

Adult Home-Based

Hearing Therapy Manual



Cochlear®

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About Hearing Therapy

Why the need for hearing therapy?

Like any other part of your body following a medical procedure, you can't begin to experience improvement without a little extra focus and some therapy.

Hearing therapy, or rehabilitation, following implant surgery is instrumental to hearing redevelopment and can possibly even bring back sounds you may have completely forgotten about. Hearing therapy approaches may vary from patient to patient depending on the severity and timing of the hearing loss. It isn't harmful to anyone and is suggested no matter what type of device you have selected. It is even beneficial for those not yet using a device, but realize they are experiencing some hearing decline. With any type of therapy, it may take some time for your brain to relearn things it's forgotten. The sooner you can begin therapy following activation, the shorter amount of time your rehabilitation may take.

Again, everyone progresses at their own pace, depending on age, overall health and current cognitive abilities and the therapy itself can range depending on where you are in your journey. At its most basic level, simply wearing the device full time can be considered a form of therapy.

Listening with a cochlear implant enables you to hear sound. However, this sound is very different from natural hearing. Also, for some people it may be some time since they have heard sound or the full range of sounds in speech. In order to get the most out of your cochlear implant, it is important to practice listening. Hearing therapy training helps you learn to understand the speech you hear with your implant and improve your communication. Listening practice should start in a few days following activation of the cochlear implant.

What to do for hearing therapy.

This manual contains exercises for you to complete at home. Everyone differs in how much they can hear initially and how quickly they learn to use their cochlear implant. The types of settings and or features of your cochlear implant can also impact your progression. It is important that you and your clinician develop an approach that works for your individual needs. Therefore, this manual includes a range of exercises covering abilities from identifying sound and speech to recognizing and understanding speech. As you move through the manual, the exercises become more challenging. By the end of the manual, the exercises are done in background noise to make the task challenging and more like the environments in which we often find ourselves communicating.

How do I know which exercises to complete?

Included in this manual is a Hearing Therapy Plan. At your initial appointments with your clinician, you can discuss which exercises you might like to try and how to make the most out of this manual. Together with your clinician you can write your plan and there is plenty of room for you to write notes about your successes and challenges on the exercises completed. You and your clinician may review and update each session as you progress.

How long do I need to continue doing hearing therapy?

This manual is aimed primarily at people who have just received their cochlear implant, to use during the first few months. The length of time that you need to do hearing therapy varies, depending on how long you have been with limited hearing, whether you were still able to use a hearing aid in your implanted ear in the period before your cochlear implant, and the availability of opportunities for listening and conversation with your cochlear implant in your everyday life. Regular therapy during the first few months after you get your cochlear implant is beneficial.¹ Scientific studies have also indicated that therapy is beneficial for some cochlear implant recipients who have been using the devices for many years.² Are there things you would like to be able to do but don't feel confident enough to try? There may be times when you will want to do some refresher training as well. You may want to consult with

your clinician on the use of this manual and which exercises would be appropriate based on your past experiences and desires.

Tips for the training partner (speaker)

Below are also a few tips that may be helpful:

- It is a good idea to practice the listening exercises each day at home at the same time, so it is part of your regular routine.
- Initially find a quiet part of the home to do the therapy.
- Hearing therapy is mostly done with hearing alone (without lip reading). The best way to do the therapy is for you to look down so you can't see the speaker's face. The speaker should avoid covering their mouth as this changes the sound of speech.
- Confirm the parts of the recipient's response that are correct.
- The speaker should give positive feedback. Good alternatives to saying **"no, that was wrong"** are: **"listen again"**, **"nearly right, listen to the end of the sentence again"**, or **"it sounds a bit like that word but it's a different word"**.
- If the recipient has difficulty with the exercise, the speaker may need to modify it using the tips provided in the manual. For example, the speaker can give a clue word, slow down their rate of speech, emphasize particular words or, if needed, let the recipient see the speaker's face. However, the speaker should always end by saying the word or sentence by hearing alone (without lip reading).
- Over time, as the recipient's listening skills improve, the speaker can make the exercises more challenging by: increasing the distance between the recipient and the speaker (for example, by sitting across a table) or sitting on the non-implanted side offering less repeats—encourage more guessing gradually increasing the noise in the environment by turning on the radio "off station" with static noise in the background, or to a station with music or talking, increasing the volume of the noise as you progress speaking a little faster.

Essential Tips For Hearing Therapy

Hearing therapy will be the most beneficial if you:

- Concentrate on using listening alone (unless instructed to also use lip reading in the exercise)
- Listen with your cochlear implant alone (if you use a hearing aid in the other ear, turn it off during the training time)
- Practice in a quiet room at first
- Check that you are using the speech processor program and settings you hear best with before you start
- The speaker should use a conversational level voice.
- Practice regularly—about 30 minutes a day for five days each week
- Practice when you are feeling fresh and relaxed

Section A: Getting Started

Practice working out the sound and speech from a list of possibilities and repeated speech

Module 1: Environmental Sounds Checklist

Why?

To help you develop an awareness of the sounds around you in the environment and learn to identify these environmental sounds.

There are some sounds that you may not have heard for a long time and you will need to re-learn them, and other sounds may sound quite different with a cochlear implant.

How?

Spend some time each day listening to the sounds around you and see if you can identify the sounds. Complete the following list as you go.

Exercise			
Lower pitched (deeper) sounds			
<input type="checkbox"/>	fridge humming	<input type="checkbox"/>	kettle boiling
<input type="checkbox"/>	man's voice	<input type="checkbox"/>	air conditioning
<input type="checkbox"/>	car engine from inside the car	<input type="checkbox"/>	wind
<input type="checkbox"/>	fan	<input type="checkbox"/>	a zipper
Higher pitched (squeaker) sounds			
<input type="checkbox"/>	birds	<input type="checkbox"/>	child's voice
<input type="checkbox"/>	car indicators	<input type="checkbox"/>	clothes rubbing together
<input type="checkbox"/>	cicadas	<input type="checkbox"/>	wire coat hangers on a metal rod
<input type="checkbox"/>	tapping on computer keyboard	<input type="checkbox"/>	microwave or washing machine beeps
<input type="checkbox"/>	frying food	<input type="checkbox"/>	light switch
<input type="checkbox"/>	rubbing hands together		
Rhythmic sounds			
<input type="checkbox"/>	phone ringing	<input type="checkbox"/>	road crossing beeps
<input type="checkbox"/>	footsteps	<input type="checkbox"/>	knocking at the door
<input type="checkbox"/>	tap dripping	<input type="checkbox"/>	clock ticking
Continuous sounds			
<input type="checkbox"/>	fridge motor	<input type="checkbox"/>	vacuum cleaner
<input type="checkbox"/>	rain on roof	<input type="checkbox"/>	waves at the beach
<input type="checkbox"/>	leaves rustling in the trees	<input type="checkbox"/>	clothes dryer

