

Features posts from
Hearing Unlimited's
Facebook page

Brain Parts Functions



www.hearingunlimited.net

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Part 1

KNOW YOUR TEAM

There's a saying that one song can bring back a thousand memories. "Your Song" during the first dance between a special bride and groom, a hot and sticky summer spent listening to Kenny Chesney or a nail-biter Steeler game with "Renegade" blasting in the third quarter.

We hear a song and our brain recognizes all the emotions and information that goes along with it. Our ears and our brain work as a team to help us understand the sounds around us. The ears gather the sounds and the brain tells us which ones to concentrate on, where the sound is coming from and processes the sound to help us assess social situations.



Those who suffer from hearing loss have to put in extra effort to pay attention to sounds. A conversation in a noisy place or listening to a TV program becomes tiring tasks. The extra energy focused on hearing can be exhausting and cause other parts of the brain to start lagging behind... such as the area of the brain responsible for memory. Despite obvious assumptions, we hear with our brains, not our ears.

Part 2

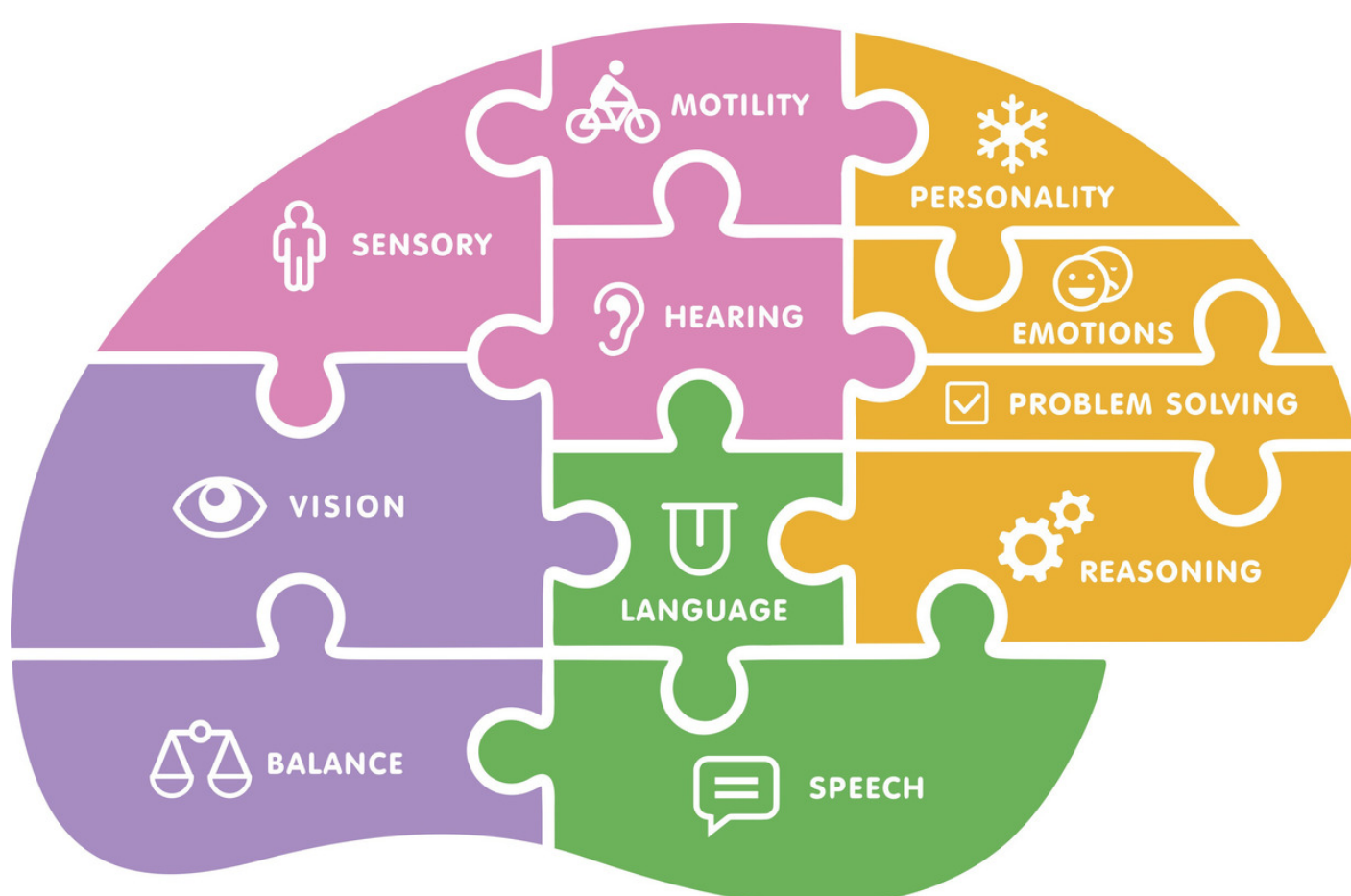
PLAY IT SAFE

In the last post in this series, we established that the ears and the brain work as a team. But what happens when the brain works too hard focusing on sounds?

In 2011, Johns Hopkins Medicine released a study that linked hearing loss and dementia. Though the exact reason for this is still unknown, researchers suggest that the additional strain on the brain to concentrate on hearing causes the areas of the brain responsible for memory to be more susceptible to dementia. Another effect of hearing loss is social isolation, which is known to increase the likelihood of dementia.

Visit
www.hopkinsmedicine.org
for more information on
this study and hearing
loss research

Even though hearing loss may not be the sole cause of dementia, scientists say hearing aids could help prevent or delay the disease. Hearing aids lend a helping hand to the brain and allow it to delegate its work more equally to all its parts.



The onset of hearing loss is gradual and sometimes undetected. Hearing aids can only help the brain's cognitive ability- so why continue without them and risk the damage?

