

# Diabetes and Hearing Loss?

## Taking a Preventive Stance on the Health of Your Hearing

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As people with diabetes, we're regularly warned about kidney dysfunction, cardiovascular disease, visual problems, and peripheral neuropathy, but the risk of hearing loss from uncontrolled blood glucose levels is rarely mentioned. Hearing loss just isn't usually discussed unless we bring it up ourselves. So if you're among the majority who hasn't given much thought to the potential effects of diabetes on your hearing, now might be a perfect time to start talking about it with your healthcare provider.

### Increased Risk for Diabetics?

Studies have shown that people with type 1 and type 2 diabetes experience more hearing loss than their non-diabetic peers. Researchers attribute this to changes in the capillaries, the small blood vessels responsible for transporting nutrients to the inner ear. The compromised blood flow to the inner ear leads to atrophy and eventually the death of the sensory hair cells found inside. Once the sensory cells are damaged, loss of hearing ability is the final (and usually permanent) result.

### Stress & Chronic Health Issues

Coping with any chronic illness that demands constant attention is a challenge. Those of us managing the disease, as well as our family and friends, understand the emotional

rollercoaster associated with diabetes. Similar psychological findings have been linked to the long-term loss of hearing.

The auditory sense allows us to connect with family, friends and the world around us. If our hearing is sub-par, we gradually withdraw from social situations and activities we once loved, in order to avoid frustration and/or embarrassment. This was clearly documented in a National Council On The Aging study, which revealed increased depression, feelings of isolation, stress, and anger in those with untreated hearing loss.

### Prevention Is The Key

Once our inner ear structures have been damaged, there is no turning back the clock to normal hearing. Therefore, it's important to address the possibility of diabetes-related permanent hearing loss by being proactive and taking preventive steps with regard to your hearing health. It will undoubtedly benefit you for years to come, in more ways than you could imagine.

## What Steps Should You Take?

In addition to maintaining tight control of blood glucose levels, there are a number of habits you should incorporate into your preventive healthcare routine today.

1. Once a year, schedule a comprehensive hearing examination by an audiologist. Make sure that you complete a test called otoacoustic emissions (OAEs). This is a brief but very sensitive test that provides information about the integrity of the hair cells in the inner ear. OAEs may actually provide early signs of hearing loss before they are evident on a standard screening or evaluation.
2. Ask your physician to thoroughly check the health of the physical structures and tissues of your ears. Although not directly related to blood glucose levels, there is a relatively rare ear condition called malignant otitis externa that primarily affects people with compromised immune systems. Those with diabetes are at an increased risk. Regular check-ups will prevent minor infections from turning into potentially life-threatening conditions.
3. Use common sense when you are in noisy work environments or during loud recreational activities. Wear hearing protection when appropriate, or distance yourself from any sound that you believe could be unhealthy for your hearing.
4. If your portable mp3 player is perpetually attached to your ears, watch your volume levels. When it comes to safe use, many hearing healthcare professionals suggest that users turn down the volume to a point where external sounds can be heard without difficulty. Some also offer the "80 for 90 rule" to their patients as a guideline: listen at no more than 80% of the volume, for 90 minutes or less.
5. Be mindful of your hearing and take some time to appreciate this remarkable sense. If you notice any sudden changes, seek the advice of your physician or hearing healthcare provider immediately.

