

Prevent and Treat Hearing Loss to Improve Your Quality of Life

Nearly two-thirds of Americans 70 and older suffer from hearing loss that ranges from mild to severe. Older adults with hearing loss are more likely to develop problems thinking and remembering than older adults whose hearing is normal, according to research published online January 21 in the *Journal of the American Medical Association Internal Medicine*. Researchers found that, in total, 1,162 study participants with baseline hearing loss had a greater rate of cognitive decline than those with normal hearing. They stated that further research should be conducted to investigate the cause of this association and whether or not interventions to stop or treat hearing loss could help reduce cognitive decline.

"Age effectively 'muffles' hearing," says Dorothy Wang, MD, an otolaryngologist at UCLA's Pacific Eye and Ear Specialists. "But there are many steps you can take to help yourself hear better if age-related hearing impairment—known as presbycusis—is impacting your ability to communicate." Given that hearing loss is associated with social isolation and cognitive problems, treating it can make a big difference to your quality of life.

What causes hearing loss?

"Presbycusis develops because tiny hair cells in the inner ear that transform sound waves into electrical impulses that then travel along the auditory nerve to the brain, atrophy or are damaged as we age," Dr. Wang explains. A genetic predisposition to hearing loss may exacerbate poor hearing as you age, as can exposure to loud noise over many years. Poor blood flow to the inner ear, which may be caused by cardiovascular disease and/or diabetes, also can be a factor, and certain medications (including some chemotherapy drugs and strong antibiotics) also can raise the risk.

"Presbycusis typically affects the ability to hear high frequency sounds—for example, hard consonants such as 'sh,' 'th,' or 'p,'" Dr. Wang says. "This makes it difficult to understand the clarity of speech, and even if words are spoken at an adequate volume, you may still have difficulty telling the difference between two that sound similar."


Ways to improve your hearing.

Dr. Wang says that if you suspect you have hearing loss (not being able to follow conversations in a noisy environment is a red flag), you should

ask your doctor to refer you to an audiologist, who can check if any medical conditions, medications, or something as simple as excess earwax, are contributing to your hearing loss. "You may also be referred to an ear, nose, and throat (ENT) specialist if you're found to have a condition that could be

WHAT YOU CAN DO

- Protect your ears from loud noises (e.g., when mowing the lawn) by wearing ear plugs, and once you reach age 50, have regular checks with an audiologist.
- If you need hearing aids, get properly evaluated and fitted for them—don't purchase one via an advertisement on television, in print, or online.
- Contact the National Institute on Deafness and Other Communication Disorders (NIDCD) at 800-241-1044 or by email at nidcdinfo@nidcd.nih.gov for information about financial assistance for hearing aids.



medically or surgically treated," she notes.

If the problem isn't serious enough for hearing aids, you may still benefit from using assistive listening devices for mild hearing loss. Simple personal amplifiers can help you in one-on-one conversations or in group settings where background noise might drown out voices. It's also possible to purchase special telephones for the hard of hearing, amplifiers for use with cellphones, and devices designed for use with televisions.

If hearing loss is advanced, the audiologist also can fit you for hearing aids. "These come in a range of designs worn both externally and inside the ear canal, and magnify sound vibrations entering the ear so that surviving hair cells can pick them up," Dr. Wang explains. Hearing aids can vastly improve your ability to communicate but they won't restore your hearing to normal, and initially your voice will sound louder inside your head. "You may need to make several visits to the audiologist for adjustments, so it's important to have realistic expectations when you start using hearing aids," Dr. Wang adds. ■

HEARING MECHANICS

