

## Contents

1.	Introduction	Page 4
2.	Practical advice to get started with listening to music	Page 5
3.	Practical advice for music selection and rehab exercises	Page 8
4.	Helpful resources	Page 10



## Introduction

Music is powerful and plays an essential role in people's lives – from birthdays and weddings to listening to our favourite songs. It is an integral part of culture and is interwoven into the way we connect with one another.

As a cochlear implant wearer, listening and deriving enjoyment from music can be a bit more complex and will take some time. Cochlear implants are geared toward improving speech clarity, but there are ways you can improve and optimise your experience with music. Research has shown that focused attention and listening practice can improve music appreciation<sup>1,2</sup>.

Below are exercises you can do in the comfort of your room or home environment, and some practical tips to help you get started with music listening exercises.

## Practical advice to get you started

#### Be kind to yourself

Music listening practice can take time and patience to see improvements. So, start slow and take breaks if you need to. Music may not sound the same as you are used to, but many recipients report that music sounds better the more they listen over time.

#### Choose a quiet place

When you first start off with music listening exercises, it is important to practice listening to music in a quiet environment. We recommend finding a quiet place in your home where you can close the door, rather than a family living area or the kitchen. It will be easier to focus on the music in a quiet room with less distractions.

#### Optimise your technology

Check that you are using the sound processor program and setting you hear best with before starting. If you are using external speakers to listen to music, set the volume at a moderate level and try not to use built-in laptop speakers – they tend to distort sound which will affect the quality of the music.

If your sound processor technology permits, we recommend directly streaming the music using a compatible\* Apple or Android™ device. Or, if you have a Mini Microphone 2+ or Phone Clip, you can connect it to your phone, tablet or laptop and listen to music that way.

#### Practice regularly

Listening practice should be broken up into short, but frequent sessions. Try doing this for no longer than 10 minutes a day, five days a week. We recommend scheduling your listening practice earlier in the day when you aren't too tired and can concentrate.

#### Listen closely

When you focus on the music, your brain tunes into the signal and learns to make more sense out of the lyrics beats and melodies. So, remember to pay close attention to the music.

#### Select your music carefully

Begin by listening to simple music – a plain melody performed on just one or two instruments. Over time you can start to broaden your music listening goals, but rich and complex sounds are harder to understand when you first get started. The next section has some useful suggestions to help with music selection.

Some cochlear implant recipients have reported that listening to music that was familiar prior to implantation can be helpful. This is because your brain and your memory of music can help to fill in missing information<sup>3</sup>.

