# Your journey to better hearing

A guide to living a healthy hearing life



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## Hearing is one of the human body's most remarkable senses.

It integrates seamlessly with our brains to help us connect with the world around us.

Made up of a complex system of delicate and synchronous parts, it's easy to take this vital sense for granted.

If any of these components aren't working properly, your ability to hear can decline.

On average, one in six Americans experiences hearing loss.<sup>1</sup> If you or someone you know would like help, this Better Hearing Guide can be a useful resource.

In it, you'll find out just how common hearing loss is, how help is more advanced and available than ever before, and the steps you can take to ensure hearing loss doesn't get in the way of a healthy and happy life.

# The most fulfilling journey starts with a goal

Like most journeys, the journey to better hearing usually begins with the desire to accomplish a goal. In this case, the goal is to finally do something about your hearing loss and stop letting it impact your quality of life.

We say "finally" because unlike eyesight, which people address by getting glasses as soon as it fades, hearing loss tends to be ignored or put off for as long as possible.

The reasons for delay in seeking treatment are as varied as the people who experience hearing loss:

- The onset of hearing loss is usually gradual — Making it easier to ignore or go unnoticed.
- It's not always recognized for what it is — Instead, it's other people talking too softly or mumbling.
- It's viewed as inconsequential —
   "So what if I can't hear as well?
   It's not hurting anyone but me."
- It's relatively easy to work
   around You can just turn the
   TV up louder or avoid places
   where it's more of a problem.
- There's a concern about how hearing aids look and what others will think — "My hearing isn't bad enough for hearing aids."

Once people fully understand the dynamics of hearing loss, the determination to take this fulfilling journey can begin. So let's start there.



On average, people wait 4.8 years between first noticing their hearing loss and finally taking action.<sup>2</sup>

### How hearing loss can impact your life

If you think hearing loss is inconsequential, you should know that studies have linked untreated hearing loss to significant issues such as:

- Diminished psychological and overall health
- Impaired memory and ability to learn new tasks
- Reduced alertness and increased risk to personal safety
- Avoidance or withdrawal from social situations
- Social rejection and loneliness
- Fatigue, tension, stress and depression
- Irritability, negativism and anger
- Reduced job performance and earning power

### Hearing loss affects more than just you

Many people put off treating their hearing loss because they wrongly assume it's only harming them. However, your hearing loss can directly affect and impact those closest to you, and in turn that can cause:

**Frustration:** The need to constantly repeat themselves

Misunderstanding: Your withdrawal from people and activities is interpreted as rudeness or disinterest in others

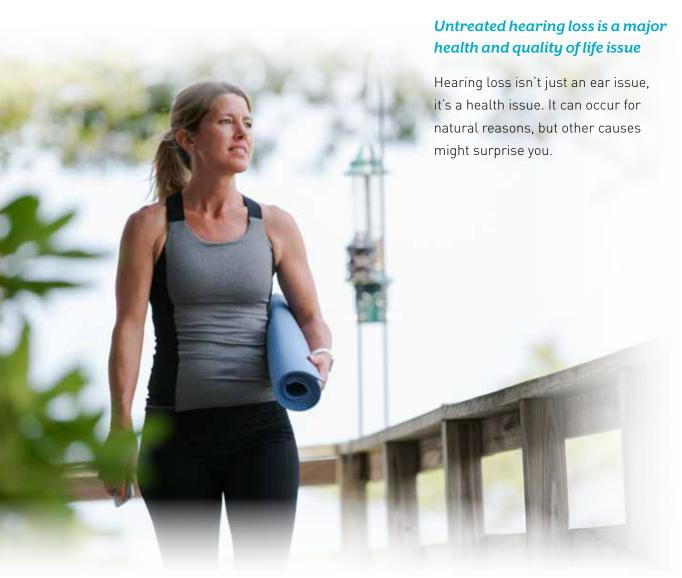
**Concern:** They worry you're unable to hear warning sounds like smoke detectors, alarms or sirens

**Confusion:** If you answer incorrectly, don't respond at all or relay the wrong information when conversing with them



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# The facts about untreated hearing loss





\*70 years and older



20%



40%

People\* with a hearing loss experience a 30-40% faster decline in cognitive abilities compared to peers without hearing loss.<sup>4</sup>

\*75 years and older



People with low-frequency hearing loss are considered at risk for cardiovascular events.<sup>5</sup>



90-95% of people with hearing loss can be treated with hearing aids.

