

# INNOVATIVE PERCEPTIONS

A QUARTERLY NEWSLETTER FOR HEARING AWARENESS IN THE GREATER BOSTON AREA

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#### Your Trusted Hearing Healthcare Professionals

#### Fun Ear Facts:

It is not a surprise that the African elephant has the biggest ears:



Asian elephants ears are a bit smaller due to the difference in their habitat:



But did you know that the Jerboa, a hopping rodent found in the deserts of Southern Mongolia and northwestern China, has the largest ears relative to its size:



Have an interesting ear fact that you'd like to share? Contact us or post it on our Facebook page:



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### Maintaining Cognition with Hearing Aids: What you should know

There is a lot of "buzz" around the relationship between hearing loss and cognitive function specifically dementia or dementia-related disorders. Why is there so much recent interest? The 2018 Lancet Commission Report by Livingston et al, indicates that dementia is a major global health problem and suggests that treating risk factors could prevent or minimize dementia cases. Hearing loss was found to be one of the largest treatable risk factors. More and more research has shown a relationship between hearing loss and cognitive decline; but let's get the elephant out of the roomhearing loss does not cause dementia. There are a myriad of factors that play a role in the rate of cognitive decline and some of those factors can be related to hearing loss. Hearing loss causes auditory (sound) depravation, which is basically the reduction in sound to our brain. The brain needs sound to be stimulated and keep it active and exercised. If our brain gets "lazy" due to auditory depravation, it becomes much more difficult to reactivate. This can result in a decline in the brain's cognitive functioning. When you struggle to hear sounds, you place additional strain on your brain and body (cognitive load). Properly fit hearing aids provide assistance to the brain, reduce strain and help

preserve cognitive function. Two long-term studies(18 and 25 years long) support this finding. In these studies, subjects were divided in three groups, 1) no hearing loss (control group); 2) diagnosed hearing loss but did not use hearing aids; and 3) diagnosed hearing loss but used hearing aids. At the end of both studies, the average rate of cognitive decline was reduced in subjects who had a hearing loss but used hearing aids. Subjects that had a hearing loss and did not use hearing aids experienced a more rapid decline in cognitive performance over time. In addition, those subjects that had a hearing loss but wore hearing aids showed no significant difference in cognitive decline compared with those in the control group (no

hearing loss). While it is important to know that hearing loss does not cause dementia, there is a growing body of evidence that shows if you have a hearing loss and are treated early on with hearing aids, it can minimize the strain on your brain and reduce potential cognitive decline.



#### How Do You Know?

It is not uncommon to evaluate a persons hearing and find that they are surprised at the results when I tell them they have hearing loss. Most often, hearing loss presents itself as a gradual change over time and can be difficult to realize. Some signs of hearing loss include:

- Turning the TV volume up louder than others need:
- Feeling like everyone around you "mumbles";
- Inability to hear household sounds like doorbell ring, tea kettle whistle, microwave beeps;
- People telling you that you speak too loudly;
- Mishearing information;
- Ringing in your ears.

School-aged kids with a hearing loss will sometimes exhibit poor school performance because they can't understand their teacher, hear assignments or other classroom interactions. If their hearing loss has been present from a young age, they often don't recognize the loss and can't identify the problem. Hearing loss does not discriminate, it can happen to all people at all ages. If you or any of your family members are experiencing any of these signs or having other difficulties, call us today!

#### It's About The Ears

Human ears are different from most other mammals. Our ears are more basic, do not move, and lie closer to our heads. Why? The most accepted theory is that, due to evolution over 30 million years ago, we lost the ability to move our ears toward sound. The muscles needed to move ears are called auriculares. These muscles are still there, but largely useless, a

trait known as a vestigial feature. One reason we evolved out of needing these muscles, is the fact that we can turn our heads on a horizontal plane. This is something that most mammals can't do as good as humans. Our ear shape also helps capture and amplify sound. The Auricle is the visible portion of the outer ear and it has many curls and depressions. The



large "bowl" in the middle is called the concha and scoops up and funnels sounds into the external auditory meatus (Ear Canal). As it funnels sound, the ear canal acts like an amplifier and increases the volume of sound. So, while we may not move our ears toward a specific sound, our ears still work quite well at picking up and amplifying the sounds humans need.



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### **AUDIOLOGY AND HEARING SOLUTIONS, INC**

Dear Friends,

We have always prided ourselves on giving you the best patient experience possible from the moment you walk through the door. We are constantly trying to improve upon that experience and if you have been into our office within the past 8 months, you may have seen our new "Comfort Corner": an area with coffee, water and snacks! We hope you have been able to enjoy this new experience and if you haven't, come in and give it a try. We know that it is because of you, the patients, that we are here and we always want to be mindful and thankful of that. The new "Patient of the Month" award has also been a great addition to our practice. It enables us to recognize patients who have gone above and beyond to improve their hearing healthcare and have encouraged others to do the same. A patient of the month exhibits initiative in improving their overall hearing health, refers patients to our office and shows kindness and respect. We are also starting a patient referral program. Each time we receive a new patient referral from you, you will be entered to win a fantastic gift basket. We hope to see you soon!

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