

Self-Healing For the Brain

A Breakthrough in Neurofeedback and
the World's First Patented
All-Digital 'Real Time'
EEG System

What is Neurofeedback?

Biofeedback gives the body information about its own function and can improve health, well being and balance. Biofeedback has been used successfully to treat muscle tension, headaches and stress.

EEG Neurofeedback is a form of biofeedback. Two sensors placed on the scalp pick up electrical impulses directly from the brain. A computer projects the electrical impulses as brain wave patterns onto a computer screen. The visual image becomes a tool for brain self-healing. Dr. Jamison uses a Neuropathways All Digital 'Real Time' EEG* system that takes a reading of the brain at least 250,000 times per second. The system displays brain wave information on the computer screen as fast as it is picked up. This establishes an instantaneous feedback mechanism that provides an opportunity for the brain to experience its activity and to self-correct abnormal wave patterns.

Benefit from Neurofeedback

Research shows neurofeedback beneficial for treating:

- Delayed Speech development and verbal skills
- Poor concentration
- Lack of focus
- Poor memory
- Impulsive behavior
- Distractibility
- ADD
- Hyperactivity
- Poor sleep
- Bed wetting
- Anger and emotional outbursts
- Learning disabilities
- Open or closed head injury
- Stroke
- Epilepsy
- Migraine and cluster headaches
- Clinical depression

The Brain Does the Work

Neurofeedback is an exciting example of the brain's ability to self-correct and bring itself back into balance. When starting EEG Neurofeedback, the patient is instructed in the desired goals. Working with the feedback unit, the brain figures out how to reach those goals. The actual process is quite uncomplicated.

The Neurofeedback Session

Non-invasive sensors are connected to specific sites on the surface of the scalp. These sensors pick up brain wave patterns that are displayed on a computer screen. Based on the location of the sensors on the scalp, specific areas of the brain can be trained to correct abnormal wave patterns and replace them with healthy rhythmic patterns. The neurofeedback equipment can select and display many electrical patterns and frequencies. Two of the most important ones are Beta, a fast wave, and Theta, a slow wave. Generally, the goal is to produce stronger Beta waves and reduce excessive Theta waves. The computer assists the brain in recognizing healthy rhythmic patterns by producing audio and visual rewards (reinforcement) when the desired patterns occur. The brain self-corrects rapidly. A typical neurofeedback training session lasts approximately 30 minutes. Most patients benefit from a series of 20 to 70 sessions. Usually patients notice improvement within 5 to 10 sessions.

Results of Neurofeedback

Results of the treatment are long-term unless another trauma or injury occurs. Once "trained", the brain remembers its healthy rhythmic patterns. When healthy patterns become established, regular neurofeedback treatments are no longer necessary. However, an occasional "tune-up" session may "remind" the brain of its healthy pattern. **All Digital 'Real Time' EEG Neurofeedback* was invented and patented by Margaret Ayers. Ms. Ayers worked as an electroencephalographer for UCLA Medical School beginning in 1975. She was the first to publish research on using EEG Neurofeedback to treat head trauma, stroke, and quadriplegia. She has won international recognition for her work in neurofeedback equipment design and has pioneered work with head injury, coma, ADD, and learning disorders. She currently practices in Beverly Hills, California.