## Adults with

untreated hearing loss were more likely to report depression, anxiety and paranoia than peers who wore hearing aids.<sup>7</sup>

of the world's population have disabling hearing loss.8

\*50 years and older

Adults with untreated hearing loss are more likely to develop dementia.



There is a significant association between high blood pressure and untreated

hearing loss.<sup>10</sup>

mild hearing loss

are 3x

more likely
to have a history
of falling.11

People with

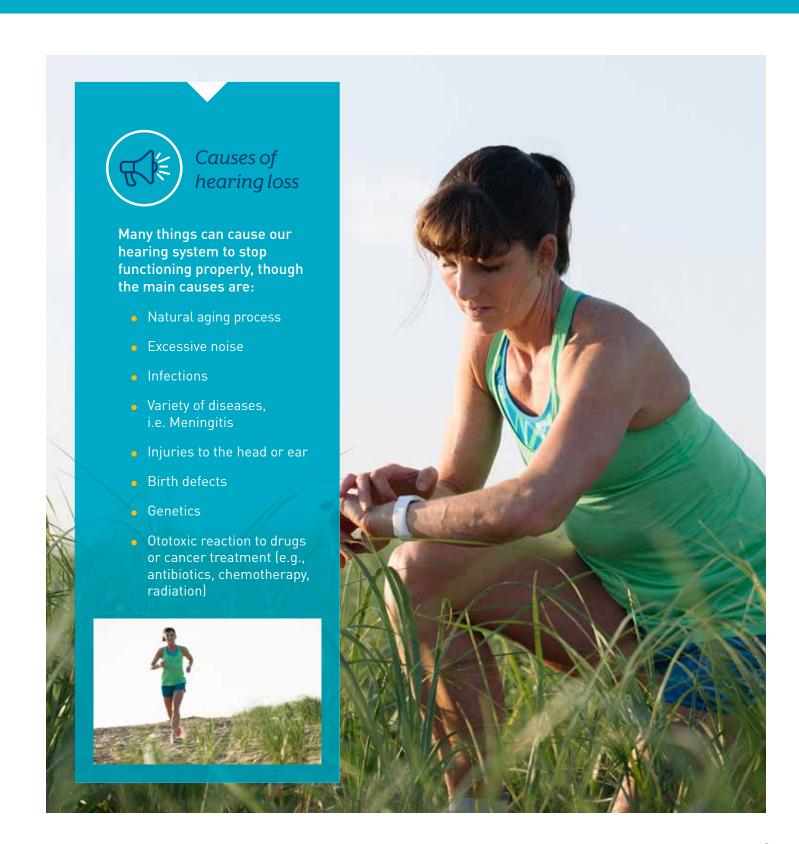
Hearing aids are made so people with hearing loss won't have to miss a single sound that brings them joy. They are made knowing people who hear better, live better.

## How hearing loss OCCUS

To understand why hearing loss is so pervasive, it's important to first understand how hearing loss happens.

Hearing loss happens when any part of our delicate hearing system stops working properly, whether it's due to damage or deterioration. The most susceptible and common parts to break down are the microscopic stereocilia, the thousands of tiny hair cells that detect and send sound impulses to the brain.

When these tiny hair cells become injured, diseased or die naturally, the result is **nerve loss**. This is by far the most common type of hearing loss.



## What it's like to have hearing loss

You can't recreate a typical hearing loss simply by plugging your ears. A person with normal hearing can hear quiet, medium and loud sounds that vary from low pitch to high pitch with amazing clarity and definition.