Brain Parts Functions



FINDING YOUR INNER BALANCE

One year after the Johns Hopkins Medicine released the study linking hearing loss to dementia, the same doctor and a new co-author published another study that linked hearing loss to falling.

Balance is truly a team effort involving the brain, eyes and ears. Not only are balance and hearing functions related, but both also take place in the inner ear.

The 2012 study showed that as the condition of hearing loss progresses, the risk of falling gets higher.



One of the authors on the study, Dr. Frank Lin, said there could be two reasons as to why hearing loss adds to the likelihood of balance issues and falling. For one, people with hearing loss tend to have poor awareness of what is going on around them and the layout of their overall environment. And, similar to the link to dementia, hearing loss causes cognitive thinking to go into overdrive and exhaust the brain.

Taking care of your hearing loss can help fix address a number of physical, mental and processing issues. Some issues you might not even suspect to be connected to your hearing.

To read the full study mentioned in this article, visit
www.ncbi.nlm.nih.gov/pmc/articles/PMC3518403/

Part 4

IS YOUR DIABETES LOWERING THE VOLUME?

It's red, it can be in a thousand places all at once and it makes some of us quite queasy... Our brains might be the masterminds behind all bodily operations, but our blood and bloodstreams are our fuel.

According to the American Diabetes Association, recent studies show a possible link between diabetes and hearing loss. It is known that diabetes can effect and damage the eyes and kidneys because of the changes in nerves. Researchers think diabetes impacts the ears in a similar way.



In 2015, a study published in the Journal of Diabetology found that the cells in our ears are very sensitive to the changes in the bloodstream caused by diabetes. The hearing loss is mild to start but worsens over time if it continues on without help or treatment.

If you or a loved one suffers from diabetes, be on the look out for signs of hearing loss such as trouble following conversations, constantly asking others to repeat themselves and requesting loud volume on the TV or radio. Also, be sure to get regular hearing screenings since you know you or your loved ones are at risk.

