



What is Neurofeedback?

Neurofeedback is a type of biofeedback that acts as a reward system for the brain to restore your brainwave patterns to a more optimal range of functioning. It is a non-invasive treatment that works toward improving the source of unwanted health symptoms. Neurofeedback differs from medicine in that it treats the issue at its core, whereas medications can only alleviate symptoms for as long as they are in your system simply by masking the initial problem. There are multiple protocols or methods of providing feedback for your brainwaves. This may include a game or puzzle, audio or watching a video.

How does Neurofeedback work?

Similar to riding a bicycle, we learn at first how to balance, steer and pedal. It is overwhelming at first, but most of us learn how to do this. We get feedback when we are learning too much which tells our brains, "hey, not this much leaning" until we automatically stay upright. How did this happen? It happens through feedback that we have received through our senses.

At **Authentic Healing and Counseling**, Neurofeedback is as easy as interacting with a simple computer game. While interacting in a game, an EEG (sensors on your head) monitors how fast or slow your brainwaves are firing, teaches your brain to fire at more optimal speeds. The game you're interacting with will reward you with a sound or an image when your brainwaves are functioning within an optimal range. When your brainwaves fire at a rate that's in optimal frequency range, a sound will go off or an image at the bottom of the screen will change, providing immediate feedback to your brain that the brain is in optimal range. Over the course of our brain performance training program, your brain may learn from this feedback and lasting structural changes within your brain may take place, allowing the brain to consistently operate within an your optimal frequency range outside of the training environment, alleviating your symptoms.

What is the Goal to Neurofeedback?

The goal to Neurofeedback is to optimize your brains frequency level and increase functioning. Brainwaves occur at various frequencies. Some are fast, and some are quite slow. The classic names of these EEG bands are delta, theta, alpha, beta, and gamma. They are measured in cycles per second or hertz (Hz). Generally speaking the brains optimal daily functioning level ranges from about 12-15 Hz. Listed below to explain the different bands/activity levels:

Gamma brainwaves are very fast EEG activity above 30 Hz is associated with intensely focused attention.

Beta brainwaves (above 13–30 Hz) are small, relatively fast brainwaves associated with a state of mental, intellectual activity and outwardly focused concentration. This is basically a “bright-eyed, bushy-tailed” state of alertness to relaxed attentiveness.

Alpha brainwaves (8–12 Hz) are slower and larger. They are generally associated with a state of relaxation. Activity in the lower half of this range represents to a considerable degree the brain shifting into an idling gear, relaxed and a bit disengaged, waiting to respond when needed. If people merely close their eyes and begin picturing something peaceful, in less than half a minute there begins to be an increase in alpha brainwaves.

Theta (4–8 Hz) activity generally represents a more day dreamlike, rather spacey state of mind that is associated with mental inefficiency. At very slow levels, theta brainwave activity is a very relaxed state, representing the twilight zone between waking and sleep.

Delta brainwaves (.5–3.5 Hz) are very slow, high-amplitude (magnitude) brainwaves and are what we experience in deep, restorative sleep.

Sited from: WHAT IS NEUROFEEDBACK: AN UPDATE, D. Corydon Hammond
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What does Neurofeedback treat?

Neurofeedback is used to treat many conditions such as: ADHD and ADD, stress disorders, anxiety, panic attacks, Autism, Aspergers, depression, headaches, migraines, concussions and sleep issues. It also used to aid memory concerns; to help individuals struggling with epilepsy, PTSD, Tourette Syndrome, learning disabilities, obsessive/compulsive behaviors and aggression; as well as to repair brain damage from stroke or a traumatic brain injury (TBI). Neurofeedback is also used to enhance many professional athletes and business professionals' performance and productivity through increased focus and better stress management and to acquire additional benefits of improved sleep, less anxiety, great ability to handle daily challenges and overall increase cognitive functioning.

To find out more or set an appointment call the office at 713-376-9500 or website:
www.AuthenticHealingandCounseling.com