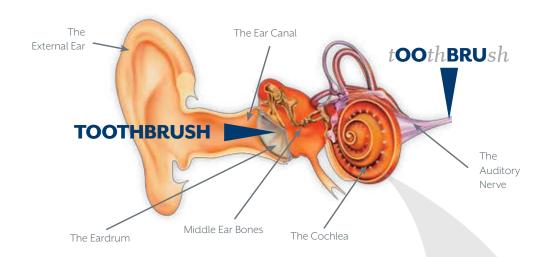
But when you have hearing loss, you often lose the ability to hear higher pitched sounds, like the sound of a mosquito near your ear, women's and children's voices, or consonants like T, S and F. Even though you still may be able to hear strong vowel sounds such as A, E and I, speech becomes harder to comprehend.

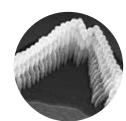
## THIS IS HOW SPEECH SOUNDS TO PEOPLE WITH HEARING LOSS

Research has shown that exposure to loud sound can damage nerve pathways yet leave sensitivity to very soft sounds intact. <sup>12</sup> The result is that speech and music at the levels we like to listen can be distorted, making understanding very difficult. This is why "I hear, but cannot understand," is a common complaint.

### DID YOU SAY tOOthBRUsh?

When your hearing is normal, sound is picked up by your outer ear, transmitted through your middle ear and presented to your inner ear. The inner ear creates a signal that is sent up to your brain where it is interpreted. When your inner ear is damaged, it will not send complete signals to your brain, causing you to be unable to understand the consonants within words. For example, the word "TOOTHBRUSH" may sound like "OO—BRU."





Healthy hair cells stand erect, and are able to accurately detect sound waves and send sound impulses to the brain.



Damaged hair cells are limp, blown out and will no longer stand erect. They are therefore unable to detect sound waves or send sound impulses to the brain.

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# Do you experience ringing in your ears?

Tinnitus ("TIN-a-tus" or "Tin-EYE-tus") is the medical term for the sensation of hearing sound in your ears or head when no external sound is present. It's commonly described as "ringing in the ears." However, for some people it may sound like hissing, buzzing, whistling, roaring and even chirping.

The important thing to know is that tinnitus is not a condition or a disease. Instead, it's a symptom — typically of something bigger, like an ear infection, high blood pressure or, most commonly, hearing loss.



## **Quick tinnitus facts:**

- Tinnitus is the number one disability for military veterans<sup>13</sup>
- > Tinnitus can occur at any age, and may begin suddenly or progress gradually
- > The most common causes of tinnitus are:
- Noise exposure

   (e.g., from shooting or machines at work)
- Aging
- Head injury
- Side effects from medication

Now that you know more about hearing loss, how do you know if that's what you're experiencing? This quick yes/no quiz might hold the key.			
YES	NO		
		You can hear, but you can't understand. Among the first sounds that "disappear" are high-pitched sounds like women's and children's voices. Also, you mistake similar high-pitched sounds, such as "fifty" and "sixty."	
		You find yourself complaining that some people mumble or slur their words.	
		You have difficulty understanding what's being said unless you are facing the speaker.	
		You are continually asking certain people to repeat words or phrases, though they feel they are speaking loud enough.	
		You prefer the TV or radio louder than others do.	
		You have difficulty understanding conversation within a group of people.	
		You avoid group meetings, social occasions, public facilities or family gatherings where listening may be difficult.	
		You have trouble hearing at the movies, concert halls, houses of worship or other public gatherings — especially where sound sources are at a distance from the listener.	
		You experience ringing, hissing, buzzing, whistling, roaring or even chirping noises in your ears.	

## **Choose Better Hearing**

## Help is available

If you think you or someone you know has hearing loss, the next step is an easy one — confirm it by seeing a hearing healthcare professional.

Whether you consult with an audiologist, an ENT doctor or a hearing aid specialist, it's important to see someone who specializes in hearing issues. Seeing a hearing specialist will ensure you will receive a comprehensive evaluation and precise measurement of your hearing loss.

### Why see a hearing professional?

Just as every person is unique, every hearing loss and hearing need is unique, too. That's why it's always recommended that you consult with a hearing healthcare professional.

They are trained experts who have the experience and state-of-the-art equipment needed to inspect your ear Tip:



canal, accurately measure your hearing loss, assess your unique needs, and prescribe a solution that takes all this important and personalized information into account. You can also count on them to provide all necessary support and ongoing care.



