

## Hearing aids and tinnitus – Choosing the right hearing aid

### Taking advice from your audiologist

Your audiologist will guide you through the available styles and which type is best for you taking into account your level of hearing loss and your tinnitus. If possible we would recommend you try and use an independent audiologist that is not restricted to providing just one brand of hearing aid. That way you are more likely to end up with the hearing aid best suited to your needs.

Also try and find an audiologist who has good experience of assessing tinnitus.

To help you prepare for your visit to the audiologist, or hearing clinic we describe the main choices of hearing aid that are available and some of the factors that will help you choose the right type.

### The main hearing aid styles

There are two main categories of hearing aids:

- In the ear, or in the ear canal where the audiologist will custom fit a hearing aid to suit your ear;
- Behind the ear where the hearing aid is discreetly tucked in behind your ear and linked via a small tube, or wire to your ear canal.

### In the ear hearing (ITE) aid



The in the ear hearing aid is a custom-made device that fits into the bowl shaped area of your outer ear instead of inside the ear canal. Their larger size allows for easy insertion and removal as well as easy access to the battery compartment and volume control.

An impression is made of your ear, and the entire hearing aid is encased in the hearing aid shell.

### More discreet versions of this style are the “Completely in the Canal” or “Invisible In the canal” hearing aids



These types are worn deep within the ear canal and custom made to suit your ear shape. The close placement to your eardrum ensures immediate sound travel and less ambient noise in loud environments. They are designed for daily removal, meaning wearers need to be comfortable inserting and removing the tiny device deep into their ear canal.



### **Behind the ear (BTE) style hearing aid**

Most manufacturers will offer this style of hearing aid in differing sizes and colours to help you choose one that is discreet and comfortable without having the expense of being custom made.

A specialist will manipulate the tubing to perfectly replicate the size and shape of your ear so you'll barely know it's there.

### **A popular version is called "receiver in the canal"**

This style has two parts, the sound processor and the receiver. The sound processor is housed in the small case that sits behind the ear. A clear narrow tube follows the ear and leads to a small ear bud that houses the receiver that fits directly into your ear canal.

### **Combination hearing aids**

Some manufacturers offer a hearing aid combined with a sound generator. This in addition to amplifying sounds provides an extra low level sound in order to try and help the tinnitus habituation process (i.e. getting used to your tinnitus).

If your audiologist recommends this type it is worth having a good discussion regarding the potential merits and possibly trying them out.

The British Tinnitus Association provides a quote worth considering "for most, amplification alone provides a reduction in tinnitus annoyance. At present there is no proven advantage to using combination devices compared to "simple" hearing aids."

### **Factors to consider when selecting the right type for you**

<b>Factors</b>	<b>Why</b>	<b>Impact on suitable styles and settings</b>
Your level of hearing loss	The smallest hearing aids are not normally recommended for severe or profound hearing loss.	Usually this will rule out the tiny aids known as "invisible within the (ear) canal."
Lifestyle	If you are often in a noisy environment where you want to hear conversations (for example restaurants, bars, conferences etc.) you will normally need the more advanced hearing aids.	If this is your lifestyle it becomes more important to invest in the more advanced models that are effective at enhancing (and separating) speech from background noise.  It is also important to be able to effectively hear both low pitch (male voices) and higher pitch voices (female).

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Lifestyle	If you want to use the hearing aid alongside Bluetooth enabled mobile phones, car phones, music players and TVs.	This requirement will also mean you are more likely to need to invest in the more advanced & more expensive types of hearing aid.
Lifestyle	If you are a very keen sports person it becomes important to have a hearing aid that is light and secure.	This will typically rule out the older style and larger behind the ear models.  The smaller behind the ear style (with potentially the receiver in the ear), or the in the ear custom made models are likely to be more suitable.
Appearance	The smaller and more discrete styles are more likely to appeal to those concerned with their appearance.	The small behind the ear style (open models, or receiver in the ear models) will appeal.  However the most discrete are the in the canal (or invisible in the canal styles).
Appearance	It is becoming more popular to choose a style that looks as if you are wearing ear buds rather than hearing aids.	You will need to check which manufacturers offer this option and whether it can be configured to suit both your hearing and tinnitus.
Dexterity	The smaller the hearing aid typically the more difficult it can be to use for people with poor dexterity.  This includes inserting and removing the aids on a daily basis. But also the ability to use manual controls to adjust settings.	For people with poor dexterity the behind the ear, or in the ear (full or half shell) styles are likely to be best.  Also use of your smart phone to control the settings.

<b>Factors</b>	<b>Why</b>	<b>Impact on suitable styles and settings</b>
Last, but of course very important – those with tinnitus	<p>The ability to naturally hear some background sounds can help.</p> <p>The ability to use the hearing aid to both enhance your hearing, but also as a sound generator is important.</p>	<p>The small behind the ear (open style, or receiver in the ear) style of hearing aid is good as it leaves your ear open to hear other sounds naturally.</p> <p>The ability to use Bluetooth and special Tinnitus Apps provided by the hearing aid companies will be important in selecting the best model.</p> <p>Many of the hearing aid manufacturers have specific models designed for people with hearing loss and tinnitus.</p>

## **Are two hearing aids always better than one?**

### **General benefits of two hearing aids over a single aid**

- Wearing two hearing aids keeps both ears actively involved in listening. Studies<sup>1</sup> have shown the ear without the hearing aid over time loses its ability to hear and understand. (This may be described to you as the auditory deprivation effect).<sup>2</sup>
- Using two aids means lower volume of sound can be used than at one ear. This also reduces the risks of feedback hiss or whistling from your hearing aids.
- Improved ability to hear and understand particularly in noisy situations like being part of a group or in a restaurant. This is partly due to the improved ability to separate speech from the surrounding background noise.
- Ability to tell the direction of sounds and hear sounds from a further distance (can improve safety). Two hearing aids can quadruple the distance you can clearly hear speech from.
- Quality of sound and the overall experience. In a similar way to enjoying listening to a good quality stereo sound system, having two sound receivers & speakers (your two hearing aids) produces a better sense of sound balance and clarity.

### **What if I only have hearing loss in one ear?**

A hearing test will provide you with an accurate assessment of your hearing ability in both ears and it is common to have different levels of hearing loss across your two ears.

Your hearing aids can then be adjusted by your audiologist to suit your balance

of hearing and given the benefits stated above you will usually be better off with two rather than one hearing aid.

However, if your hearing is normal in one ear usually a hearing aid is not needed for that ear.

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<sup>1</sup> Silman S, Gelfand SA, Silverman CA. Late-onset auditory deprivation: effects of monaural versus binaural hearing aids. *J Acoust Soc Am.* 1984;76(5):1357-62.

Gelfand SA, Silman S, Ross L. Long-term effects of monaural, binaural and no amplification in subjects with bilateral hearing loss. *Scand J Audiol.* 1987;16(4):201-7.

<sup>2</sup> Munro KJ. Reorganization of the adult auditory system: perceptual and physiological evidence from monaural fitting of hearing aids. *Trends Amplif.* 2008;12(3):254-71