Exercise			
Very soft sounds			
<input type="checkbox"/>	own breathing	<input type="checkbox"/>	ice cubes melting
<input type="checkbox"/>	chopping apples or onions	<input type="checkbox"/>	rustling of tissue paper
<input type="checkbox"/>	pet drinking from a bowl	<input type="checkbox"/>	cat purring
<input type="checkbox"/>	the sound released when opening a soda can	<input type="checkbox"/>	scissors opening and closing
<input type="checkbox"/>	spray from perfume or deodorant container	<input type="checkbox"/>	shuffling a pack of cards
Distant sounds			
<input type="checkbox"/>	traffic in distance	<input type="checkbox"/>	waves at the beach
<input type="checkbox"/>	neighbor coming and going	<input type="checkbox"/>	children at a playground
<input type="checkbox"/>	car coming down the road	<input type="checkbox"/>	airplane flying overhead
Louder sounds			
<input type="checkbox"/>	cutlery being placed in drawer	<input type="checkbox"/>	running water into the sink
<input type="checkbox"/>	toilet flushing	<input type="checkbox"/>	own chewing
<input type="checkbox"/>	cup on bench	<input type="checkbox"/>	motor bike passing by
<input type="checkbox"/>	dog barking	<input type="checkbox"/>	stirring a cup of liquid with a spoon
<input type="checkbox"/>	plastic bags or packaging	<input type="checkbox"/>	jangling keys
<input type="checkbox"/>	traffic		
List some sounds that you heard in the first week following activation that you may have forgotten about.			

Module 2: Identifying Speech Sounds (Vowels and Consonants)

Why?

Using your cochlear implant throughout the day gives you a lot of practice and helps your brain learn to recognize speech. However, some speech sounds may remain difficult to tell apart and identify with the new and different sound heard through the implant. Recent research indicates that it may be helpful to do exercises to train the brain to learn to tell apart and identify speech sounds. This training involves actively listening to pairs of words that differ in one particular speech sound (for example, the middle vowel "ee" in "theme" vs "u" in "thumb") and learning to tell the sounds apart. Some types of vowels and consonants are harder to hear with a cochlear implant than others. Therefore, there is a range of exercises progressing from easier to more difficult.

How?

The speaker will say the two words, pointing to each, and then repeat one of the words. You then point to or say the word. If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Vowel Identification – Level 1*

Exercise 1									
1	theme	thumb	6	carp	cup				
2	sharp	ship	7	port	put				
3	teach	touch	8	peep	pip				
4	barn	bin	9	mast	must				
5	leak	luck	10	wall	wool				

Vowel Identification – Level 2*

Exercise 2									
1	bath	booth	6	fast	feast				
2	spark	speak	7	hard	who'd				
3	tar	too	8	barn	bean				
4	parch	peach	9	bars	booze				
5	tart	toot	10	park	peak				

Exercise 3									
1	tea	too	6	kid	could				
2	pit	put	7	bat	but				
3	cap	cup	8	bid	bed				
4	pit	pet	9	feed	food				
5	beat	boot	10	pill	pull				

* Adapted from Plant, G. (1984). Commtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

Consonant identification – Level 1*

Exercise 4										
1	rip	rib	lack	6	lag					
2	cap	cab	lock	7	log					
3	mop	mob	cod	8	cot					
4	pick	pig	card	9	cart					
5	duck	dug	hard	10	heart					

Consonant identification – Level 2*

Exercise 5										
1	pea	me	pen	6	pet					
2	pop	mop	seen	7	seat					
3	pie	my	ban	8	bat					
4	peel	meal	bean	9	beet					
5	pet	met	mean	10	meet					

Exercise 6

1	match	batch	hen	6	head					
2	man	ban	moon	7	mood					
3	morn	born	bun	8	bud					
4	mail	bail	pan	9	pad					
5	me	be	corn	10	cord					

* Adapted from Plant, G. (1984). Commitram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

Exercise 7

1	sum	numb	6	moose	moon
2	sea	knee	7	horse	horn
3	sap	nap	8	mass	man
4	sit	knit	9	case	cane
5	seed	need	10	dice	dine

Consonant identification – Level 3*

Exercise 8

1	lip	nip	6	mean	meal
2	law	nor	7	fine	file
3	lap	nap	8	coin	coil
4	lit	knit	9	spin	spill
5	let	net	10	skin	skill

Exercise 9

1	chew	shoe	6	cheer	shear
2	chin	shin	7	chose	shows
3	chip	ship	8	chop	shop
4	chewed	shooped	9	cheers	shears
5	chore	shore	10	chair	share

* Adapted from Plant, G. (1984). Commitram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

Consonant identification – Level 4

Exercise 10						
1	boat	goat	6	lab	lad	
2	bub	dub	7	bag	bad	
3	big	dig	8	big	bib	
4	dad	gad	9	bust	dust	
5	bet	get	10	wed	web	

Exercise 11						
1	peer	tier	6	hop	hot	
2	peak	teak	7	bat	back	
3	pour	tore	8	map	mat	
4	pair	care	9	cape	cake	
5	tool	cool	10	lip	lit	

Exercise 12						
1	fought	short	6	fit	sit	
2	fine	sign	7	sam	sham	
3	few	shoe	8	frill	shrill	
4	lass	lash	9	buff	bus	
5	fell	shell	10	fail	shale	

Exercise 13						
1	mail	nail	6	boom	boon	
2	mine	nine	7	more	gnaw	
3	sum	sun	8	game	gain	
4	gum	gun	9	lime	line	
5	meet	neat	10	beam	been	

Module 3: Recognizing Words (Known Topics)

Why?

To gain practice in recognizing words when you know what the topic is.

How?

Your speaking partner will tell you the topic (Animals for example) and you are then to repeat the topic to them. Then the speaker will say each of the words within the topic category. You are then to repeat the word. If you cannot repeat the word after three attempts, the speaker will repeat the word again allowing you to lip read, as well. You can also try having the words in front of you to assist if you are having difficulty.

Exercise 1	
Topic: Animals	
1	tiger
2	snake
3	kangaroo
4	dog
5	chimpanzee
6	bear
7	elephant
8	spider
9	cat
10	hippopotamus

Exercise 2	
Topic: Months	
1	September
2	March
3	July
4	February
5	October
6	April
7	August
8	June
9	December
10	May

You can also make up your own sets of topics and words. Here are some ideas: colors, vehicles, foods, bicycle parts, days of the week. Fill in the topics and associated words in the tables at the end of the manual (Appendix 1).