## **Choose Better Hearing**

# What to expect at your first appointment

You took the most difficult step toward improving your hearing when you took the first one — recognizing you need to find out more about your hearing loss and improving your situation. Everything after that is easy, including your initial hearing consultation. Most appointments consist of at least these three steps:

### 1. Hearing analysis

After answering questions to establish your general health and hearing history, you will undergo a thorough hearing examination. First, both ears will be visually examined to see if there are any obstructions in the ear canal that might be affecting your hearing.

Then, you'll be tested with the latest standard-of-care methods and technology to precisely determine the degree and type of hearing loss you have. This quick and painless test consists of listening and reacting to pure tones in a sound treated booth.

Your results will be illustrated in a detailed **audiogram** that your hearing healthcare professional will review with you.

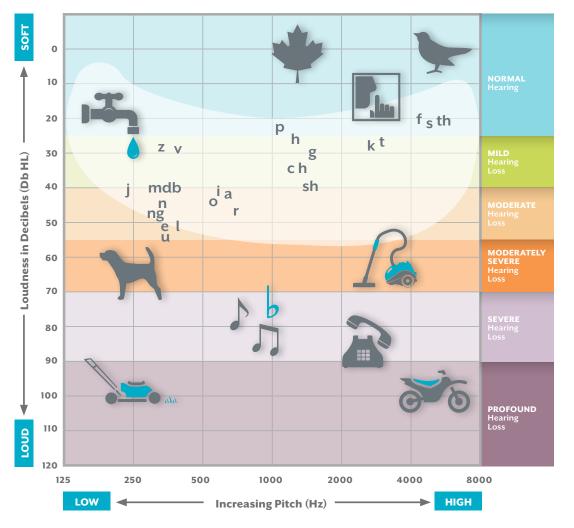
### 2. Lifestyle discussion

Next will be a lifestyle assessment. In this conversation, you will discuss what you may have stopped doing or how your relationships with family and friends have been impacted by hearing loss. This is an important step — as your answers help ensure that any solution prescribed is customized specifically for your needs.

### 3. Solution options

Once the evaluation and assessment are complete, the hearing healthcare professional will explain your solution options. If it's determined that hearing aids can help, you'll get a personalized demonstration of the different instruments that are appropriate for your level of hearing loss as well as your preferences for size, color and features.

### **SAMPLE AUDIOGRAM**



## Hearing aids are a smart solution

Today, more than ever, the best solution for many individuals with hearing loss is hearing aids. Like all high-tech devices, hearing aids have improved significantly over the past several years in terms of performance and appearance.

This includes "invisible" solutions that fit deep inside your ear canal and are virtually undetectable when worn, or wireless options that stream audio directly from your TV, radio and phone. Today's hearing aids sound better, fit more comfortably and perform more reliably than ever before.

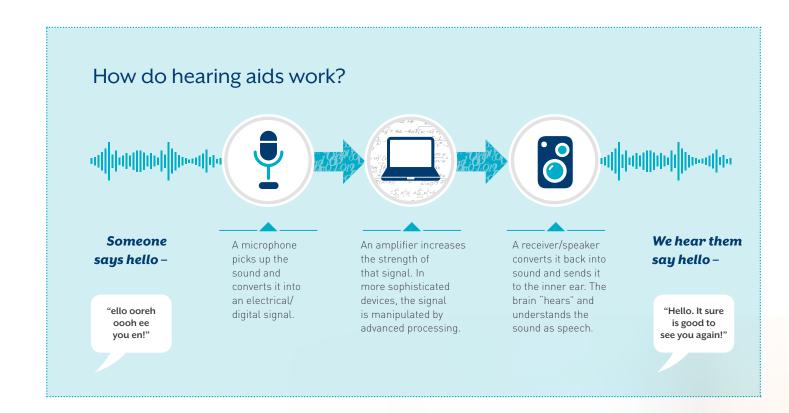
#### Be informed

15

If your hearing healthcare professional recommends hearing aids, you'll want to be ready with questions. So let's review what you should know about hearing aids.

