

Cochlear Family

At-home Rehabilitation Exercises for Seniors



Contents

- Introduction 1.
- Starting your at-home hearing 2.
- Practical listening exercises to 3.
- Recipient's tips to help you pra 4.
- Digital tools to support your r 5.
- Tips to help you talk on the ph 6.

66

It's very important to have support and understanding from other recipients, family and friends, and to inform others about your Cochlear implant.

Sue, Cochlear[™] Nucleus[®] System recipient.

	Page 3
g rehab	Page 6
o do at home	Page 10
actise listening	Page 13
ehab	Page 15
none or online	Page 19

Introduction

Making a consistent effort to practise your listening and rehab exercises at home has been shown to be one of the most important things you can do after receiving your cochlear implant. Studies also suggest that cochlear implant recipients maintain their best sense of hearing by continuing to do their rehab exercises long term.^{1,2}

In this guide, you will find easy rehab exercises that you can do in the comfort of your home environment, along with lots of practical advice to help you achieve your hearing goals. The exercises in this guide are intended to supplement the guidance you receive from your hearing healthcare professional, who can set up a more bespoke program to meet your specific hearing and lifestyle needs.

For communication strategies and hearing exercises to build your conversational confidence, please refer to the **Communications Strategies Guide for Seniors.** For practical tips and exercises for caregivers to help support your hearing journey, please refer to the **Caregivers Toolkit for Seniors**.

Information within this guide has been extracted from the Adult Cochlear Implant Home-Based Auditory Training Manual: Postlingual Hearing Loss[3].





Starting your at-home hearing rehab

Any training that you can do in your own time at home can help to complement the rehab work you are doing with your hearing healthcare professional and help to enhance the way you understand speech. We want you to feel positive, supported, and optimistic about achieving your hearing goals, so we've put together some practical strategies to help you get started.

Wearing your sound processor

Nucleus® Smart App, you can use it to track your usage.

Being patient

Taking regular breaks

3 air outside.

It sounds obvious, but the first step in your hearing journey is to simply practise listening with your sound processor. Wearing your sound processor as much as possible - whether you are at home, outside in the garden or visiting friends - can help you to become familiar with how it works and the settings that are best suited to different listening environments. Your hearing healthcare professional can guide you in the number of hours that you should be using your sound processor. If you have the

It may take time before you see improvements with your hearing rehab, so remember to be patient and start slowly. To begin with, we recommend allocating 10 to 15 minutes each day at a time when you are feeling relaxed and refreshed. It's a good idea to set your alarm as a reminder that it's time to do your exercises so they become part of your daily routine. And whenever possible, enlist the support of a practice partner - a friend or caregiver who can help you practise conversational hearing in real time.

As a new cochlear implant recipient, it's normal to feel more tired by the end of the day. Whenever listening becomes too challenging, it's important to take time to do something relaxing. Try to schedular regular breaks and give yourself opportunities to unwind, whether it's reading a book, making a cup of tea, or enjoying some fresh

Isolating sounds

When you first start your hearing rehab, we recommend finding a quiet room at home that is free from distractions. Choose a comfortable place to sit and close your eyes. Listen carefully and try to identify as many sounds in your home environment as possible – birds tweeting, traffic noises, the sound of the wind. Isolate each sound and focus your attention on it for a few seconds, so your brain becomes familiar with it. We also recommend that you make a note of these sounds, so that you can see your progress.

Setting realistic goals

5 Think about what you want to achieve with your listening and discuss your goals with your hearing healthcare professional. They can help you break them down into realistic goals tailored to your hearing and lifestyle needs. It may take time to achieve your best hearing performance, so it's important to focus on improving one day at a time. Please remember to celebrate every hearing milestone, big or small, as it will give you the motivation to persevere.

Starting a listening diary

6 Start a listening diary so that you can note down any issues and achievements you might experience along the way. This will serve as a useful resource when you meet with your hearing healthcare professional, reminding you to a raise any concerns or seek their guidance. It will also help you to reflect on your progress over time, so that you are motivated to stay on track and persevere towards your goals.

Keeping a positive mindset

Maintaining a positive mindset is an important aspect of your hearing rehab. Adapting to a new routine isn't easy, so it's important to accept that challenging situations and obstacles are a part of life. Whenever you're faced with a setback, focus on what you've achieved so far in your hearing journey, no matter how small or seemingly insignificant it may seem. Try to use your humour in all situations, especially the difficult ones, and give yourself permission to laugh. It instantly lightens the mood and makes things seem a little less difficult.





Practical listening exercises to do at home

Practising structured activities and incidental listening at home can help you to achieve your hearing goals. Wearing your sound processor as much as possible when you are awake can help to facilitate your incidental listening and make it easier for your brain to learn and recognise different sounds. We have put together some simple structured activities that you can follow in your own time to help you build your listening skills.

Reading out loud

Changing your listening environment

2 noisy café.

Listening to an audiobook or podcast

3 may be missing.

Choose a magazine article, a newspaper or a chapter from your favourite book and read it out loud to a friend, a grandchild or even your pet for 15 minutes each day. After activation, you may notice that your voice sounds guite different. Reading out loud is one of the easiest ways to become familiar with the sound of your own voice. Saying, hearing and seeing the words can also help to improve your speech understanding.

Once you are familiar with the sound of your own voice, you may wish to challenge yourself further by reading out loud with background noise. Turn on your television or radio and continue to focus on what you say, hear and see as you read. This will help to improve your ability to hear and understand normal conversation in the presence of competing noise, such as when you are in a shopping centre or talking to a friend in a

If you enjoy reading, download an audiobook using an app to help improve your listening skills. Listening to and physically reading the same book is a simple way to crosscheck that you are hearing individual words and speech sounds correctly. This can also help you hear the rhythm and pattern of sentences and identify any sounds you

Watching a film

Choose your favourite film or TV show and switch on the captions. This can help you distinguish between different voices, sounds and background noises. To increase the level of difficulty, you can turn the captions off. Once you are confident with this, close your eyes and practise listening to the words only. This listening exercise takes focus and effort so remember to take a break if you feel tired. Remember that you may wish to continue using captions for viewing movies and TV for pleasure. This is a simple way to challenge your listening.

Listening to a TED Talk

For a great listening and comprehension activity, choose a TED Talk on a topic that interests you, and use the captions to support your listening skills. Try to stop every two minutes to make notes about what you've heard. You can then go back to the beginning and check if you have heard everything correctly. If you want to challenge yourself further, listen to talks from speakers with different accents and high and low-pitched voices so you can improve your speech perception and understanding.

Singing out loud

6 Music is an important part of life and can transform the way you feel. Once you can understand simple sentences, you may even want to challenge yourself further by listening to music and then singing out loud. Singing is a complex vocal ability and to achieve the right rhythm, melody, and notes, you need the ability to hear clearly. Play your favourite song at a low volume and listen to the beat and the pitch. This will help you tune up your listening skills and improve your ability to hear 'speech-in-noise'. Once you feel confident, try singing along to the music. This can help you to feel vibrant and energised. When you are ready, try singing along to the music. Not only can it improve your perception of rhythm, stress, and tone in language, but it may also help to boost your mental health and wellbeing.

66

The mental approach you take is a key strategy to living skilfully. We call it 'Mind shifts': taking a clear look at how we view our hearing loss can be one of the biggest steps forward that we take.

10 practical tips to improve listening skills

Cochlear implant recipient, Dianne found the best way to improve her listening skills was to immerse herself in the outside world and expose herself to as many environmental sounds as possible. She shares 10 practical tips to help you benefit from her experiences.

- Noisy environments are challenging, but the real world is noisy so this is a good way to work on your listening skills. When I'm in a quiet environment with up to three people, my interaction and listening skills are good. So, to challenge myself I practise listening in noisy cafés, restaurants, at parties and in large social groups. Remember, you are working to improve communication skills by listening and this helps your social skills.
- There is nothing wrong with asking someone politely would they mind repeating the sentence 2 or word. Don't pretend that you have understood the speaker; it is better to ask them to repeat what was said. It will save embarrassment if you answer incorrectly.
- With our cochlear implants we can hear, but listening requires paying attention it takes 3 conscious effort. The saying "practice makes perfect" means that it is possible to learn something or develop a skill if you practise. It takes persistence and there are challenges. You may feel at times that your progress is hindered, but it's important to continue with your effort.
- In a restaurant, at parties or wherever there is a group of people, I try to position myself in a 4 well-lit area with my back to the noise and away from any music speakers in the room.
- Try simple things like going for walk where you can find a connection to environmental sounds 5 such as cars approaching, rustling of the trees, hearing unseen birds, ocean waves and the sound of wind.
- Wear your sound processor from the time you get up until you go to bed. Wearing your sound 6 processor all day every day and having sound around you can help you to achieve all the wonderful things that a cochlear implant offers. Remember, we have been given a second chance to hear and it's up to us to give it our best effort.

- If you live alone, ensure you have some noise around you - such as a radio, television, podcasts or audiobooks so that you are practising your listening skills.
- 8 Communicating with people with an accent can make it hard to understand. But it's also good practice. I make sure I'm face to face when communicating in this situation. I also give the other person my undivided attention and fully concentrate of what is being said.
- Take every opportunity to practise g your listening. When cleaning the house or washing the car, I had a small radio in my pocket. I didn't always know what was being said, but knew I would benefit in the long term by surrounding myself with sound.
- Don't give up. 10

Remember, we have been given a second chance to hear and it's up to us to give it our best effort.