Module 4: Recognizing Sentences (Known Topics)

Why?

To gain practice in recognizing speech when you know what the topic is but you don't know what the possible sentences are.

How?

You do not see the sentences. The speaker tells you the topic and you repeat the topic. The speaker says the first sentence and you repeat the sentence. The speaker confirms which words you got right and encourages you to use strategies to clarify the sentence, such as **“repeat”** or **“did you say...?”** or **“can you say it a different way?”** If you have not been able to repeat the sentence after three attempts, the speaker will provide an important word in the sentence using lip reading cues, then repeat the entire sentence using hearing alone. If you are unable to repeat the sentence, the speaker will say the sentence with lip reading cues and then hearing alone once more. Another option if you are having difficulties is to put the list in front of you so you can see what the options are.

Exercise 1*

Topic: At a restaurant

- 1 How would you like your steak cooked?
- 2 You have a choice of soup or salad.
- 3 Good evening. May I take your order?
- 4 Would you care to dine at this restaurant again?
- 5 Would you like to use a credit card or pay cash?
- 6 Thank you. Do come again.
- 7 Would you like a table for two?
- 8 Is there anything else I can get for you?
- 9 You have potato on your chin.
- 10 Would you like pie, cake or ice cream for dessert?

* Pedley, K. Synthetic training.

Exercise 2*

Topic: At the bank

- 1 Do you have an account at this branch?
- 2 Would you like to open a new account?
- 3 The teller at window number one will help you.
- 4 Is this a deposit or a withdrawal?
- 5 You forgot to sign this check.
- 6 This check has not been cleared.
- 7 Would you like to order a statement?
- 8 Your account is overdrawn.

* Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd. Based on concept of Plant, G. (1984). Corrimtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

You can also make up your own topics and sentences. Here are some ideas: at the post office, your last holiday, your favorite hobby, going to the beach. Fill in the topics and sentences in the tables at the end of the manual (Appendix 1).

Module 5: Recognizing Link Sentences

Why?

To gain practice in identifying sentences when you know what the possible options are. This exercise is more difficult than the previous sentences as the topics are not known and there are many possible options.

How?

You have the table in front of you. The speaker starts by saying one of the sentences across a row. You should try to identify which sentence the speaker said. You may be able to identify the sentence from hearing one or two words correctly, thus building confidence. Once you can do this easily from the whole table without lip reading, the speaker can create new sentences by selecting one word from each column, for example, Bill bought eight yellow jackets. If the whole sentence was not correct, the speaker can confirm which words were correct and says the sentence again.

If the response is still incorrect, the speaker says the sentence again, pointing to the words as they are spoken. If needed, reduce the number of items in the list (reduce the number of rows in the table).

Module 6: Text Following— Passages Read Aloud

Why?

A good way to learn to hear the rhythm and pattern of sentences and individual words and then to identify the speech, is to listen to text being read aloud. You can do this by listening to someone reading aloud from a passage, or by listening to an audiobook (see next section) and following along with the text on the printed copy.

How?

Choose a passage from a book, newspaper, magazine or one of the passages on the following pages. You will need two copies of the passage, one for you and one for the speaker. The speaker reads the passage aloud. You follow along pointing to each word as it is spoken. The speaker then stops at a random place and you stop at the same word. If you don't stop at the same word, the speaker will show you which word is correct.

Some handy tips:

- When you start this task, practice in a quiet room using materials that are easy to follow (for example, reading from children's books, or passages where content is easy to follow and you know the topic).
- The speaker should start by speaking slowly and stopping in places that are predictable, such as at the end of sentences or phrases. Passages can be read several times for practice.
- As you gain more experience with this task, you can use more difficult materials with longer sentences and where you are not familiar with the topic.
- When you start to find the task easier, listen in a room with background noise. To do this you can turn on a fan, or turn on the radio "off station" with static noise in the background, or to a station with music or talking, increasing the volume of the noise as you progress.
- You can also practice listening by reading aloud to yourself.

Exercise*

Australia

The continent of Australia is about 7000 miles southwest of California. It is both a continent and an island and is almost exactly the same size as the mainland United States. The Nullarbor is the second largest desert in the world and means "no trees" in Latin. Because of this huge desert, most of the population live around the coastal borders. There are seven states, including the island of Tasmania.

One of the most interesting features of this country is the animals. The most well-known is the koala bear, of course. In fact, the koala is not really a bear, because it has a pouch in which it carries its young. The koala lives in a special kind of eucalyptus tree, because the koala will eat only the leaves from this tree.

Another animal is the wallaby. This is a miniature kangaroo. It has very big eyes and very long claws and is more friendly than a kangaroo. There are several kinds of kangaroos: gray ones, red ones and brown ones. They have very large hind feet and a long tapered tail that make it possible for them to leap great distances. They can move faster than fifty miles per hour. In the north of Australia, kangaroos can be found in the wild very easily. However, wild Australian animals are not usually found wandering the streets of any major city.

There are many other interesting things in this land called "Down Under".

* Hunt, P. Analytic training.

Audiobooks (Recorded Books)

Why?

A good way to learn to hear the rhythm and pattern of sentences and individual words and then to identify the speech is to listen to text being read aloud. You can do this by listening to someone reading aloud from a passage (see section above) or by listening to an audiobook and following along with the text on the printed copy.

How?

Listen to the audiobook and at the same time follow along on the text in the written book. Listen to the patterns in the speech and try to identify what the words are. If you find it difficult at first, you can repeat the passage several times to practice.

Some handy tips:

- It's a good idea to start with the clearest and quietest signal possible.
- Audiobooks are available at most libraries, and also for sale online.
- It's a good idea to start with easier books and build up to harder books as you get more practice. Starting with children's books may be easier. Then as you get more practice, listen to books for adults, starting with topics that you are familiar with and are of interest to you—perhaps a book you have read before and enjoyed.
- Some speakers are easier to hear than others, so it can be helpful to experiment with this.
- You can make the task more difficult by listening to the audiobook alone without reading along.
- Another way of challenging yourself is to add in background noise by opening a window, turning on a fan, turning on a radio to a static state or to a station with music. Increase the level of the noise as you begin to see success.

Module 7: Recognizing Common Phrases

Why?

To gain practice in recognizing commonly heard phrases.

How?