### How hearing aids help

Have you heard negative comments about hearing aids? That's because the basic premise of hearing aids is to amplify sound. And until the late '90s, that's literally all they did — made everything louder. Today's hearing aids are designed to do so much more to keep you comfortable and in touch with the world around you.



### How do personal sound amplifiers (PSAPs) differ from hearing aids?

There is a difference between basic amplification products and hearing aids. PSAPs, typically stripped of sound enhancement features, are rudimentary devices similar to old analog hearing aids that only make sounds louder. Although both hearing aids and PSAPs improve the ability to hear sound, hearing aids are designed to improve each individual's hearing even in difficult situations. With advanced technology features like feedback control and mobile connectivity, the gap between hearing aids and PSAPs becomes even wider.

## Advanced features

Today's hearing aids still amplify sounds, but thanks to digital and technological advances, they're much smarter and more selective in what they amplify. Here are the latest cutting-edge technologies.



### Help with listening in noise

One of the biggest challenges people with hearing loss have is hearing in busy places like restaurants or social gatherings. It's not that they can't hear, it's that they can't hear clearly. It's all one muddled mass of sound — and the voices of the people they're with don't stand out.

Now, advanced noise reduction technology and precise directional microphones work together to help make speech easier to hear in today's complex listening environments.



### Works with your phone

While some hearing aids manufacturers require you to wear a device around your neck, SurfLink accessories offer a direct wireless connection between your phone — or any other Bluetooth® device — and your hearings aids.



### Wireless connectivity

Wireless hearing aids allow for more advanced connections between devices. With accessories like SurfLink® Mobile 2, SurfLink Media 2 and SurfLink Remote, you can directly stream TV, music and more to your hearing aids — with carefree, hands-free connectivity and control, and no worn device. This direct connection makes you feel more present in your environment, and you can hear at the volume you want without having to listen to loud or harmful sounds.



### Invisible devices

Best of all, digital technology has enabled all these new features and benefits to fit in advanced hearing solutions that are getting smaller and smaller all the time — with some so tiny they rest completely in your ear canal, virtually undetectable when worn.



Now, thanks to breakthrough technology, hearing aids provide the most natural hearing experience in the most complex environments.

## Features for devices connected to iPhone



Certain hearings aids can connect directly to your iPhone®, providing premium features that are customizable to fit your unique hearing needs.

### Adjustable settings

Adjust sounds to your specific settings by simply moving your finger across the screen of your iPhone. Save your preferences in different situations so you're comfortable in any listening environment.

#### Phone calls

Answer your calls with the touch of a finger and hear an entire conversation streaming directly to your hearing aids via Bluetooth technology.

### **Geotagged settings**

You can even geotag settings using the built-in GPS on your iPhone. A geotagged setting will recognize where you are, and automatically adjust your hearings aids when you enter that space. For instance, if you save your settings in your favorite coffee shop, those settings will automatically activate when you walk into that area.

### **Automatic sound adjustments**

Your hearing aids' loudness can automatically adjust over time to help you transition to your new hearing experience at a comfortable pace.

#### **Audio streaming**

Your hearing aids can directly stream phone calls, music and media from your iPhone – so you can enjoy clear communication and pristine audio streaming any time, anywhere, for impressive, immersive sound.

### Apple Watch compatible

Use hearing aid apps for Apple Watch® to control volume, mute your hearing aids, or change other settings right from your wrist.

#### Music enhancements

Enjoy music in a whole new way with features that focus on music audibility, desired loudness and sound quality. Now hearing aids can make soft music sounds audible and allow on-demand and automatic control.

# Hearing aid styles

Hearing aids come in a wide range of styles. Your hearing healthcare professional will recommend one or more types based on factors such as your level of hearing loss, cosmetic preferences, lifestyle needs, and budget. Most Behind-The-Ear and Receiver-In-Canal styles come in a range of colors and metallic finishes to complement your hair or skin tone.

Invisible-In-The-Canals (IICs)





Completely-In-Canal Hearing Aids (CICs)





In-The-Canal Hearing Aids (ITCs)





In-The-Ear Hearing Aids (ITEs)





Receiver-In-Canal Hearing Aids (RICs)





Behind-The-Ear Hearing Aids (BTEs)





# Hearing aid technology levels



### Premium Technology

Premium technology is designed for active people that frequent a variety of listening environments, including events with crowds or high noise levels — like noisy restaurants or malls.

