

# Tinnitus

Tinnitus is the name for sounds heard 'in the ears' or 'in the head', not originating from an external source.

Tinnitus can take many forms (including buzzing, whistling, hissing). Tinnitus is extremely common affecting 1 in 10 people. For a small minority it can be distressing. There are a number of management and treatment options that can significantly reduce the effects of tinnitus.

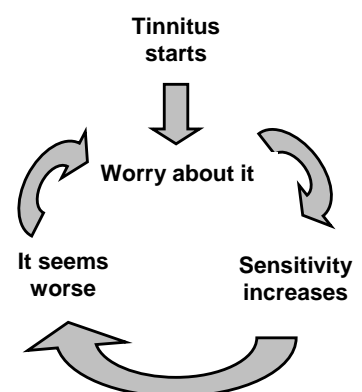
## Understanding how we interpret sound

Sound travels down the ear canal causing the ear drum to vibrate. This is transmitted via three bones of the middle ear into the cochlea (the organ of hearing) within the inner ear. Inside the cochlea are thousands of tiny hair cells which convert the sound to an electrical impulse which is passed to the brain via nerve fibres.

The brain analyses every incoming sound by matching it with a sound stored in its auditory memory. At the same time we attach meaning to the sounds we hear (for example a lion's roar would probably cause us to run, whereas a loud aircraft overhead would generally not prompt us to action). The end result is that we have the ability to filter out sounds on a 'need to hear' basis.

## What triggers tinnitus?

Tinnitus occurs when the sound of electrical activity (the natural process outlined above) is perceived as a potentially dangerous signal. This is because the auditory memory cannot match it to any of the sounds stored in its memory bank. As a result, more attention can be paid to this unfamiliar, internal sound than to external/ environmental sounds. In this way an awareness "loop" can occur.



Tinnitus is considered to be a symptom and not a disease. The reason for a person's awareness is therefore likely to be different from one individual to another. It may not be possible to identify a single trigger, but discussion with a hearing therapist is likely to help you to identify contributory factors.

When a person with a hearing loss experiences tinnitus, the brain is often attending to their internal sounds because of a reduction in incoming sounds. In the majority of cases, regular use of a hearing aid can help to break this pattern, by providing the ear with more everyday sound, so reducing the strain on the auditory system.

Auditory gain can also be increased by changes in the emotional or physiological systems. Triggers for this can include stressful events, tension, or changes in medication. Such factors are generally found to underlie tinnitus awareness when it triggers for people who do not have a hearing loss. In such cases it may be helpful to look at sound therapy or relaxation techniques. Lifestyle changes, however small, can also be hugely beneficial.

### Coping strategies

- Understand the explanation of the tinnitus mechanism – this is fundamental to successful “tuning out”!
- Try not to think too much about your tinnitus. Dwelling on it is likely to make it appear worse. Distraction will speed up natural habituation, so keeping active with interests & hobbies is important.
- Stress management. Reduce stress levels using muscle relaxation exercises, breathing exercises, general exercise to improve fitness.
- Avoid silence as this strains your ears. Use devices for sound enrichment such as a tinnitus relaxer, pillow speaker, talking books, TV, radio, wearable sound generator, hearing aid (if appropriate).
- Try to improve your sleeping pattern. Avoid napping during the day, only go to bed when tired and get up at the same time each day.

### Further information

Action on Hearing Loss (formerly RNID)

19-23 Featherstone Street, London EC1Y 8SL

Helpline: 0808 808 6666 (9:00am - 5:00pm)

Textphone: 0808 808 9000 SMS: 0780 000 0360

e-mail: [information@hearingloss.org.uk](mailto:information@hearingloss.org.uk): [www.actiononhearingloss.org.uk](http://www.actiononhearingloss.org.uk)

The British Tinnitus Association (BTA)

Ground Floor, Unit 5, Acorn Business Park, Woodseats Close, Sheffield S8 0TB

Helpline: 0800 018 0527 (9:15am - 4:30pm) Fax: 0114 258 7059

e-mail: [info@tinnitus.org.uk](mailto:info@tinnitus.org.uk) Web: [www.tinnitus.org.uk](http://www.tinnitus.org.uk)

## Devices

Naturecare Relaxation, sound devices and CDs

- AoHL Tel: 01733 361199 [www.actiononhearingloss.org.uk/shop](http://www.actiononhearingloss.org.uk/shop)
- New World Music [www.newworldmusic.com](http://www.newworldmusic.com)
- Connevans. 01737 247571 [www.connevans.com](http://www.connevans.com)

Pillow speaker

- AoHL Shop Tel: 01733 361199 [www.actiononhearingloss.org.uk/shop](http://www.actiononhearingloss.org.uk/shop)
- Maplin Electronics [www.maplin.co.uk](http://www.maplin.co.uk)

Free download of nature sounds & wind chimes.

Available from: [www.peterhirschberg.com/mysoftware.html](http://www.peterhirschberg.com/mysoftware.html)

Click link to *Aire Freshener*.

Also try <http://naturesoundsfor.me/> for free download to MP3

Downloading nature sounds apps on iPhone works well.

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