

# Optimal Nutrition and Hearing Health



Hearing loss ranks as the third most prevalent disability in the US. Hearing loss significantly impacts individuals and society. The World Health Organization estimates approximately one-third of hearing losses are caused by preventable factors. Diet and nutrition are two such factors that have garnered recent attention.

## 5 facts about the relationship between nutrition and hearing health.

#1

**An inflammatory dietary pattern — one high in processed sugars, refined carbohydrates, unhealthy fats, and red and processed meats — significantly increases risk of hearing loss.**

A cross-sectional and randomization analysis found that an inflammatory diet significantly increases risk of sensorineural hearing loss. Conversely, a fish-rich, Mediterranean-style diet was protective, potentially acting as an inner gut-ear modulator of inflammation and cochlear blood flow. (Wang et al 2024).

#2

**Ultraprocessed food intake increases the risk of age-related hearing loss.**

A U.S. cross-sectional study of 1,075 adults over age 50 showed that those within the highest quartile of ultra-processed food consumption had approximately  $2.8 \times$  greater odds of high-frequency hearing loss compared to the lowest quartile, after adjusting for confounders. (Fu et al, 2024).

#3

**Nutritious foods protect against age-related hearing loss.**

A metaanalysis of 33 observational studies revealed inverse associations between intake of certain nutrients — vitamin B, carotene, carotenoids, protein, fiber, fish, and fat — and risk of hearing loss. These nutrients appear to act as a protectant against hearing loss as people age. (Lu et al 2025).

#4

**Diet quality in adults over the age of 50 is associated with hearing health**

Adults over age 50 with higher Mediterranean Diet Scores — indicating greater intake of fruits, vegetables, fish, legumes, etc. — showed significantly lower odds of high-frequency hearing loss. (Huang, et al 2020).

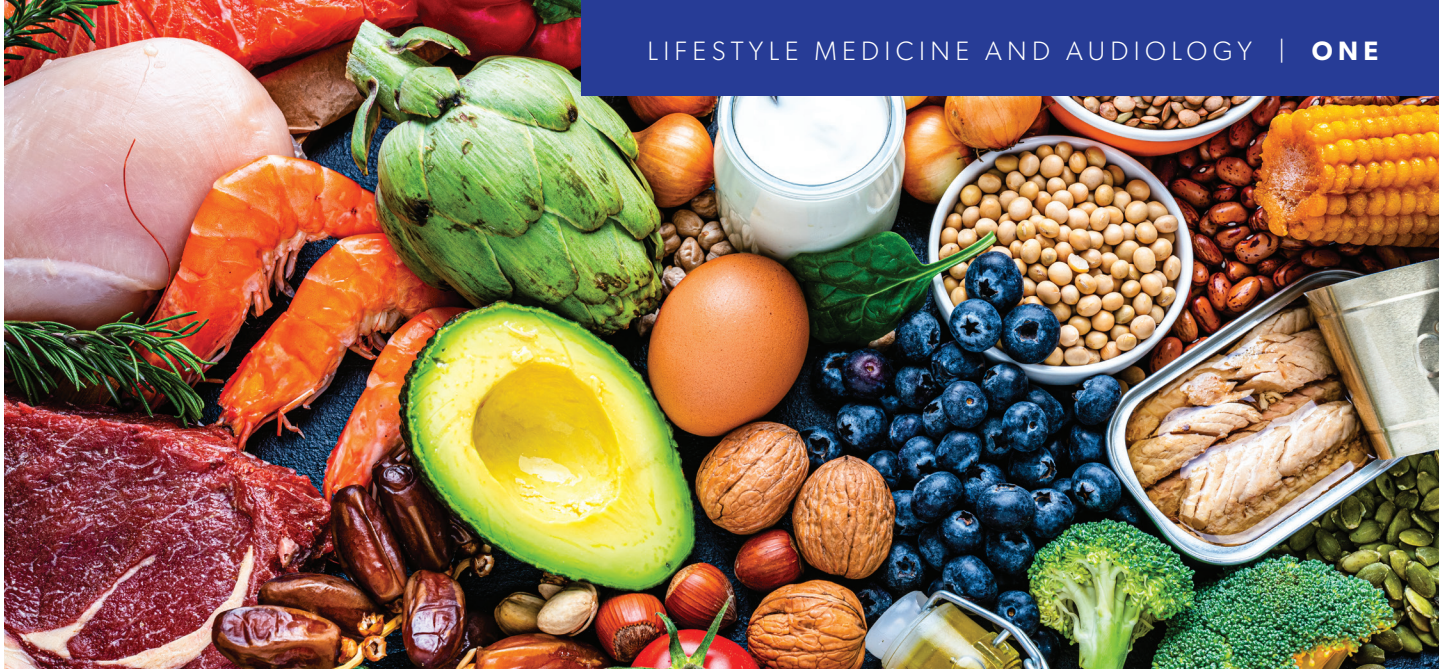
#5

**Calcium and magnesium dietary supplements are associated with better hearing.**

A study of older adults (>70 years) found that higher dietary intakes of calcium and magnesium, as well as their combined intake, were associated with lower odds of both low-frequency and speech-frequency hearing loss — with ever lower odds at higher intake levels. (Wei, 2023).

### KEY POINTS

Diets rich in fish, antioxidants, fiber, lean protein, calcium, and magnesium are consistently associated with reduced risks of age-related or sensorineural hearing loss. Ultra-processed or inflammatory dietary patterns, high in sugars, refined carbs, and added fats, are linked to greater risk.



## Optimal Nutrition and Hearing Health (Continued)

### ACTIONS

Besides encouraging individuals to eat a healthy diet, individuals over the age of 50 should be encouraged to get a baseline hearing test from an audiologist. [The American Academy of Otolaryngology-Head and Neck Surgery \(AAO-HNS\) recommends that all adults aged 50 and older undergo regular hearing screenings.](#) This recommendation is specifically for those who haven't noticed any issues with their hearing and aims to detect age-related hearing loss early.



### References:

- Huang, Q., Jin, Y., Reed, N. S., Ma, Y., Power, M. C., & Talegawkar, S. A. (2020). Diet quality and hearing loss among middle-older aged adults in the USA: findings from National Health and Nutrition Examination Survey. *Public health nutrition*, 23(5), 812–820.
- Fu, Y., Chen, W. & Liu, Y. (2024) The association between ultra-processed food intake and age-related hearing loss: a cross-sectional study. *BMC Geriatr* 24, 450.
- Lu, W., Tang, R., Jiahui, X., Shipeng, Z., Tao, G., Hanyua, W., Feng, X., & Hui, X. (2025). Protective effects of dietary nutrients on hearing loss: a systematic review and meta-analysis. *Frontiers in Nutrition*, 12, 1528771.
- Wang, Y., Nie, J., Yan, K., Wang, J., Wang, X., & Zhao, Y. (2024). Inflammatory diet, gut microbiota and sensorineural hearing loss: a cross-sectional and Mendelian randomization study. *Frontiers in Nutrition*, 11, 1458484.
- Wei X. (2023). Dietary magnesium and calcium intake is associated with lower risk of hearing loss in older adults: A cross-sectional study of NHANES. *Frontiers in nutrition*, 10, 1101764.