

Are Your Ears Causing Your Brain to Shrink?

As you age, your body changes – including your brain. It's normal for your brain to shrink a tiny bit. It's not normal for your brain to shrink so much that you suffer from dementia.

Dementia is more than just forgetting someone's name. It's forgetting so many things that your poor memory interferes with daily living.

Preventing Dementia

Until recently, advice about preventing dementia focused on staying active and healthy. Physical exercise, diet, sleep, and 'exercising' your brain with puzzles, games, and social activities all enhance your mental ability. These things keep your brain active, supple, and in shape. But did you know that your hearing also affects your brain? New research shows that the ability to hear well is as important as everything else. In fact, if you neglect your hearing your brain can actually become smaller.

It's true. If you suffer from poor hearing, your brain will shrink. Several studies from [Johns Hopkins University](#) and the [National Institute on Aging](#), have found that the brains of people “with impaired hearing lost more than an additional cubic centimeter of brain tissue each year compared with those with normal hearing.”

This is significant because the adult human brain is only about 1,450cm in size. At age 40, your brain starts to shrink about [five percent a decade](#). This means by the time you're 70, your brain is only about 1,243cm in size. Each additional centimeter you keep helps you think better.

Your Brain is like a Muscle

As the studies show, not being able to hear properly can cause you to lose your mind – literally. Here's what happens: Your brain is like a muscle. Muscles need good nutrition. They need rest. And they need to be exercised. So does your brain.

One way of exercising your brain is through reading and learning. Another way is through using your senses – eyes, ears, nose, mouth, and touch. When you quit using one of your senses, such as hearing, that part of your brain shrinks.

This shrinking doesn't just affect the part of the brain used for hearing, either. It affects other parts as well. The John Hopkins study revealed brain “structures don't work in isolation, and their responsibilities don't end at sorting out sounds and language. . . [they] also play roles in memory and sensory integration and have been shown to be involved in the early stages of mild cognitive impairment and Alzheimer's disease.”

Three Reasons Poor Hearing Causes Your Brain to Shrink:

The studies show your ability to hear well affects your ability to remember things. When you can't remember things over the long-term, that's dementia. Researchers think poor hearing affects your memory for the following three reasons:

1. Stress on the Brain

Straining to hear causes “cognitive overload.” Cognitive overload is a fancy phrase for stress. It means your brain has to work extra hard to make sense of something that should be easy.

You know how stress feels. It makes you anxious. This same thing happens with your brain when it can't hear properly. It stresses out. If your brain is struggling to figure out what people say, it can't focus and put that information into memory. So you forget things.

Think of your brain like a bucket. It can hold a lot of information. Sometimes, however, you have so much on your mind that some data falls out. You forget. This is normal when you're stressed.

When your brain shrinks from not being used, however, it's like making your bucket smaller. You have the same amount of information, but it doesn't all fit.

2. Social Isolation

Social isolation is when you don't interact with others. Maybe you do this because you're tired of constantly asking, “what did you say?” Or you don't

want to be a bother so you tune out conversations. Maybe you even avoid people altogether.

Guess what? Not interacting with your family and friends leads to depression, poor self-esteem, and memory loss. Humans are wired to need each other. We connect mainly through touch and talk. When you don't talk to people, you don't get your daily dose of connection. Talking with friends and family gives you an emotional high and creates "feel good" hormones that boost your brain power.

3. Your Brain gets Bored

Your brain craves stimulation. If it can't hear well, the gray matter that processes hearing doesn't get used. It figures there is nothing to do. It gets bored, and shuts down.

You don't actually lose brain cells, according to the studies. They just become smaller so you have less gray matter. Of course, less gray matter means you don't process sounds as well, which means your gray matter shrinks even more, which can become an endless downward spiral into deafness.

Stopping the Downward Spiral

This downward spiral can be stopped. All you have to do is fix the problem. Getting a hearing instrument is a simple solution. Studies demonstrate that returning hearing to normal stops your gray matter from shrinking.

Getting a hearing instrument may even help your gray matter bounce back to its original size. Researchers are currently studying to see if this happens. However, It's going to be easier for your brain to get back in shape if the problem is caught early.

Take control of your health by getting your hearing checked. Hearing deteriorates very slowly. Most people don't realize they have a hearing problem until it's quite severe. If you're over 50, or if you think you need a boost in your hearing, get it checked. Just pick up the phone and call us at 435.682.3192. We'll schedule your FREE Real-World Hearing Assessment (\$150 Value) at a convenient time for you.