You do not see the list of sentences. The speaker will say the sentence without lip reading. Try to repeat as many words as you can. If you are not sure, fill in the missing words with your best guess. Remember, these are sentences that you hear every day. The speaker confirms which words you got right and encourages you to use strategies to clarify the sentence, such as **"repeat"** or **"did you say...?"** or **"can you say it a different way?"** If you have not been able to repeat the sentence after three attempts, the speaker will provide a key word in the sentence using lip reading cues, then repeat the entire sentence using hearing alone. If you are still unable to repeat the sentence, the speaker will say the whole sentence with lip reading cues and then hearing alone once more. For further practice you can also try making up your own phrases which are relevant to you.

Exercise

1	What time is it?
2	I'll see you later!
3	How was your day?
4	Would you like a cup of coffee?
5	Wait just a minute.
6	What's the weather like?
7	Have a nice day.
8	What are we having for dinner?
9	You are looking well today.
10	Do you need a lift?
11	Would you like some help?
12	Please close the door.
13	Are you warm enough?
14	What would you like for breakfast?
15	Happy Birthday!
16	Let's go to the movies.
17	Pass the bread and butter please.

Section B: Making It More Challenging

Practice repeating and understanding speech in quiet and noisy backgrounds

Part 1: Practicing in a Quiet Background

Well done on reaching the section for practicing, recognizing and repeating speech when the topics and possible options are not known, and for practicing understanding the message. This is getting more challenging!

Module 8: Recognizing Sentences (No Topics)

Why?

To practice recognizing speech when the topic and possible options are not known.

How?

The speaker says a sentence. You repeat the sentence. The speaker then confirms which words you got right and repeats the sentence two more times if needed. If you are having difficulty, the speaker can try providing a related topic or providing one of the words in the sentence with lip reading cues. If you can't repeat the sentence after three attempts, the speaker will say the sentence with lip reading cues and then again hearing only.

Exercise 1 (Level 1)*

- | | |
|----|------------------------------------|
| 1 | We must vote next Tuesday. |
| 2 | Press the pedal with your foot. |
| 3 | Pour the stew into the bowl. |
| 4 | She saw a cat in the house. |
| 5 | The sky was clear and bright. |
| 6 | Take the winding path to the lake. |
| 7 | Will you please answer the phone? |
| 8 | The fish swam in the tank. |
| 9 | The boy missed the boat. |
| 10 | The house was built of brick. |

* Adapted from IEEE sentences. Institute of Electrical and Electronic Engineers (1969).

Exercise 2 (Level 1)*

- 1 Always close the barn door tight.
- 2 After the dance they went straight home.
- 3 She was waiting at my front door.
- 4 Her dress was trimmed with a gold sash.
- 5 He found a pink shell on the beach.
- 6 The grapes were pressed into wine.
- 7 A break in the dam almost caused a flood.
- 8 The red apple fell to the ground.
- 9 The corner store was robbed last night.
- 10 Cut the pie into eight equal portions.

Exercise 4 (Level 2)*

- 1 A small creek cuts across the field.
- 2 Pencils with black lead are good for sketching.
- 3 Movie tickets cost five dollars on Mondays.
- 4 The round mat covered the mark on the floor.
- 5 A frog and a toad are hard to tell apart.
- 6 The night alarm woke him from a deep sleep.
- 7 The crew lost their lives in the raging storm.
- 8 The bomb raid left most of the town in ruins.
- 9 The curtain rose and the show began.
- 10 Drive the screw straight into the wood.

Exercise 3 (Level 2)*

- 1 The man went to the woods to gather sticks.
- 2 Next Sunday is the twelfth of the month.
- 3 Plant a bush near the front steps.
- 4 She called his name many times.
- 5 She sewed the torn coat quite neatly.
- 6 The sun came up in the eastern sky.
- 7 The term ended in June that year.
- 8 Use a pencil to write the first draft.
- 9 Come quickly when you hear the bell.
- 10 Wood is best for making toys and blocks.

Exercise 5 (Level 3)*

- 1 Pick a card and place it under the pack.
- 2 The plant grew large and green in the window.
- 3 Raise the sail and steer the ship northward.
- 4 She danced like a swan, tall and graceful.
- 5 The salt breeze came across the sea.
- 6 There was the sound of dry leaves outside.
- 7 Turn on the lantern for light.
- 8 Twist the valve and release hot steam.
- 9 Watch the log float in the wide river.
- 10 We now have a new warehouse for shipping.

* Adapted from IEEE sentences. Institute of Electrical and Electronic Engineers (1969).

* Adapted from IEEE sentences. Institute of Electrical and Electronic Engineers (1969).

Exercise 6 (Level 3)*	
1	Canned pears lack full flavor.
2	A dash of pepper spoils beef stew.
3	The gray mare walked before the colt.
4	Boards will warp unless kept dry.
5	The rent was paid every third week.
6	The beetle droned in the hot June sun.
7	Bail the boat to stop it from sinking.
8	The copper bowl shone in the sun's rays.
9	The black dog crawled under the fence.
10	A rod is used to catch pink salmon.

* Adapted from IEEE sentences. Institute of Electrical and Electronic Engineers (1969).

Module 9: Recognizing Words (No Topics)

Why?

To gain practice at recognizing speech when the topic and possible options are not known.

How?

The speaker starts by saying the first word. You repeat the word. If you do not get the word completely correct, your speaker can give you tips, such as **"nearly; listen to the last letter again"**, or **"almost right, but this word doesn't begin with p"**. After three attempts, the speaker should then write down the test word and the word that was said and then say them several times, pointing to each in turn.

Exercise 1*			
1	dip	6	shed
2	can	7	chop
3	boot	8	verse
4	cheese	9	notch
5	jug	10	fib

Exercise 2*			
1	jam	6	rough
2	leg	7	talk
3	caught	8	yes
4	can	9	zoom
5	bath	10	pave

Exercise 3*			
1	mesh	6	path
2	him	7	weave
3	term	8	dawn
4	thought	9	hook
5	girl	10	sheep

Exercise 4*			
1	fuss	6	them
2	reef	7	latch
3	save	8	nil
4	daze	9	sheep
5	wash	10	sage

Module 10: Interactive Stories

Why?

To gain practice in understanding the message rather than just repeating what is heard.

How?

The speaker reads out the paragraph without lip reading (you do not see the paragraph or the topic). The speaker then asks you questions about the paragraph. If you are having difficulty, your speaker could give you the topic clue, or you can start by reading the paragraph with lip reading and then asking the questions with hearing alone.

Exercise 1 (Level 1)*

Story 1: Breakfast

Breakfast is probably the most important meal of the day. It gives us energy to go through the morning. Most people eat breakfast at about seven o'clock in the morning. I like cereal, toast and juice for breakfast. On Sundays, it's nice to go out to a restaurant for breakfast.

