

# HEARING

With Your Brain



**BETTER HEARING WITH BOTH EARS**

**oticon**  
PEOPLE FIRST



## Experience **A NEW FREEDOM**



Your brain is responsible for processing everything you hear and needs accurate sound information from both ears.

When you choose your hearing solution, remember- two ears are better than one.



## Listening In All Dimensions

A child is calling from across the street. Someone is knocking at the door. A car is honking its horn. In situations like these how do you know what these sounds are or which way to look?

The world of sound is rich and complex. Humans have an amazing ability to sort through rapidly changing information and automatically make sense of what is happening.

## Hearing With Two Ears

Think of your hearing as a system—your two ears and your brain—constantly taking in a wide variety of cues and automatically, unconsciously and effortlessly identifying the sounds

and locating where they are coming from. Actually it's accurate to think of your brain as the center of hearing and listening. To interpret sounds correctly, the information your brain receives must be as accurate and as detailed as possible.

When we are listening in challenging environments, locating where sound is coming from is what helps us understand. We mentally locate sounds in specific positions and then we can focus on what's important. Sounds reach one ear fractionally faster and louder than the other— and the brain registers these subtle differences.

The most important benefits of wearing two hearing instruments are covered in detail on the following pages.

### Did you know?

*Spatial awareness gives you the valuable cues you need to organize what you hear. Your brain distinguishes changes in loudness, depth, origin and direction so sound makes sense to you.*

## Making Conversation Easier

In the past, people with hearing loss often wore only one hearing instrument. Today the most common approach is a balanced fitting— one in each ear.

Research shows that two instruments make speech easier to understand than only one. Just as the brain converts visual input from both eyes into one clearly defined image, it turns the input from two ears into a single sound picture where speech stands out more clearly.

People who wear two instruments typically experience greater ease of listening, more stamina, better participation in social situations. Listening is more comfortable because less volume is needed when two ears are aided.



### Did you know?

*that binaural listening means “bi” for two; and “aural” for ears. The human auditory system is incredibly complex. Inside the ear, tiny hair cells turn sound vibrations into electrical impulses. These signals are sent to the hearing nerve, which contains more than 30,000 nerve fibers.*

## Focusing On The Conversation

In busy environments such as a restaurant, you need input from both ears in order to be able to focus on the conversation be less distracted by uninteresting background noise. This focus keeps sounds from perceptually merging together in what feels like a "wall of sound."

## Locating Where Sounds Are Coming From

Your brain uses information from both ears to locate a sound and make the best use of it. When you wear two instruments designed to work as a system, both ears can give the brain more accurate information. Locating sound helps keep you more in touch with your surroundings, helps you understand speech with less effort, and gives you cues as to which way to focus when others are trying to get your attention.

## Keeping Your Ears "In Shape"

If you have a hearing loss in both ears but decide only to wear one instrument in the ear that needs it the most, the ear that is deprived of stimulation might get even lazier. This condition is known as "auditory deprivation", and the only way to combat it is by keeping both ears active.

## Improving Sound Quality

Imagine listening to music on your stereo system. With only one speaker working it would sound flat and lifeless, but with two it sounds balanced and natural. The same can be said of hearing instruments. Wearing two instruments increases your hearing range from 180 degrees to 360 degrees for a far more detailed sound picture.

## Communicating With Greater Confidence

Research shows that people who wear two instruments are generally more satisfied with their performance than those who wear only one. The more pieces of the auditory "jigsaw puzzle" you can pick up, the easier it becomes to communicate.

### Did you know?

*that people collect and store sound patterns in their auditory memory throughout their lives? Sound can evoke instantaneous, automatic responses; just think of all the memories a favorite song from "way back when" can trigger!*

## Technology supporting natural hearing

Today the most natural sound quality comes from instruments that use "wireless" technology for binaural processing. Subtle but important differences in sound cues on two sides of the head help people hear sounds and locate them. While traditional hearing instrument technology often disturbs these cues, wireless technology works differently by supporting the natural interaction between the ears and brain.

Two wireless hearing instruments actually work together in a coordinated system, sharing information. Binaural processing provides a clearer, better coordinated sound picture for your brain to process and helps provide a better idea of where you are in relation to people and objects in your environment.



## How well can you perform in these situations?

**Speech-** *In a group situation when the conversation switches from one person to another, can you easily follow the conversation without missing the start of what each new speaker is saying?*

**Spatial-** *If you are outdoors in an unfamiliar place and you cannot see where the sound is coming from can you still locate it?*

**Qualities-** *Can you easily ignore other sounds when trying to listen to something?*

If you have difficulty in these types of listening situations, you may benefit from the wireless hearing solutions that offer binaural processing.

There are so many good reasons to get two hearing instruments, and even more reason to get two that work wirelessly together. Your hearing care professional can easily demonstrate the benefits, either at the clinic or through a home trial.

## People First

People First is our promise:  
to empower people  
to communicate freely,  
interact naturally and  
participate actively

**TO SCHEDULE A HEARING  
APPOINTMENT CONTACT:**