Dianne, Cochlear[™] Nucleus[®] System recipient.



Digital tools to support your rehab

Today, there are a multitude of smartphone and iPad apps that offer rehab exercises to help support your listening performance. Having these devices at your fingertips makes it easier for you to incorporate your hearing rehab exercises into your daily activities. It means you can practise at your convenience, whether you're relaxing on the sofa, walking the dog or having a coffee at your local café. We've selected some apps and online programs that may help you get started, but you should also ask your hearing healthcare professional to recommend the digital tools that best meet your hearing needs.

Apps to practise your listening skills

Angel Sound[™]

This is an interactive auditory training and hearing program designed to help you practise identifying different speech sounds. It also gives you audio and visual feedback so that you can go through the exercises at your own pace, crosschecking your progress to make sure you are hearing sounds correctly.

Hearoes

Hearoes is an interactive auditory training platform designed to help you become familiar with different environmental sounds, identify vowels and consonants, recognise different words, and improve your understanding of sentence structures and narratives.

Apps to improve your communication skills

- background noise.
 - Google's Live Transcribe

This is an Android[™] app that shows speech and sounds as text on your smartphone screen to help support you with everyday conversations. The app can also recognise non-speech sounds and is voice-activated.

Notes for iOS

This app can be used on your iPhone to capture a conversation, so that you don't miss out on any words or sounds.

• Otter.ai

This app is available for both Android and iPhone and takes notes to help you follow conversations.

NALscribe

This is a free, easy-to-use live speech captioning tool to help people with hearing difficulties understand speech and conversations. It aims to increase understanding and decrease stress levels during communication.

"I believe in the four 'Ps': patience, practice, perseverance, and positivity. They have been pivotal to my success in learning to listen again after activation."

Cathy, Cochlear[™] Nucleus[®] System recipient.

Apps that translate speech into text in real-time on your smartphone are a great way to build your communication skills and your confidence, particularly when there's

Apps to help you manage your listening environment

3

Apps and online reviews that provide useful information about noise levels are a great resource when you want to socialise with friends and family, enabling you to choose listening environments suited to your hearing needs.

• TripAdvisor and Zagat

Both these apps offer useful customer reviews on noise levels at restaurants and cafes, enabling you to avoid venues with lots of background noise.

• SoundPrint

This is a mobile app that takes a decibel reading and averages a location's readings, so you can assess the noise levels before choosing a venue.

Apps to help improve your safety and sound awareness

4 Apps that can alert you to sounds in your environment are a great way to enhance your hearing experience and can help you feel more connected to the world around you.

• iPhone Sound Recognition Alerts

This app allow your iPhone and iPad to alert you to sounds, such as running water, kitchen appliances and doorbells. It can also identify shouting voices or a baby crying, and can distinguish between alarms for fire, smoke and sirens.

Android Sound Notifications

This app allows your Android phone to alert you to sounds via a push notification, a flash from your camera light, or by making your phone vibrate. Sound Notifications can identify noises such as sirens and a dog barking, to smoke alarms and running water.

66

I love the little listening exercises that help me work on word recognition... it's like playing a short game.

Christine, Cochlear Implant recipient





Tips to help you talk on the phone or online

After activation, you may need time to get used to the new world of sounds that surround you. Once you can understand some simple sentences without lip reading, your hearing healthcare professional may suggest that you practise talking on the phone. We understand that this may feel daunting, particularly if your hearing loss has made it challenging for you to hear telephone conversations in the past. If you are able to hear on the phone, it can help you to:

- Complete everyday tasks more easily, such as making medical appointments
- Communicate more effectively with family and friends, so you feel connected and included
- Enjoy an increased sense of independence and achievement

We've prepared some practical tips that will help set you up for success, but for a more tailored program, please talk to your hearing healthcare professional. You will also find some useful rehab and listening exercises in our Adult Phone and Online Communication Guide.

Mastering technology

Technology certainly makes many aspects of our lives easier but keeping up with the latest devices and updates can be overwhelming. Whether you use a landline or a mobile phone, your hearing healthcare professional will be able to advise you on the best technology for your specific hearing needs. This might include using Assisted Listening Devices such as Bluetooth to stream sound from your smartphone directly to your sound processor. Or they may recommend features like ForwardFocus^{*} to reduce background noise and make it easier for you to hear the phone conversation.

Always remember that as an older adult, you have a unique perspective that will help you master new technology: lifelong wisdom, judgement, and experience. And don't forget that the key to learning anything new is patience, persistence, and guided repetition.





Find a rehab partner

When you begin your phone rehab, it's useful to practise at home with a family member, caregiver, or friend. Their voice will be familiar to you, which may help you to recognise what they are saying over the phone. They will also be mindful of your hearing needs, which is important for your confidence as you get started.

Practice makes perfect

Your listening practice on the phone should be broken up into short, but frequent sessions. We recommend practising for around 10 to 15 minutes per day, five days a week. Take it slowly and write down any necessary steps in a notebook to help prompt you. As with any new activity, it may take several tries before you make any progress. With persistence and patience, you will gradually feel more connected to the outside world.

Be realistic

Remember that hearing on the phone is not easy. You have no visual clues and cannot lip read. Give yourself time to adapt to listening with your cochlear implant first and then gradually challenge yourself with different exercises. Always talk to your hearing healthcare professional about your progress and any issues you may be experiencing.

Don't be discouraged

It is difficult, but you will see improvements over time. Try not to compare yourself to others. Everyone's ability to hear with a cochlear implant is different and it's important to progress at your own pace. Some people can use the phone very quickly, but it may take time and lots of practice to become a more confident user.

Find the best settings and accessories for you

Once you have understood the basics, you can talk to your hearing healthcare professional about adjusting the volume and programs on your sound processor to find out what works for you.

Here are 10 useful tips to help guide your phone rehab with your practice partner:

1	Schedule 5-minute calls with your rehab
2	Ask them to take your phone calls in a qu
3	Let them know in advance that you may i
4	Inform your rehab partner straight away Be clear with your instructions for examp again." "Could you speak slower?"
5	Always check that you've heard things co then writing it down
6	Start with a simple script. Ask your rehab you and then read the same text back to voices sound on the phone.
7	As you become more confident, choose of the topic in advance will give you some c matter you will be using.
8	Rehearse real-life situations such as maki ordering a takeaway meal. Practise listen
9	As you make progress, challenge yoursel of the house and then move outside to se competing noise.
10	Challenge yourself further by talking to d used to different voices on the phone.

partner two to three times a week.

uiet space so there is no background noise.

not understand every word.

when you don't understand something. ole, "I did not understand." "Please say it

orrectly by repeating what was said and

b partner to read a newspaper article to them. This helps you to tune in to the way

different topics to talk about. Knowing context about the vocabulary and subject

ing an appointment with the doctor or ning for numbers and times.

If by taking phone calls in different rooms ee if you can hear in the presence of

different rehab partners so you can get

Hear now. And always

As the global leader in implantable hearing solutions, Cochlear is dedicated to helping people with moderate to profound hearing loss experience a life full of hearing. We have provided more than 700,000 implantable devices, helping people of all ages to hear and connect with life's opportunities.

We aim to give people the best lifelong hearing experience and access to innovative future technologies. We have the industry's best clinical, research and support networks.

That's why more people choose Cochlear than any other hearing implant company.

References

- 1. Adult Cochlear Implant Home-Based Auditory Training Manual: Postlingual Hearing Loss, Belinda Henry, Karen Pedley, Qian-Jie Fu, July 2015, produced by Cochlear Ltd (N585130-585133 ISS2 JUL15).
- Fu, QJ., Galvin, JJ 3rd. Maximizing cochlear implant patients' performance with advanced speech training procedures. Hear Res. 2008 Aug; 242 (1-2):198-208 3. Anderson S & Kraus N. Auditory training: evidence for neural plasticity in older adults. Perspect Hear Hear Disord Res Diagn. 2013 May;17:37–57.
- 3. Zendel B, West GL, Belleville S et al. Musical training improves the ability to understand speech-in-noise in older adults. Neurobiol Aging. 2019 Sep;81:102–115.
- 4. Pascual-Leone A, Amedi A, Fregni F et al. The plastic human brain cortex. Ann Rev Neurosci 2005 Jul;28:377-401.

5. Cochlear Ltd (ABN 96 002 618 073) 1 University Avenue, Macquarie University, NSW 2109, Australia Tel: +61 2 9428 6555 Fax: +61 2 9428 6352

www.cochlear.com

Please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always follow the directions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information.

Views expressed are those of the individual. Consult your health professional to determine if you are a candidate for Cochlear Technology. Cochlear[™] Nucleus[®] implant systems are intended for the treatment of moderately severe to profound hearing loss. Baha implant systems are intended for the treatment of moderate to profound hearing loss

Cochlear, Hear now. And Always, the elliptical logo, True Wireless, Nucleus, ForwardFocus*, Kanso and Baha are either trademarks or registered trademarks of Cochlear group of companies.

Apple, iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

Android and Google Play are trademarks of Google LLC.

AUDIBLE is a trademark and brand of Audible Inc. TED TALKS is a trademark of Ted Conferences, LLC. TRIPADVISOR is a trademark of TRIPADVISOR LLC. SOUNDPRINT is a trademark of Soundprint Media Center, Inc. HEAROS is a trademark of Pick, Douglas A. Angel Sound is a trademark of the Emily Fu Foundation. Zagat is a registered trademark of Zagat Surveys, LLC