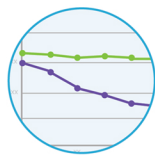


COGNITIVE DECLINE RISK AWARENESS



HEARING HEALTH DECISIONS

A 25-YEAR STUDY SHOWS **HEARING AID** USE MAY LESSEN THE PROGRESSION OF **COGNITIVE DECLINE** IN OLDER ADULTS.^[1]

DID YOU KNOW?

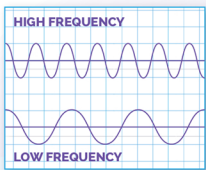


The brain's **auditory cortex** performs vital hearing functions. Using your hearing, just like exercising a muscle, makes it stronger and more effective.



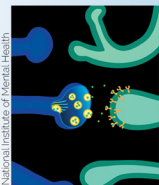
RESEARCH INDICATES

Reduced hearing stimulation, particularly high frequency, is associated with changed brain structure and reduced gray matter (brain) volumes in key sensory areas such as the auditory cortex.^[2]



How individual differences in sensory ability influence brain resource allocation, between, for example, hearing and vision related tasks.^[3]

Important connections or neural pathways between gray matter volumes, hearing ability and speech comprehension.



*Illustrative view of decline vs. baseline trends

Those with hearing loss have accelerated rates of cognitive decline and increased risks of dementia compared to individuals with normal hearing.^[4]

THE SOONER, THE BETTER!

As hearing loss can be gradual, many delay necessary testing. Timely evaluation keeps you or your loved ones informed about auditory issues, such as high frequency loss, which can increase risk and rate of cognitive decline.

Never
Next Year
Today Tomorrow



[1] Amieva, Self-Reported Hearing Loss, Hearing Aids, and Cognitive Decline in Elderly Adults: A 25-Year Study. *Journal of The American Geriatrics Society* 2015 [2] Eckert, et al: Auditory cortex signs of age-related hearing loss. *Journal for the Association for Research in Otolaryngology* 2012 [3] Peelle, et al: Hearing loss in older adults affects neural systems... *The Journal of Neuroscience* 2011 [4] Lin, et al: Association of hearing impairment with brain volume changes in older adults. *Neuroimage* 2014