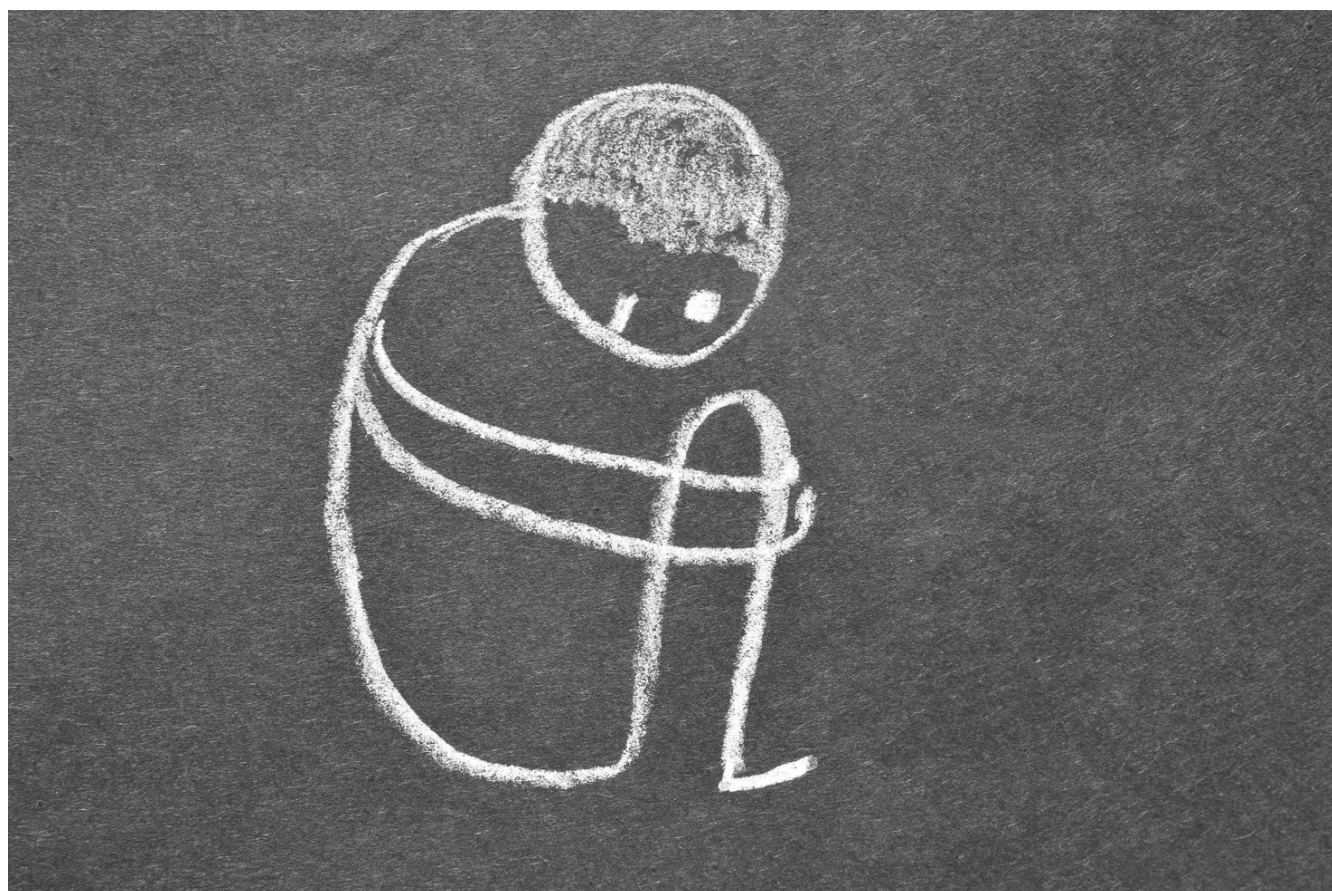
See the full study in the Journal of Diabetology here:
[http://journalofdiabetology.org/Pages/Releases/PDFFiles/
EIGHTEENISSUE/SC-1-JOD-15-001.pdf](http://journalofdiabetology.org/Pages/Releases/PDFFiles/EIGHTEENISSUE/SC-1-JOD-15-001.pdf)



GETTING BACK IN THE GAME

No matter the occasion, family and friends are what makes every step in life a celebration. Holidays are warm and fuzzy because of laughter at the dinner table. Birthdays are loud and cheerful because of the singing. Random get together's are long and special because of the never-ending chitchat.

We rely on our hearing for all of these special occasions and special relationships. When our hearing starts to fade, so do these moments and memories.



In a review published in August 2003 published in the International Journal of Audiology stated that “uncorrected hearing loss gives rise to poor quality of life, related to isolation, reduced social activity and a feeling of being excluded, leading to an increased prevalence of symptoms of depression.”

Throughout this series, we've established a clear connection between the brain's cognitive function and hearing loss. So, the link to depression symptoms isn't a surprising one for most researchers, according to WebMD.

