### **COGNITIVE DECLINE** RISK AWARENESS



### HEARING HEALTH DECISIONS

A 25-YEAR STUDY SHOWS HEARING AID USE CAN REDUCE PROGRESSION OF COGNITIVE DECLINE IN OI DER ADUI TS.<sup>[1]</sup>

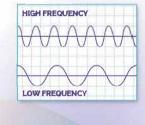
# **DID YOU KNOW?**

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.<sup>[2]</sup>

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.<sup>[3]</sup>

"illustrative view of decline vs. baseline trends

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

**Tomorrow** 

Today

#### 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.

Next Year



Chippendale 239.230.3799 Audiology chippendaleaudiology.com

©2016 HEALTHSCAPES™

[1] Amieva, Self-Reported Hearing Loss, Hearing Aids, and Cognitive Decline in Elderly Adults: A 25-Year Study. Journal of The American Genatrics 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

INTELLECTUAL PROPERTY WARNING: Intellectual property contained on these pages is the exclusive property of High Definition Impressions (HDI) and cannot be reproduced in any way without the expressed written consent of HDI.



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			



1224 Del Prado Blvd S, Ste C • Cape Coral, FL 33990 239.230.3799 • chippendaleaudiology.com

