# **Cognition and Older Adults:**

How to Keep Your Brain Fit and What that Means for Your Health



Our brains go through changes in size, vascular makeup, and processing speed as we get older. Not only does the physical size of the brain decrease about 5% per decade after age 40, but the levels of hormones and neurotransmitters decrease as well.



# Hypothalamus

Maintenance center

This part of the brain is linked to functions like eating and sleeping but also governs dopamine levels which are responsible for "reward" seeking impulses. Dopamine production declines as we age, leading to impulse decline.



# **Cerebral Cortex**

Information processing center

This brain region thins as we get older, leading to fewer connections being made between new experiences and retained knowledge, resulting in slower cognitive processing.



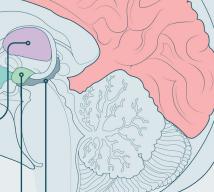
#### **Thalamus**

Message relay center

Decreases in volume with age, leading to fewer messages being relayed between neurons and diminished cognitive speed.









### **Amygdala**

**Emotion center** 

One of the brain regions typically most affected by Alzheimer's. For example, responses to emotional triggers are often exaggerated in those who have been diagnosed.



## **Hippocampus**

Memory center

This part of the brain becomes smaller in size with age, resulting in memory loss.