



---

# Diabetes and Hearing Loss

By Dr. Keith Darrow, PhD  
Harvard and MIT Trained Neuroscientist





## DIABETES AND HEARING LOSS

**31 million people living with Diabetes are at an increased risk of developing Dementia and hearing loss.**

Diabetes is not a normal part of aging. Neither is the inevitable hearing loss that comes with aging. In fact, hearing loss- a progressive degenerative disorder - profoundly impacts social, physical and cognitive health. There is a difference between 'common' and 'normal' aspects of aging. The important thing is that we know the difference between the two and know when to speak with our physicians, pharmacists, endocrinologist and audiologists if we are experiencing symptoms associated with these 'common' disorders that can have a profound negative impact on our lives and health.

Nearly 31 million people live with diabetes. That means that nearly every family has at least one person who suffers from this disease. Many families watch as a loved one progresses from dietary restrictions and exercise, to pills, to injections to treat their diabetes. Sadly, each of these 31 million people are at increased risk of developing hearing loss, a disorder shown to increase the risk of developing memory loss, cognitive decline and Dementia by as much as 200-500%. The most devastating effect of diabetes is its impact on small blood vessels throughout the body. Each cell, tissue, muscle, nerve and organ in our body relies on proper blood supply to keep our internal components working properly. Blood carries the most important ingredients for life to all of our organs: **oxygen and glucose**. Too much glucose in the blood leads to the symptoms of diabetes.

Diabetic neuropathy, the nerve damage that results from high blood sugar injuring nerves throughout the body, interferes with the nervous system's ability to send signals. Damaged nerve cells are extremely difficult to repair, and will often die. Unfortunately, for most patients the symptoms of diabetic neuropathy only become evident when they perceive 'numbness and tingling' in their feet, hands, arms and legs. The impact of diabetic neuropathy on internal organs - the brain, heart, eyes and ears - go undetected for too long. The most common signs and symptoms of diabetes include:

- Increased Thirst
- Hunger and Frequent Urination
- Fatigue
- Blurred Vision
- Loss of Hearing Clarity
- Slow-Healing Sores or Frequent Infections

Diabetes takes its toll on small blood vessels throughout our bodies; in particular, our hearing organ is very susceptible to damage. Fortunately, some parts of the body can accommodate for damaged blood vessels by depending on alternative blood supplies, but unfortunately our ears lack that option— and the resulting hearing loss is permanent.

***"There's no redundancy in the blood supply to the inner ear."***

– Dr. Yuri Agrawal, Johns Hopkins University.



Dr. Keith Darrow, PhD, CCC-A



A research report in JAMA (Journal of American Medical Association) found that patients with diabetic neuropathy experience decreased hearing acuity thought to result from degenerative neuropathy of the auditory nerve. Researchers stress the importance of individuals with diabetes have their hearing loss evaluated and treated as early as possible.

## DIABETES AND DEMENTIA

Dementia and diabetes starve your brain and tangles and twists vital cells. The devastating diseases of Dementia share a strong link with diabetes and wreaks havoc on millions of individuals in North America. In fact, Alzheimer's disease is the 5th leading cause of death in the elderly in North America. Both Type 1 and Type 2 Diabetes have a notable resistance to insulin. Type 1 is caused by the body's inability to produce insulin, and Type 2 is caused by the deterioration of the body's insulin receptors and is associated with the consumption of too much refined carbohydrate such as processed grains and sugar. Multiple studies have indicated that diabetes is a major risk factor for Dementia, including Alzheimer's disease and vascular Dementia.

Cardiovascular problems associated with diabetes are also associated with Dementia, including:

- Obesity
- Heart Disease or Family History of Heart Disease
- Impaired Blood Vessels
- Circulation Problems
- High Cholesterol
- High Blood Pressure

To learn more about hearing health care, and how to help others, go to [www.mthoodhearing.com](http://www.mthoodhearing.com) to read more about the importance of hearing health care.

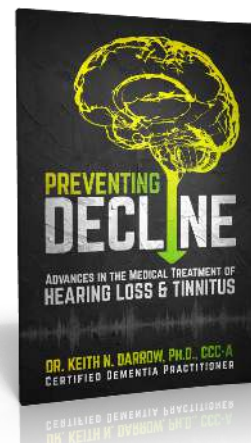
In both diabetes and Dementia, glucose is not used properly in the brain. Depriving the brain of oxygen and glucose results in nerve cell death, and therefore decreases the brain's ability to interpret messages.

**Reducing Your Risk for Diabetes and Dementia:** What's good for your heart is good for your brain! Living a healthy lifestyle that promotes cardiovascular health will benefit your brain, your body and your ears! Eat a healthy diet, exercise regularly and stay socially active.

### Dr. Keith Darrow, PhD, CCC-A

M.I.T. and Harvard Medical Trained  
Neuroscientist and Clinical Audiologist

Amazon #1 New Release & Best-Selling Author  
President, Excellence In Audiology  
Expert in Speech and Hearing Bioscience and Technology  
Director of Audiology Research at Intermountain Audiology  
Professor at Worcester State University  
Nationally Recognized Speaker, Trainer, and Researcher  
Research Associate at Massachusetts Eye and Ear Infirmary  
His publications and research cited over 1,200 times



FREE Book Offer, Visit  
[www.mthoodhearingbookoffer.com](http://www.mthoodhearingbookoffer.com)



**(971) 983-8341**

**4105 SE Division St, Portland, OR 97202**

**[www.mthoodhearing.com](http://www.mthoodhearing.com)**