### Advanced Technology

Advanced technology designed to be used in relatively easy listening situations with some noise — like quiet restaurants, meetings and in the car.

### Select Technology

Select technology is designed for simple listening environments like one-on-one conversations and small groups.

# The question everyone asks

One of the first things first-time hearing aid buyers want to know is "How much is a pair going to cost?" The answer is, "It depends on what you need." In other words — people have different hearing needs, not all hearing aids are alike, and not all service packages are the same.

When considered along with other quality-of-life items that you pay for monthly (for instance, cell phones, cable TV or even coffee), the financial investment is very comparable and definitely worth it.

Remember, too, that hearing aids are highly sophisticated medical devices fit by educated and trained professionals, and typically include additional benefits and services like follow-up visits, repairs and counseling.

### There's a range for a reason

Like many things you buy — from televisions to cell phones to glasses — there is a wide range of pricing that applies to hearing aids. They're available in a variety of styles, with a range of high-tech features, which means you'll typically pay less for big and basic than you will for hearing aids that are little and loaded.

Features discussed earlier that cancel noise, eliminate feedback, improve high-frequency audibility and enable direct connectivity to phones, TVs and music greatly improve performance and enhance everyday listening, but also increase costs. Insurance coverage varies based upon your plan. Check with your insurance provider to determine your benefits. For details on pricing and financing options, talk to your hearing healthcare professional.

### The right fit

Today's best hearing aids are precision instruments, utilizing advanced technology that can and should be customized to fit your specific hearing loss and your unique lifestyle needs. Determining which hearing aids are right for you depends on a variety of important and unique factors, including:

- The nature and severity of your hearing loss
  - *y* .
- > The size and shape of your outer and inner ear

> Your eyesight and dexterity

- > The types of activities you enjoy
- Cosmetic concerns



## Spreading hope from ear to ear

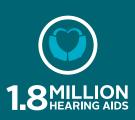
Bill Austin, the founder and CEO of the Starkey Hearing Foundation, has always held the strong belief that the gift of better hearing results in a fuller and richer life.

The Foundation dedicates themselves to this philosophy daily. They've provided more than 1 million hearing aids to people in need worldwide, and are committed to providing 1 million more this decade.

The gift of hearing opens up new worlds of opportunity. It connects individuals to life and helps them realize they can accomplish more than they ever thought possible. Starkey Hearing Foundation uses hearing as a vehicle to change lives around the world.

Whenever you buy a Starkey Hearing Technologies' device, you're helping someone in need.

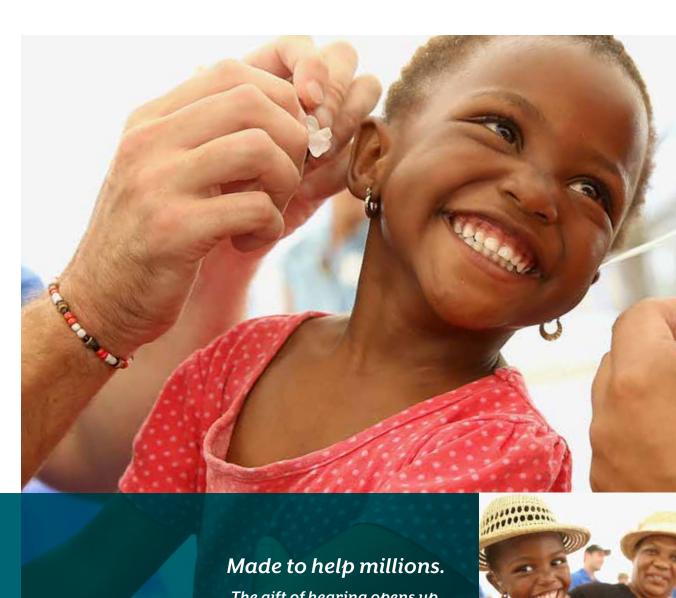






To learn more or give the gift of hearing, visit StarkeyHearingFoundation.org.









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