- 1 What was I talking about?
- 2 What time do most people eat breakfast?
- 3 What time do you eat breakfast?
- 4 Do you like eggs for breakfast?
- 5 What do you like best for breakfast?
- 6 Do you ever go to a restaurant for breakfast?

* Pedley, K. Synthetic training.

Exercise 2 (Level 2)*

Story 2: The disappointed cat

One day, a little bird sat in a tree and looked around. He wanted something to eat and saw a piece of bread on the ground. He flew down and began to eat it. An old black cat saw the bird and crept up behind him. She almost caught him, but the little bird heard her and flew back into the tree. The cat was disappointed. She lay down on the steps and went to sleep. Then the little bird flew down again and ate the bread.

- 1 How big was the bird?
- 2 What did the bird see on the ground?
- 3 Did the cat catch the bird?
- 4 What color was the cat?
- 5 Where did the cat fall asleep?
- 6 Did the bird get to eat the bread?

* NSW Department of School Studies (1990).

Exercise 3 (Level 3)*

Story 3: Garlic

The simple bulb of garlic as we know it is certainly nothing special. However, garlic has a long and fascinating past. The Babylonians and ancient Greeks called it the “stinking rose” and believed it had peculiar powers. People rubbed it on their bodies, buried it with their dead, and wore it round their necks.

The Egyptians went so far as to pray to garlic. They maintained that it possessed the secret of physical strength. When garlic supplies ran short for the workers building the Great Pyramid, they reportedly went on strike. Big servings of garlic were also fed to soldiers for strength in battle and to athletes for better performance.

It was also believed that garlic had many therapeutic values. Remedies have been recorded for snakebite, measles, colds and cholera, to name but a few. A more bizarre practice was to string it around the neck to repel vampires.

While garlic is certainly not a cure for all sickness, it is a powerful antiseptic. It has also been used with good results as a pesticide. At the present time, the real value of garlic is in cooking. For some time, though, it was frowned upon as something smelly that only people from the Mediterranean ate. This view is changing, and no chef, who takes pride in cooking, would be without it.

Since most people worry about bad breath, it should be remembered that this only occurs with raw garlic. It is perfectly safe to eat when cooked. A final reassurance comes from the Japanese, who focused on the development of an odorless garlic. This breakthrough won over many who refrained from eating garlic previously because of fear of bad breath.

1	What was garlic called in the time of the Babylonians?
2	Name two ways that garlic was used in the past.
3	Why were soldiers and athletes fed so much garlic?
4	What were the garlic remedies supposed to cure?
5	What do we use garlic for in modern times?
6	What is the major shortcoming of garlic?
7	What was the process that made garlic better to eat?

*Pedley, K Synthetic training.

Module 11: Information Transfer— Complete the Missing Information*

Why?

To gain practice in understanding the message rather than just repeating what is heard.

How?

The speaker's copy of the exercise is on the next page and your copy is in Appendix 1 (page 51). You and the speaker both have the same table, but you each have different and complimentary missing details. The task is to fill in the missing information on both of your sheets by taking turns to ask and answer questions. For example, the speaker may ask you: **"What street is the house on?"** You may ask the speaker: **"Is the condition of the apartment modern, quite modern or not very modern?"** When you hesitate, the speaker should encourage you to request clarification.

Exercise		
Detail	Apartment	House
Street	King Street	
Size	big quite big small	big quite big ✓ small
Condition	modern ✓ quite modern not very modern	modern quite modern not very modern
Number of rooms	three	downstairs -- upstairs --
List of rooms	a living room a kitchen a bedroom	
Central heating	Yes	
Near the shops		No
Distance from town center	1 mile	
Rent		\$1600 a month
Any other information	You share the toilet and bathroom on the first floor.	

* Pedley, K. Synthetic training.

Module 12: Information Transfer—Describe, Perceive, Draw*

Why?

To gain practice in understanding the message rather than just repeating what is heard.

How?

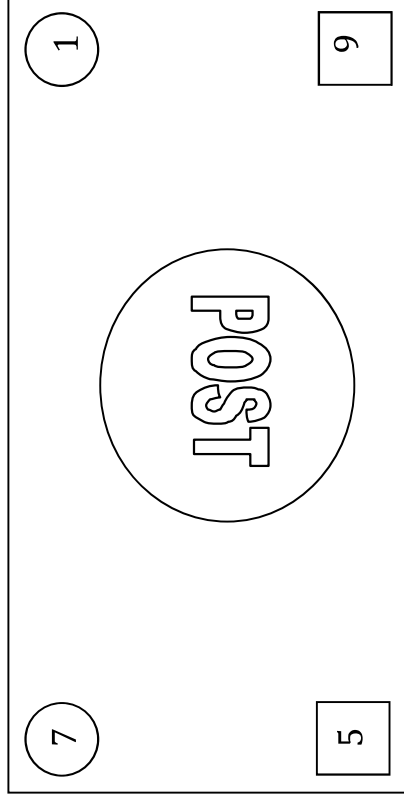
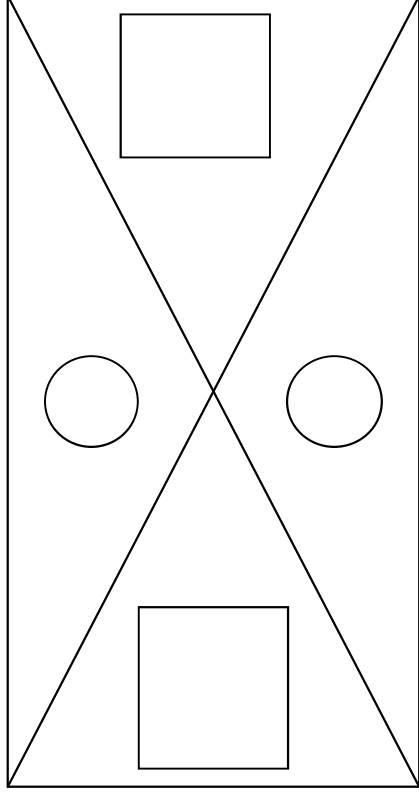
The speaker gives you a set of verbal instructions to draw or write objects and symbols on a blank rectangle (see Appendix 1) to form a pattern. Example patterns for the speaker are shown below. You carry out the instructions, using clarification strategies whenever you are unsure of any details. Once you have completed the exercise, the speaker will show you the correct pattern and discuss any errors.

The following presentation tips may be useful for the speaker:

- Use a number of short sentences initially, building up to longer, more detailed instructions when the recipient is achieving the task.
- If the recipient is reluctant to ask for clarification, encourage them to repeat or paraphrase each instruction to ensure it has been correctly perceived.

Do not automatically repeat the instruction if the recipient hesitates.

Wait for them to question details so they begin to take responsibility for repairing the communication breakdown.



