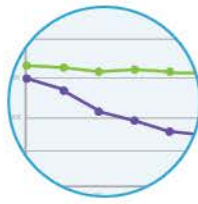


COGNITIVE DECLINE RISK AWARENESS



HEARING HEALTH DECISIONS

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

DID YOU KNOW?



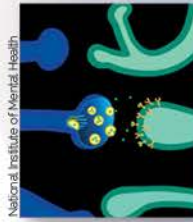
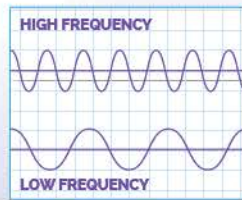
The brain's **auditory cortex** performs vital hearing functions. Using your hearing, just like exercising a muscle, makes it stronger and more effective.



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]

Atrophy of functional brain pathways can negatively impact hearing ability and speech comprehension.



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

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

*illustrative view of decline vs. baseline trends

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 cognitive decline's risk and rate.

Never
Next
Year

Tomorrow
Today

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[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 © 2016 HEALTHSCAPES®



COULD HEARING LOSS INCREASE YOUR RISK OF COGNITIVE DECLINE?

✓ Check all that apply

- ☐ I have difficulty understanding speech in the presence of background noise or in a crowded restaurant.
- ☐ I avoid social situations that require me to participate in conversations.
- ☐ I avoid the movies or theater because I miss so much.
- ☐ I have greater difficulty understanding females and children.
- ☐ My family and friends complain that I am not hearing accurately.
- ☐ Others notice that I turn the volume on my television or radio too loud.
- ☐ I have difficulty conversing on the telephone.
- ☐ I ask others to repeat themselves often during conversations.

✓ Questions I'd like to ask my Hearing Health Expert

1. _____
2. _____
3. _____

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4351 Booth Calloway Rd, Ste 308 • North Richland Hills, TX 76180
647 S Great Southwest Pkwy, Ste 103 • Grand Prairie, TX 75051
817.595.3700 • northhillsent.com

1550 Norwood Dr, Ste 100 • Hurst, TX 76054
817.282.8402 • NorthHillsHearingAndBalanceCenter.com

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