is a stand-alone device for your bedside that can play various sounds to reduce tinnitus.



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



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

### Taking the **first step**

Learning to manage the tinnitus is the first step to maintaining your health and regaining hope. Here are a few questions that can help you figure out how bothersome tinnitus is to you:

|  | Yes | Sometimes | No |
|--|-----|-----------|----|
| Because of your tinnitus, is it difficult for you to concentrate?            |     |           |    |
| Because of your tinnitus,<br>do you have trouble falling<br>asleep at night? | 0   |           | •  |
| Because of your tinnitus,<br>do you feel frustrated?                         |     |           |    |
| Does your tinnitus make it difficult to enjoy life?                          |     |           |    |
| Do you feel as though you cannot escape from your tinnitus?                  |     |           |    |
| 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 hearing care professional is trained in providing you with the best treatment plan to suit your individual needs.

#### **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.

American Tinnitus Association
www.ata.org

British Tinnitus Association
www.tinnitus.org.uk

Tinnitus First Aid Kit
www.tinnituskit.com

Oticon
www.oticon.ca

### 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 emotion center in your brain. The limbic system is made

up of a group of structures in the brain that translate and process how things affect you emotionally. When you hear tinnitus, it can trigger an emotional response such as

irritation or anger.

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:

Hearing loss caused by a one-time exposure to very loud noise (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 rare 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:** Sound therapy is the systematic use of sound and can take

several forms to offer relief in different situations. To get the best results, sound therapy and counselling should comple-

ment each other.

**Subjective 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.



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