* Watcyn-Jones, P. & Howard-Williams, D. (2001). Grammar games and activities, Book 1.

Module 13: Role Play*

Why?

To gain practice in understanding the message rather than just repeating what is heard.

How?

You will pretend to be in a specific place with a task to achieve. Your speaker will give you basic information about the conversation context and purpose, and an introductory sentence with lip reading. Your speaker will then ask you questions related to the situation and you are to not use lip reading. Your job is to try and give appropriate answers. If needed, ask your conversation partner to repeat the question, or use prompts such as “**Did you say...?**” or “**Are you asking...?**”

Exercise 1

Situation: Purchasing a train ticket at the ticket office

1	Where would you like to go?
2	When would you like to go?
3	What time of the day would you like to travel?
4	How many people will be traveling with you?
5	Would you like a one-way or a return ticket?
6	Will you be returning on the same day?
7	How would you like to pay for the ticket?

Exercise 2

Situation: Obtaining a replacement cable for a speech processor

1	Was your speech processor fitted at this clinic?
2	What model is your speech processor?
3	Would you like the cable mailed to you?
4	How long have you had this speech processor?
5	What length of cable would you like, six inch or eight inch?
6	What color would you prefer: beige, brown, gray or black?
7	Do you need any other spare parts?

* Pedley, K. Synthetic training.

Module 14: Scripted Conversation

Why?

To gain practice using prediction and topic cues to anticipate what your speaking partner is saying.

How?

You will start the conversation about the preparation for an imaginary trip you will both take for a picnic. Below are the sentences and questions that you will say. Your speaking partner will make the appropriate responses. Try to repeat back what your partner says before moving on to the next sentence.

Note to speaker: Encourage the recipient to guess. If the recipient cannot correctly repeat the information, provide assistance as follows:

- Repeat the whole answer.
- Repeat the answer emphasizing the incorrect part.
- Repeat only the incorrect part.
- Confirm the parts correctly repeated.

Adjust the predictability and complexity of your replies to suit the skill level of the recipient (for example, embed the answer, use proper nouns) so the exercise remains challenging but manageable.

Exercise 1

Topic: Organizing a picnic

1	Let's go for a picnic. Where shall we go?
2	Who should we invite along?
3	Which day will we go?
4	Whose car shall we take?
5	How long do you think it will take to get there?
6	What food should we take?
7	What other activities shall we do at the picnic site?
8	What shall we do if it rains?
9	How long shall we stay there?
10	Do you want to take anything else with you?

Module 15: Quest?ar*

Why?

To gain practice in understanding the message rather than just repeating what is heard.

How?

Your speaker will decide on a topic to discuss (see topic examples below). You and your speaking partner can both see the list of questions (see page 55 for copy of questions). You ask each question, and your speaking partner will answer. The speaking partner asks you to repeat what you have understood of their response. Your speaking partner and you should work together to clarify exactly what was said until it is all understood.

Topic examples:

museum	restaurant	post office	shopping	camping
doctor	zoo	beach	airport	swimming
mountains	picnic	music	lesson	supermarket

Exercise

Topic: Organizing a picnic

- 1 Where did you go?
- 2 Why did you go there?
- 3 When did you go?
- 4 How many people went with you?
- 5 Who were they? (give names)
- 6 What did you take with you?
- 7 Where is (the place that you went)?
- 8 How did you get there?
- 9 What did you see on the way?
- 10 What time did you get there?
- 11 What did you do first?
- 12 What did you see?
- 13 How many? What color?
- 14 What happened at (the place where you went)?
- 15 What else did you do?
- 16 What were the other people doing at (the place where you went)?
- 17 What was the most interesting thing that you saw?
- 18 What was the most interesting thing that you did?
- 19 What did you buy?
- 20 What kind? What flavor? What color?

(Continued on next page)

21	How much did it cost?
22	Did anything unusual happen? What?
23	How long did you stay?
24	What did you do just before you came home?
25	When did you leave?
26	How did you get home?
27	What happened on the way home?
28	What time did you get home?
29	How did you feel then?
30	When are you going back
31	Do you think that I should go sometime? Why?

* Adapted from Erber, N. (1996). Communication therapy for adults with sensory hearing loss (2nd ed). Clifton Hill: Clavis

Part 2: Practicing in Background Noise

Well done on reaching the section for practicing in background noise. Now it's getting quite challenging. Many of the everyday environments in which we communicate are noisy. The noise may be steady such as an air conditioner or fan, or may be loud and variable such as traffic noise, and often it is a background of other people talking or of music. As you know, it is much more difficult to communicate in a noisy background. So when you are well practiced at recognizing speech in quiet, it is important to practice listening in noisy backgrounds.

You can start with low levels of noise and increase the noise level as you progress. This practice will help your brain sort out the message you want to hear from the noise and help you learn to fill in the gaps when you don't hear all of the message. You can practice listening in background noise with all the exercises in this manual. Below are the instructions for how to practice in background noise.

Exercise

- All of the exercises in the manual can be practiced in noisy backgrounds.
- You can create background noise by opening windows, turning on a fan or air conditioner, turning on the radio to a static state or to a station with music or talking.
- Increase the level of the noise as you progress:
 - Start with the noise at a level where you are just aware of it until you can get > 90% correct on your chosen exercise.
 - Next, increase the noise level so that you have to really concentrate on the speaker but the speaker is still louder than the noise. Practice until you can get > 80% correct.
 - Increase the noise so that it is the same level as your speaker. At this level, sentence-type exercises work best. Remember to listen for meaning rather than every word.

Part 3: Practicing on the Phone

Most recipients who were able to use the phone with their hearing aid learn to use the phone again with the cochlear implant. Success depends on how much you understand without lip reading with your cochlear implant, how you manage the conversation when you are unsure of what is said, and how well you manage the speaker at the other end of the line. Voices will sound different on the telephone through the cochlear implant, as not all the tones available in your speech processor are transmitted down the phone line. It is also less clear and natural than talking with someone in person with your cochlear implant. You may not always identify the caller. If you begin by initiating the calls yourself, you can remove one source of "telephone-stress".

Getting started

Before trying any exercises over the phone, your audiologist will show you the different ways to use your technology: for example, you can use the speaker feature on the phone, or hold the receiver against the microphone of your processor, stream wirelessly from your smartphone, or use the telecoil inside your processor.

Using your chosen method, start with an exercise you can already do easily with your speaking partner without lip reading. Try to repeat back what is said. Remember to listen for the key words and aim to get the gist.

Exercises that work well over the phone include:

- Sentences people say every day like those in Module 7.
- Words with a common theme like your family names, months of the year, similar to Module 3.
- Sentences on a specific topic such as booking a restaurant or arranging a trip to the movies or a picnic, similar to Module 4.
- Following and repeating a passage of text over the phone, such as Module 6. Material that works well includes recipes, children's stories, a description of a TV program in a TV guide. You could email a piece of familiar text to your phone buddy and ask them to read it to you over the phone, so that you can become accustomed to their voice.
- Ask your speaker to say 10 things about themselves and repeat back each item, for example, I have brown hair, I am 6 ft. 2 inches tall, I work on a farm, I ride a motorbike, my favorite hobby is football.
- Try information transfer exercises like that in Module 11. Ask your phone buddy to look out of the window and describe the house across the road, while you repeat back.

What to do when you are unsure what the speaker says

- Always try to repeat back as much as you can to check understanding using "Did you say...?"
- If you still can't get a word or phrase after two repeats, ask the speaker to use a different word or say it a different way—this is the fastest way to get back on track.
- Ask the speaker to spell the word—it's easier if you have pen and paper near the phone.

Managing the speaker

- It's important to be very specific when asking your speaker to help you. Saying **"I can't understand you"**, or **"I can't get that"** or **"sorry?"** is likely to result in the speaker talking more loudly, which may sound distorted in your cochlear implant processor. Ask your speaker to use a normal level voice, to speak more slowly and to make it clear when they change the subject, for example, **"Can we talk about the arrangements for dinner next week?"**

Tips

- Practice, practice, practice—most recipients who are confident phone users speak on the phone every day.
- Get a good receiver-to-cochlear implant position and reposition as needed.
- Once you have a good position with the receiver against the microphone at the top of your speech processor, keep the receiver still!
- Start with a "phone buddy"—someone in the family whose voice you know you understand quite well. It helps if the person has observed your audiologist work with you on the phone.
- Keep the first phone calls short. Chalking up a few successes will do a great deal for your confidence.
- When you first start, it helps if the speaker at the other end is in a quiet place. If you can hear a lot of background noise, explain to the caller that you will call them at home later.
- Landlines can be clearer than mobiles and hands-free devices. Initiate your first call to a landline. Ensure the person you are calling is in a quiet environment on their end to ensure you have an optimal situation.
- If you are using the telecoil, you may reduce interference by moving away from electronic items such as computers and fluorescent lights.
- If you are still struggling on the phone, talk to your audiologist about changing the balance of sound between your microphone and your telecoil, and discuss direct auditory input and Bluetooth® options.
- If you wear a hearing aid in the other ear, use the phone on speaker so that you can listen with two ears.

Appendix 1: Extra Exercise Copies

1: Extra Exercise Tables

Exercise	
Topic	
1	
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Exercise	
Topic	
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2: Recipient Copy of Module 11: Information Transfer—Complete the Missing Information*

Why?

To gain practice in understanding the message rather than just repeating what is heard.

How?

The speaker's copy of the exercise is below and your copy is in Appendix

1. You and the speaker both have the same table, but you each have different and complimentary missing details. The task is to fill in the missing information on both of your sheets by taking turns to ask and answer questions. For example, you may ask the recipient: "**What street is the house on?**" The recipient may ask you: "**Is the condition of the apartment modern, quite modern or not very modern?**" When the recipient hesitates, encourage them to request clarification.

Exercise		
Detail	Apartment	House
Street		Park Road
Size	big ✓ quite big small	big quite big small
Condition	modern quite modern not very modern	modern quite modern not very modern ✓
Number of rooms	three	downstairs – two upstairs – three
List of rooms		a living room a kitchen two bedroom a bathroom/toilet
Central heating		No
Near the shops	Yes	
Distance from town center		2 miles
Rent	\$250 a week	
Any other information		There is a large garden and a garage.

* Watcyn-Jones, P. & Howard-Williams, D. (2001). Grammar games and activities, Book 1.

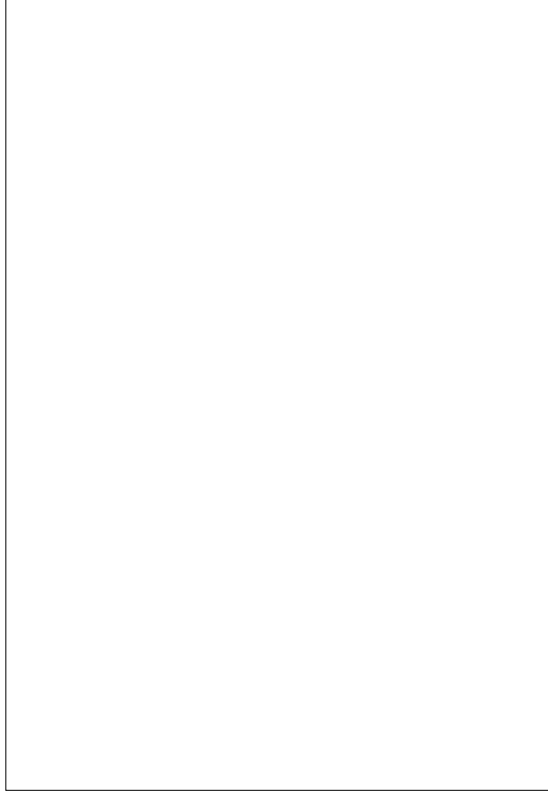
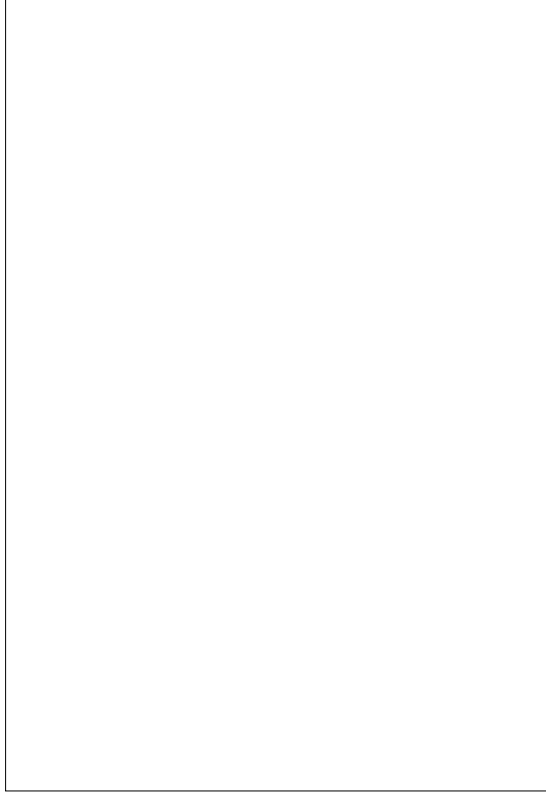
3: Recipient Copy of Module 12: Information Transfer—Describe, Perceive, Draw*

How?

