How do hearing aids work?

Hearing aids are electronic devices that collect sound, amplify it, and direct the amplified sound into the ear. While the style of hearing aid may vary, all hearing aids have similar components:

- A microphone to pick up sound
- An amplifier to make sounds louder
- A receiver (miniature loudspeaker) to deliver the amplified sound into the ear
- Batteries for power

Some hearing aids also have earmolds (or dome ear pieces) to direct the flow of sound into the ear and enhance sound quality.

Styles of hearing aids

- In-the-canal (ITC)
- Completely-in-the-canal (CIC)
- In-the-ear (ITE)
- Behind-the-ear (BTE)

Features available in hearing aids

- Automatic volume control means that the hearing aid automatically analyzes incoming sound and amplifies it based on your hearing loss. Soft sounds will be amplified more than loud sounds, allowing all sounds to be comfortable for you. With automatic volume control, you will not need a volume control button or wheel on your hearing aid.
- Directional microphones amplify sounds in front of you and minimize sounds coming from behind. This helps you focus on sound you are most interested in hearing. This technology can also be automated.
- Telephone coils (t-coils) are small coils inside some hearing aids that allow you to hear speech coming from the phone clearly. This feature is also useful with loop listening systems that are used in some large group areas.
- Feedback (whistling) control automatically analyzes feedback from the hearing aid and adjusts the amplification to minimize this unwanted squealing noise.
- Wireless technology. This feature can allow the adjustments (such as volume control and noise programs) that you make on one hearing aid to be automatically made on the other. Also, some hearing aids contain Bluetooth technology that allows users to hear their cell phones or radio signals directly in their hearing aids. This is great for clearer listening of these devices.
- Listening programs allow you to adjust the hearing aid for different listening environments and needs.
- Remote control. This feature allows you to adjust the hearing aids using a small handheld device.
LIFESTYLE AND COMMUNICATION NEEDS

When considering the type of hearing aids or features you will need, the audiologist will want to know about your lifestyle and activities. For example, do you…

- Work or stay home?
- Attend meetings, conferences, plays, movies, concerts, or worship services?
- Communicate in mostly one-on-one situations or mostly in large or small groups?
- Participate in sports?
- Enjoy watching TV, talking on the phone, or traveling in the car?

Because hearing aids are so small, your audiologist will also consider your ability to see and handle them.

After your hearing is tested, the audiologist will:

- Carefully explain your test results
- Ask you about your lifestyle and listening demands
- Describe the various styles and features available and what would be most appropriate for you
- Schedule you to return in 1 or 2 weeks for a hearing aid fitting, programming, and orientation
- Provide a copy of your test results
- Discuss the costs and possible available funding sources
- Provide a written contract that includes how much your hearing aids will cost and how much you will be charged for the fitting and follow-up fees. The contract should also provide a good description of the services that are included, as well as the date of purchase.

On the day you pick up your hearing aids, your audiologist will:

- Check to ensure that your hearing aids fit comfortably
- Evaluate your hearing aids to be sure they are set (programmed) for your hearing needs
- Show you how to insert and remove your hearing aids
- Teach you how to insert and remove the batteries and clean and care for your hearing aids
- Teach you how to use your hearing aid on the phone
- Discuss hearing assistive technology that may be helpful to you
- Schedule you to return for a follow-up visit

NOTES: