## What are the impacts of prolonged, untreated hearing loss?

## Hearing loss and brain function:

The term "auditory deprivation" refers to depriving the brain of sound stimulation. The term describes the effects of untreated hearing loss on the ability of the brain to understand speech and other sounds. While the ear picks up and transmits the sounds around us, it is the brain that processes the signals and gives them meaning.

With hearing loss, the presentation of sound to the brain is decreased. As the brain receives less sound, it "forgets" what to do with the sound. Studies published by the Veterans Affairs (VA) in the early 1990's showed that individuals fit with only one hearing aid had a decreased ability to understand speech in the ear without the hearing instrument.

## Hearing loss and Alzheimer's development:

As mentioned above, prolonged hearing loss can ultimately lead to reduced abilities and brain function, which may stimulate conditions such as Alzheimer's and dementia. A study conducted at the University of Washington's Department of Medicine of 100 cases of Alzheimer's patients found that 83% had a hearing loss. Once fit with hearing aids, 33% were classified with less severe dementia.

According to the Fischer Center for Alzheimer's Research, many of the symptoms of Alzheimer's can be indirectly caused by hearing loss. In fact, the Michigan chapter of Self-Help for Hard of Hearing advocates for a required hearing evaluation prior to an Alzheimer's diagnosis to determine the impact and overlap of hearing loss.

\*www.widex.com/Consumer Guide to Your Best Hearing