Two senses connected to brain health





As two of the five major senses, smell and hearing contribute to every aspect of our daily lives. These crucial senses help warn us of spoiled food, cross a busy intersection, and interact with our peers. When one of these senses goes astray, it can signal some major biological differences occurring in your body.

The Nose Knows

Decreased olfactory function is very common as we age and is linked to a decreased ability to taste and decreased appetite. In fact, odor identification issues are present in over half of those between the ages of 65 and 80, and in over three quarters of those over the age of 80. It's known that decreased smelling abilities are often an early indicator of neurodegenerative diseases such as Alzheimer's and sporadic Parkinson's disease. In turn, olfactory deficits can decrease one's quality of life and increase the risk for depression. However, there is emerging evidence that "smell training" can improve the ability to smell.

Smell and smell recognition are intricately connected to brain functioning. Hundreds of olfactory receptors in the nose bind the odor molecules and initiate an electrical signal that travels to the olfactory bulb, a structure at the base of the brain. The piriform cortex—located just behind the olfactory bulb— then works to identify the smell. From there, smell information is transmitted to another area of the brain where it is integrated with taste information.

The Ears Have It

In addition to a loss of smell, new studies have linked people with hearing loss to having higher rates of dementia. One particular study found that people with hearing loss were 24% more likely to have Alzheimer's, and the worse the hearing loss was, the more likely the person was to develop dementia. While hearing loss does not cause dementia, there is certainly an association between the two. The surrounding theories include changes in brain function, a larger cognitive load, and social isolation.

It is important to note that hearing loss does not mean your loved one is guaranteed to develop Alzheimer's. However, preventative measures can be taken to significantly reduce the likelihood of getting Alzheimer's, or the severity of it.

While hearing loss and loss of smell can signify many different things, it is important to seek out treatment for it in order to live a better lifestyle. Not only will it make it easier to enjoy foods and communicate with friends, but it could potentially stave off Alzheimer's for longer.