#### Create playlists

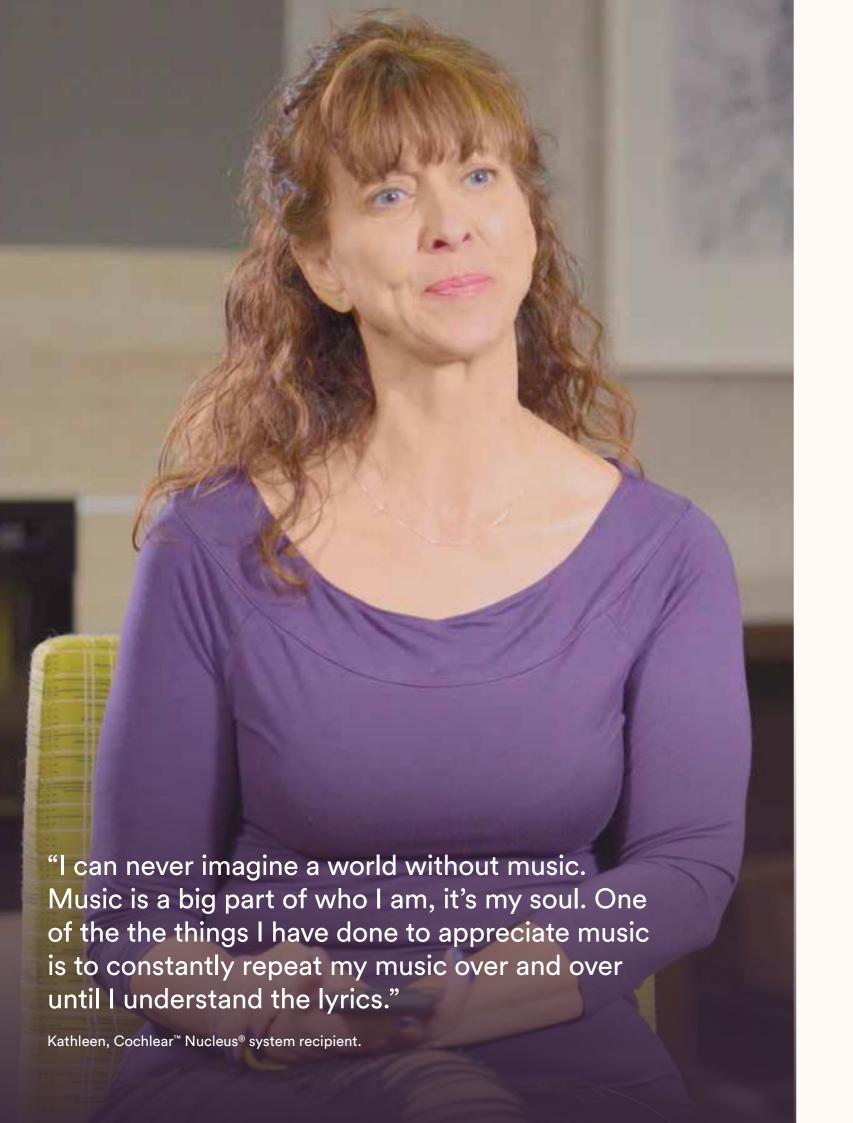
It may take some time to learn which music will be most pleasant for you to listen to. We recommend creating playlists of music that sounds nice to you. You can create these playlists on your music libraries.

We also suggest creating a new playlist every 3 months to see how your musical preferences evolve over time. In the playlist title, note the date you started creating it. This way you can easily keep track. You may find that the songs you enjoy start to use more instruments and have increasingly complex beats.

#### Set and revisit listening goals

Track your progress by setting yourself some listening goals. You can set realistic goals with the help of your audiologist or rehab specialist. But remember, your goals can always be revisited over time and adapted. For example, if you have set a goal to attend a live music event and find that you aren't ready, you can always move that goal a few months down the track.

5



# Music Selection and Rehab Exercises

Before you begin music listening practice it is important to involve your family or friends and get their support. Their encouragement can have a really positive impact on your progress. We also recommend scheduling an appointment to speak with your clinician, so they can help you set personalised listening goals.

Below are some simple steps that you can follow to discover or re-discover your love for music. We also share tips to help you with song selection when you are first getting started. When it comes to music rehab, it's important to start with the basics, go at a pace that you are comfortable with and try not to overcomplicate things.

#### Keep it simple



Begin by listening to songs performed using one instrument i.e a piano or guitar. Songs that are familiar or repeat musical patterns can be easier to follow. An example of this is children's music like Mary had a little lamb or Twinkle Twinkle Little Star.

#### **Explore music apps**



There is a great library of apps that you can download to help with things like identifying the different sounds instruments produce, tone, pitch and rhythms—all of which come together to form melodic quality of songs. Later on, once you are onto step 5, you can try downloading some lyrics training apps. We have shared a list of useful apps further down in the guide.

#### Continue with instrumental songs



Build your confidence in listening to instrumental songs and begin listening to songs that use 2 or even 3 instruments. You can even watch these being performed on YouTube, so you can see when the different instruments are being played.

To increase the difficulty, listen without the visual input and try to identify the different instruments being played and listen for shifts in the beat.

#### Introduce lyrics



Start with simple songs with repetitive lyrics. If you choose a song where you are familiar with the melody, that's even better.