Below is an empty box. Your speaker is going to help you to draw a pattern of objects and symbols in the box by telling you what to draw and where to draw it. Listen carefully and then draw the items in the box. If you are not sure, use one of the following strategies for clarification, but do not look at the speaker's drawing:

- Ask the speaker to repeat the whole instruction.
- Repeat back what you think the instruction was, for example, **"Did you say the top left hand corner?"** Your speaker will provide feedback as to which parts you heard correctly.
- Ask your speaker to clarify any parts you are not sure of, for example, **"I heard you say 'circle', but I am not sure where to draw."**

When you have finished, compare your drawing to the speaker's drawing.



* Adapted from Plant, G. (1991). *Syntrex: Synthetic training exercises for hearing-impaired adults, Part 1*. Therapist's Handbook. Sydney: National Acoustics Laboratories.

4: Recipient Copy of Module 13: Role Play*

Exercise 1

Situation A. Railway ticket office

Task: To obtain a train ticket for your journey home/to visit family.

Introductory sentence: "I would like to buy a train ticket please."

Exercise 2

Situation B. The reception area at your cochlear implant clinic

Task: To obtain a train ticket for your journey home/to visit family.

Introductory sentence: "I would like to buy a train ticket please."

* Pedley, K. Synthetic training.

5: Recipient Copy for Module 14: Quest?ar*

Topic examples:

museum	restaurant	post office	shopping	camping
doctor	zoo	beach	airport	swimming
mountains	picnic	music	lesson	supermarket

Exercise

Topic: Organizing a picnic

1	Where did you go?
2	Why did you go there?
3	When did you go?
4	How many people went with you?
5	Who were they? (give names)
6	What did you take with you?
7	Where is (the place that you went)?
8	How did you get there?
9	What did you see on the way?
10	What time did you get there?
11	What did you do first?
12	What did you see?
13	How many? What color?

(Continued on next page)

Appendix 2: Tips and Resources for Individual Hearing Therapy (No Partner)

14	What happened at (the place where you went)?
15	What else did you do?
16	What were the other people doing at (the place where you went)?
17	What was the most interesting thing that you saw?
18	What was the most interesting thing that you did?
19	What did you buy?
20	What kind? What flavor? What color?
21	How much did it cost?
22	Did anything unusual happen? What?
23	How long did you stay?
24	What did you do just before you came home?
25	When did you leave?
26	How did you get home?
27	What happened on the way home?
28	What time did you get home?
29	How did you feel then?
30	When are you going back
31	Do you think that I should go sometime? Why?

* Adapted from Erber, N. (1996). Communication therapy for adults with sensory hearing loss (2nd ed). Clifton Hill: Clavis

Individual Hearing Therapy Tips

Hearing therapy, or rehabilitation, following implant surgery is an important step to enable you to get the most out of your implant and may reintroduce you to sounds you had completely forgotten about. Hearing therapy approaches may vary from patient to patient depending on the details of your hearing loss.

We want to ensure that you are beyond confident in your hearing capabilities and are getting the support you need and where you need it. Below are a few things you can do to start to improve your hearing success.

- Start slow, devote time and attention and focus on listening with the sound processor alone.
- Practice in a quiet room and check that you are using the sound processor program and settings you hear best with before starting.
- Use a conversational level voice
- Practice regularly, at least 20-30 minutes a day, five days a week. The more the better!
- Practice at the same time every day, preferably when you are fresh and relaxed

We also encourage you to connect with one of our Cochlear mentors, a recipient that understands the hearing journey, to discuss their approaches to addressing specific hearing challenges. Find a mentor that is right for you at:

www.Cochlear.com/US/Connect-with-a-mentor

Individual Resources Level I

- Wear your sound processor, this alone is the first step to gaining and regaining hearing capabilities
- Watch TV with the captions on and listen to words as you read them
- Read newspaper or other print aloud and pay close attention to what you are reading
- Read simple short stories/passages aloud to yourself. Even read children's books to your child or grandchild.
- Watch a sporting event (baseball) on TV and accompany it with the radio broadcast of the same game (no TV sound)
- Listen to a talk show on the radio
- App called **Speech Banana**

Continue these approaches for 3-4 weeks every day or until you are more than 80% proficient with such before moving on to Level II approaches.

Individual Resources Level II

- Watch TV with captions off and look away occasionally for listening alone
- TED Talks on your computer with captions active
- Listen to a talk show on the radio
- **Angel Sound: <http://angelsound.tigerspeech.com> - "Open set Module"**

Continue these approaches for 3-4 weeks until ease of listening moves from maximal difficulty to moderate or minimal difficulty.

Resources Level III

- Telephone with Confidence by Cochlear:
<https://www.Cochlear.com/US/Communication-Corner/Program/Adult-telephone.htm>
- Make more phone calls in quiet and then public spaces, with familiar and then unfamiliar speaking partners
- Find a moderately noisy space and have a conversation using your Mini Microphone
- Audiobooks without the book to follow (try listening to a narrator with an accent once comfortable with listening alone)
- Podcasts (start with a host that does not have an accent and then move on to one that does)
- TED Talks without captions
- App called **Bring Back the Beat** for developing music appreciation and pitch perception
- Watch YouTube videos of your favorite band and follow along with the lyrics (captions) to the song. Start with songs you are familiar with. Eventually listen without captions. Try new genres of music.

Additional Independent Resources in English:

- App called **"Hear Coach"** for word recognition
- App called **"Nature Sound"** for listening to nature sounds
- App called **"Breethe"** for listening to environmental sounds and focused attention/meditation
- App called **"Coffitivity"** to practice by adding background noise like being in a restaurant, etc.
- App called **"Mondly"** a free app for different languages*
- App called **"TOEIC"** learning English as a second language*

*While these are designed for people who are learning to appreciate and listen to the English language, they can often be helpful materials to assist English speaking individuals with hearing loss therapy.

Web Resources:

- www.ManyThings.org/ac/
- www.LanguageGuide.org/english
- www.SenseSynergy.com/readmyquips/live/go

Additional Independent Resources in Spanish:

- App called **"Mondly"** a free app for different languages*
- App called **"Spanish Conversation Courses"** for learning Spanish*
- App called **"FluentU"** offers real world videos, movie trailers, news, inspiring talks and more*

*While these are designed for people who are learning to listen and appreciate the Spanish language, they can often be helpful materials to help Spanish speaking individuals with hearing loss therapy.

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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 550,000 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.

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 read the instructions 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.

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