



Obesity Associated with Higher Risk of Hearing Loss in Women; Physical Activity Associated with Lower Risk

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According to the World Health Organization, 360 million people have disabling hearing loss, a condition that is often considered to be an unavoidable side effect of aging. New research from Brigham and Women's Hospital (BWH) published online in *The American Journal of Medicine*, finds that a higher body mass index (BMI) and larger waist circumference are each associated with higher risk of hearing loss, while a higher level of physical activity is associated with lower risk of hearing loss in women.

"We often think of hearing loss as an inevitable part of the aging process, but these findings provide evidence that potentially modifiable risk factors, such as maintaining a healthy weight and staying physically active, may help in the prevention of hearing loss or delay its progression," said Sharon Curhan, MD, ScM, lead author of the paper and a researcher in the Channing Division of Network Medicine at BWH.

Using data from 68,421 women in the Nurses' Health Study II who were followed from 1989 to 2009, researchers analyzed information on BMI, waist circumference, physical activity, and self-reported hearing loss. The baseline and updated information was obtained through validated biennial questionnaires. Researchers found that women with a BMI of 30-34 had a relative risk for hearing loss that was 17 percent higher, and with a BMI of 40 or more had a relative risk that was 25 percent higher, when compared with those with a BMI of less than 25.

For women with waist circumference 80-88 cm, the relative risk for hearing loss was 11 percent higher and with waist circumference greater than 88 cm the relative risk was 27 percent higher when compared with women with waist circumference less than 71 cm.

Researchers also found that higher level of physical activity was associated with lower risk. Compared with women who were the least physically active, women who were the most physically active had a 17 percent lower risk of hearing loss. Walking, which was the most common form of physical activity reported among these women, was associated with lower risk; walking 2 hours per week or more



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was associated with a 15 percent lower risk of hearing loss, compared with walking less than one hour per week.

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