#### Watch live or acoustic performances



Start by watching live acoustic performances of artists you like. Live or acoustic performances tend to strip back the production side of the song and use fewer instruments, making it easier to listen to the words the singer is saying. Also, by watching their performances, you get the visual input of their lip movements and facial expressions. Try having the lyrics on hand, so you can follow along with the singer.

#### Listen to live acoustic performances



Repetition is key, so try listening to the same acoustic performances, but this time without the visual cues that come from watching a video. When listening to the song, focus on identifying the lyrics, how the singer uses tone to convey emotion and also listen out for the different instruments that are being used.

#### Watch music videos



Music videos usually use the radio edit version of songs, these tend to be more stylised and a step up in listening difficulty.

#### Listen to the song without video



The next step is to listen to the same song but without the video. Same as step 5, try to have the lyrics on hand so you can follow along with the song. From here, you can listen to different songs by the same artist and then move onto other songs by different artists in the same genre.

#### Get experimental with music



Branch out and get experimental! Try listening to different genres of music that you normally wouldn't listen to. This will expose you to different tones, instruments and beats. For example, if you usually listen to pop, try listening to rock or jazz music.

#### Pick up an instrument



If you find you're very interested in further developing your appreciation of music, grab an instrument and start playing it. You may find that you form a deeper connection to music when you are the one producing the sounds and setting the rhythm. This is also a great way to experiment with different chords and how small changes to the notes you play can alter the overall sound.

#### Celebrate your wins



Dedicating time out of your day to music listening practice requires effort and patience. So, be proud of the work you are doing. Remember, your family, friends and whole Cochlear Family community are here to support you.

### Resources

Below are a list of websites and apps to help with music rehab and appreciation.

#### Apps



#### 1. Hearoes

An interactive auditory training platform that helps familiarise cochlear implant users with different environmental and instrumental sounds, speech sounds (vowels and consonants) and sentences. Great for general hearing rehab but also for listening to music and following along with the lyrics.



2. Auralia Pitch Comparison
Helps to develop the fundamentals of
pitch awareness. The app has exercises
that increase in difficulty. Early level
exercises start by asking players to
compare 2 different pitches and later level
exercises will ask players to compare the
first and last notes of a played melody.



#### 3. Lyrics Training

This app covers a wider range of languages and works on developing word recognition in songs. There are two game modes, multiple choice and karaoke. With multiple choice, players are asked to fill in the gaps for the lyrics. Karaoke game mode works by playing the song and highlighting the word as it is sung by the artist.

For more information, please contact your local Cochlear customer service team.

9 10

## Hear now. And always

Cochlear is dedicated to helping people with moderate to profound hearing loss experience a world full of hearing. As the global leader in implantable hearing solutions, we have provided more than 650,000 devices and helped 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 next generation technologies. We collaborate with leading clinical, research and support networks to advance hearing science and improve care.

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

#### References

- 1. Torppa R, Huotilainen M. Why and how music can be used to rehabilitate and develop speech and language skills in hearing-impaired children. Hearing Research 2019; 380: 108–122.
- 2. Looi V, Gfeller K, Driscoll V. Music appreciation and training for Cochlear implant recipients: a review. Seminar Hear. 2012 Nov 1;3(4):307–334
- 3. Gfeller KE, Turner C, Woodworth G, Mehr M, Fearn R, Knutson J, Witt S, Stordahl J. Recognition of familiar melodies by adult cochlear implant recipients and normal hearing adults. Cochlear Implants International. 2002;3(1):29–53.

■ 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

- \* The Cochlear Nucleus Smart App is available on App Store and Google Play. For compatibility information visit www.cochlear.com/compatibility
- $\hat{\ }$  Bring Back the Beat  $\ ^{\mathbb{M}}$  is not available in all countries.

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.

Cochlear, Hear now. And Always, the elliptical logo, Nucleus, SmartSound and Kanso are either trademarks or registered trademarks of Cochlear Limited or Cochlear Bone Anchored Solutions AB.

Android is a trademark of Google LLC. Google Play and the Google Play logo are trademarks of Google LLC.

Apple is trademark 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.