

## **FAQ Memory Issues**

### **How does NeuroCodex® measure memory?**

We measure it in two ways. First, from a classic neuro-psych perspective by having the individual do a set of activities while measuring brain wave activity to see how long they retain information. Second, we are also measuring brain processes. We look at storage, did the brain receive the information appropriately? Then did it store the information? If not, why? Then, can the brain retrieve the information when asked for, and how long does it take to find and retrieve the information? Is the retrieval accurate? Is the information being expressed properly? If not, why?

Another hidden piece we can often identify is, did the white matter transmission occur or occur appropriately? Is the neuro-electric (EEG) frequency and speed of transmission within norms or is the transmission slowed? If the frequency is slow, we often see memory issues with word or memory retrieval. If it slows down below a certain level, we begin to see issues that mimic dementia. From a behavior point of view, it presents the same. From a brain-based point of view, we can see the differences.

### **What is the difference between memory deficits and dementia and Alzheimer's?**

When we are looking at memory deficits, those can occur due to memory capacity issues or toxicity or other organ issues, that interfere with memory. Illnesses or medications can also interfere with memory. From a natural aging process, our bodies do not absorb nutrients the same, which can affect the storage and retrieval of memory. Life choices and habits, such as alcohol or drug consumption can have an impact. Head injuries can also interfere and/or create memory deficits, which can impact memory storage and retrieval. All these causes are potentially repairable.

Dementia is a generalized term for severe memory deficits. Alzheimer's is a severe form of dementia in which there is cell death within the brain. That cell death can be within the grey matter or the myelination (protective sheath around nerve bundles in the brain) of the white matter. These issues are not always repairable.

### **Can NeuroCodex® evaluation differentiate between memory deficits and dementia?**

Within the realm of dementia, NeuroCodex® can evaluate the different types of memory deficits. We can see memory deficits that are more severe and/or have dropped below a certain threshold, that indicate early dementia. We also look at specific markers that were developed by NIH that indicate if an individual has dementia or Alzheimer's markers. We still always recommend the individual look at the biomedical aspect as well.

### **Are there limitations to NeuroCoach® for Alzheimer's?**

The health of brain physiology will be the ultimate limitation. Working with medical health professional combined with the NeuroCoach® training system we can often stabilize and increase the memory capabilities of the individual.

However, when we work with more severe cases of dementia and especially Alzheimer's, it will depend on where the individual is in that process when they come to us. Is there grey matter cell loss or white matter demyelination? Sometimes we can slow down the process and add quality of life to the individual and their loved ones. But we cannot reverse Alzheimer's.