When the hearing loss gets worse, so does the depression. But, with the use of hearing aids, hearing loss gets better and so do the depression symptoms. Take the right steps to get your hearing back and get your life back.



KIDNEY CONNECTIONS

It's safe to say the ears and the brain have been our star players in this series. Now it's time to bring in another player who works mostly behind the scenes— that is until something goes wrong.

Our kidneys act like filters. They help us absorb all the good stuff and release all the bad stuff. Most people who have kidney problems don't realize it for years as the damage progresses- kind of like hearing loss.



In 2010, a report published in the American Journal of Kidney Diseases stated, “older adults with moderate chronic kidney disease (CKD) have a higher prevalence of hearing loss than those the same age without CKD.”

The tissue in our kidneys and our ears has structural and functional similarities that justify the link between kidney problems and hearing loss. In addition, the toxins that build up in the kidneys when they do not function properly can cause nerve damage in the inner ear.

Not to mention, hearing loss and kidney disease share common risk factors including diabetes, high blood pressure and old age. If any of these conditions run in your family, regular check ups and tests will help you to get ahead and slow their progression.



LISTEN TO YOUR HEART

In the previous parts of this series we've determined the brain, blood flow and the kidneys all have some connection to our ears. This part is dedicated to the big guy that makes it all possible— our heart.

Experts are starting to suggest that cardiovascular disease is connected to hearing loss. Cardiovascular disease damages blood vessels and decreases blood flow to the ears. This is an essential role in the hearing process.

In this case, hearing loss can be the sign of underlying heart problems. In fact, some research states that the inner ear is so sensitive to blood flow that it can be one of the first signs of cardiovascular problems before the parts of the body show any sign of altered blood flow.

Low- frequency hearing loss is usually the type of hearing loss associated with cardiovascular health issues. So, audiologists and hearing health care professionals can also educate their patients to check up on heart health— especially those patients with low-frequency hearing loss.



Part 8

FAMILY HISTORY OF HEARING LOSS



We know that the things you expose your ears to can cause hearing loss over the years. These are called environmental causes. But what about the things that make up your body—the things you can't control.

Researchers know that there are a lot of environmental links to hearing loss, but your genetic makeup plays a role too. Certain genetic factors can make people more susceptible to hearing loss, so it is important to know your family history of hearing loss.

One example of a genetic form of hearing loss is otosclerosis. It is a hereditary disorder in which a small bony growth forms in the middle ear that blocks sound vibrations. This disorder usually presents itself in early adulthood.

Be aware of your family's history of hearing loss and discuss this with your audiologist in order to tailor the best treatment for your specific type of hearing loss.

Part 9

FAMILY FIRST

Most of this series consists of information and advice for the people who suffer from hearing loss. But, hearing loss doesn't affect just one person- it affects all the people surrounding those who suffer from hearing loss.

Family and friends play a quintessential role in healthy hearing practices. A lot of times, family members are the people who get most patients to go in for their first hearing screenings.

You know your loved one best and you know what it takes to convince them to get a hearing screening. Sometimes it's as easy as explaining that hearing screenings are just as necessary and similar to annual doctor's office or dentist office check ups. They allow audiologists to monitor changes in hearing and decide when and how it would be best to intervene.



Others may react more to the risk factors of prolonging a hearing test. As mentioned earlier in this series, hearing loss may contribute to many serious health conditions and an overall decrease in a person's quality of life.

Whatever it takes, provide your loved one with the information and support they need to practice healthy hearing and prolong his or her happy and healthy life.



EARLY DETECTION

You most likely had your first hearing screening when you were born and maybe a few more the first few years of your life to make sure all was good and healthy.

Then, you had a hearing test every few years or so throughout grade school. After that, can you remember the last time you got your hearing checked?

The 2012 president of the Academy of Doctors of Audiology, Dr. Eric Hagberg, said that people on average experience hearing loss for 7-10 years before they get a hearing screening.

When hearing loss goes undetected for that long, people start to think they don't have a problem and the hearing loss becomes normal. The longer the hearing loss goes untreated, the worse it can get.

Early detection of hearing loss decreases the likelihood of all the medical risks related to hearing loss and preserves a person's quality of life.



Work with your audiologists, work with your family and friends, and work with your hearing... work together in order to lead a happy and healthy life.