

## Jeff's Corner



### Can Good Eating Habits Help Prevent Hearing Loss?

Recent research has shown that nutrition can slow the loss of hearing due to aging. According to the American Journal of Clinical Nutrition, *"If you eat two servings of (fresh) fish, you lower the risk of hearing loss by 42 percent if you're 50 years old or older."*

Eating fish reduces the risk of hearing loss primarily due to the presence of omega-3 fatty acids. As you may know, omega-3 is associated with a multitude of health benefits, including protection against cardiovascular disease, improved brain function and reduced risk of certain cancers. An American Journal of Clinical Nutrition study also revealed that omega-3 supplements lower the risk of hearing loss by 14 percent.

This does not mean eating fried fish at a fast-food restaurant will protect you against hearing loss. Processed fish offers few nutrients, including omega-3.

### Vitamins and Minerals

Several researchers have shown that certain vitamins and minerals also lessen the probability of hearing loss due to aging. Vitamins C and E and the element magnesium may be among those that guard against hearing loss.

A 2007 study conducted in The Netherlands concluded that presbycusis (age-related progressive hearing loss) is delayed in the lower frequency ranges when people between the ages of 50 and 70 increase consumption of folic acid. Folic acid is found in

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## Should you consider extended wear hearing aids?

Recently, you may have seen ads praising the virtues of new hearing aids that fit deep within the ear canal. These devices, called extended wear hearing aids (EWHAs), were developed in response to patient demand for a solution to hearing loss that is completely invisible. I agree that the deep placement of EWHAs makes them essentially unnoticeable, and the sound quality is acceptable. However, I have some serious concerns about the performance and potential side effects of this new technology.

First, EWHAs have very limited fitting capabilities. The patient's ear canal must be of a certain size, shape and direction. Those with narrow, short or highly angled canals need not apply. Another drawback is that these instruments are only appropriate for those who have very mild hearing losses.

Patients wearing EWHAs may experience unintended medical complications. Measuring the ear canal for proper placement of the device requires that the fitter touch the eardrum lightly with a probe. It is not uncommon for this to cause a slight hematoma on the eardrum, or, in the worst cases, a perforation which requires surgical repair. In addition, EWHAs occlude the ear canal, creating a barrier that prevents air from circulating freely. This condition may cause moisture to accumulate in the canal, which in turn makes it more likely that fungal infections will develop.

Since EWHAs should not be removed and reinserted by the patient, battery replacement is not as simple as it is with conventional hearing aids. These devices are powered by a battery that lasts about two months. When the battery fails, the EWhA must be removed by a hearing care professional and replaced with a completely new device. This procedure is necessary six or more times per year.

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vegetables, such as broccoli, beans and lettuce, and is also included in many multi-vitamin supplements.

Another study suggests consuming more beta carotene to prevent premature hearing loss. Orange and yellow vegetables, such as carrots and yellow beans, are among the best sources.

### Suggestions

- Have your hearing tested every year.
- Talk to your doctor about the supplements he/she would recommend for you.

If you have questions about nutrition and hearing, just give me a call.

Have a happy and healthy holiday season.

*Jeff*

The price of ESHA fitting is also a drawback. Currently, ESHAs cannot be purchased. Manufacturers offer them for lease at a cost of about \$1,600 annually for one device and \$3,200 for two. Therefore, patients must reinvest in the technology every 12 months in order to continue using the product.

ESHAs are in their infancy, but you should be aware that the hearing aid industry is working enthusiastically to advance this technology and to solve the problems outlined above. Only when they have evolved to meet higher standards will I offer them to my patients.



*Wishing you and your loved ones a happy and healthy holiday season*

## How Often Should You Purchase New Hearing Aids?



Patients often ask me, "Is there anything available now that will work better than my current hearing aids?" Since hearing aid circuits are miniature computers and their changes parallel the advancements in computer technology, you will see marked improvements every two to three years. The leading manufacturers (Widex, Oticon, and Phonak) are focusing their research and development in the following areas:

- **Better fidelity:** Widened bandwidth results in a cleaner, more realistic sound quality due to refinements in microphone and receiver development
- **Better understanding in background noise:** New directional microphones have a narrowed width of focus that shuts out noises from the sides and rear
- **Improved control of acoustic feedback:** High-resolution phase cancellation techniques create a negative waveform to eliminate the feedback immediately
- **Computer circuitry enhancements:** Faster, more intelligent microprocessors and more efficient software identify and amplify the speech you want to hear and reduce the noises you don't need to hear
- **Cosmetic advantages:** Miniaturization allows for packaging more technology into smaller hearing aids

- **Connectivity:** Hearing aids can connect effortlessly and wirelessly to other audio sources you use daily, such as cell phones, televisions, iPods, etc.

You'll never know how much improvement you can experience from new technology without taking a "test drive." I suggest you reflect on listening situations that you experience routinely and honestly assess how well you perform. Would you like to hear more clearly on the phone? Is background noise interfering with your understanding in restaurants? Does music sound as rich and full as you would like? The newest hearing aids are designed to overcome many of the obstacles that older technology could not address. Together, we should evaluate how the benefits of new hearing instruments can optimize every listening situation you encounter.