## FAQ Anxiety and Depression

## Can NeuroEval® and NeuroCodex® indicate the presence of anxiety and depression?

The NeuroCodex<sup>®</sup> evaluation looks for markers indicating anxiety and depression. There are many mechanisms that we pay attention to within the brain and its function. One of the most important functions we look at is the transfer of information via the white matter. If the white matter is not transferring the information effectively, consistently or if it is blocked, we (as individuals) can have difficulty accessing our inner resources. Subjectively, we call that anxiety. From a brain perspective, this indicates the white matter information being transferred is either out of phase or not transferring from hemisphere to hemisphere appropriately. This can be caused by neuro-inefficiency, or a health issue, or the working memory may be adversely affected because of stressors to the system, and information "in mind" is lost, which then creates anxiety. There are also many, many other reasons that anxiety can manifest.

Mood disorders, similarly, can occur due to several cognitive control networks in the brain that may not be functioning completely or may be out of phase. One network in particular, the Default Mode Network (the brain at rest), allows the individual to feel their "sense of self". If the Default Mode Network is *stuck*, we can get into an internal loop, in which we question ourselves or our abilities. We may feel disconnected from who we are or life, which is one of the major contributors to depression. Again, there are many reasons that depression occurs. It could be that the Default Mode Network is stuck or because we have health issues that are impacting the various brain network systems. Other causes can be due to allergies and toxin or due to an event in our life that has weakened the brain systems.

## How does NeuroEval® and NeuroCodex® look for anxiety, depression or mood disorder markers?

NeuroEval<sup>®</sup> and NeuroCodex<sup>®</sup> determine not only what and why the dysfunctions may be occurring, but also within which brain network system/s. What is the root cause of the issue/s? During that process we are looking at markers for anxiety and depression.

The tool and technology records and looks at how the brain transfers information within the white matter. If white matter is not transferring effectively, the individual will have difficulty accessing their inner resources. Subjectively, we call that anxiety. From a brain-based perspective, that typically means the white matter is out of phase or information is not transferring from the different hemispheres appropriately from a timing point of view. This can be caused due to multiple reasons. Among those is a lack of neuro-efficiency or illness or allergy (airborne, food, water), which can all cause interference or "static" in the system.

Another possible cause is the working memory system is not stress resilient so that information "in mind" is suddenly lost. This creates an internal anxiety moment of not being able to have inner access to information being transmitted or processed.

From a mood disorder perspective, we can have similar root cause issues within the cognitive control networks (CON). Another brain system network, the Default Mode Network (DMN), which is the most dominant network during the brain at rest, can also cause depressions and other mood disorders. This DMN network gives an individual a strong sense of "self", known as the autobiographical sense of self. If that system is stuck, we get into an internal loop of self...we question our self, our actions, our motives. We feel disconnected from who we are as well as life in general, which is one of the major contributing factors toward depression.

Again, depression and other mood disorders can come from many reasons. The system may be stuck due to a life event or momentary life experience, or it could be stuck due to health issues (thyroid, toxic substances, allergies, medical reason - glucose, heart, etc.). As the brain becomes stressed and less resilient to additional stresses it can manifest as a depression within the brain and expresses outwardly as a mood disorder or depression.

