QEEG QEEG is an FDA approved, evidence-based diagnostic tool that measures the speed and processing of brain function. Crossroads Institute utilizes this objective tool because it allows us to actually measure the brain's processing speed and overall brain function.
Much like a road map, brain maps show us not only which brain systems are out of balance but also where the imbalances are located. Only by using objective measures can the brain's processing and cognitive abilities be determined. We do not know of any other science-based method that uses real number and NIH funded databases that can determine the speed of processing and function of the brain.
fQEEG allow us to determine what type of program an individual should undertake to correct brain based imbalances.

Related Articles in the Learning Center:

QEEG General Information
QEEG: What is Brain Mapping?
QEEG: Brain Wave Information
QEEG: Bibliography

What is QEEG & fQEEG?

QEEG is an FDA approved, evidence-based diagnostic tool that measures the speed and processing of brain function. Much like a road map, Brain Maps show us not only what brain systems are out of balance but also where the imbalances are located. Only by using objective measures can the brain's processing and cognitive abilities be determined. We do not know of any other science-based method that uses real number and NIH funded databases that can determine the speed of processing and function of the brain. fQEEG allow us to determine what type of program an individual should undertake to correct brain based imbalances. QEEG measures brainwave acitivity. To learn more about brainwaves and what they mean click here.

Why is it important?

Imagine if you were in an accident and went to a hospital or doctor's office to find out the extent of injury you had sustained. What if, instead of sending you to x-ray, you were told it wasn't necessary to determine precisely where there might be break or even if you had a break. What if your entire legs or arms were instead placed in a cast (just to be safe), or worse what if the wrong leg or arm were placed in the cast because it could not be determined by talking to you where there might be a break, sprain or damage? Wouldn't you be a little alarmed if objective measures (x-rays) were not used prior to recommendations being made for treatment?

We feel the same way about your brain. We believe your brain is very important....and that each brain is very different. So, how can anyone know what areas might be out of balance without using objective measures (brain mapping) to make those determinations? We don't believe a one-size-fits-all approach or program works for each individual any more than a professional would recommend placing a cast over your entire arm or leg. So, prior to recommending a customized program we want to know exactly where to target our activities and therapies based on objective measures. This not only makes good sense, it is also in the client's best interest. How can you know where and when physiological improvements have occurred if there are no

measurements and no baselines in which to compare? **The Science Behind QEEG**
The qEEG is used by those in a professional practice for the following clinical applications: evaluating effects of medications and predicting medication response, head traumas, cognitive and psychiatric changes, neurodevelopment, neurotherapy, peak performance, and predicting protocols for training. (Gunkelman, J., n.d.)

QEEG reveals " . . . a level of specificity and sensitivity that is comparable to sonograms, blood tests, MRIs and other diagnostic measures commonly used in clinical practice." (Thatcher, R., Moore, R., John, R., Duffy, F., et. al.,1999)
This body of research supports that QEEG has a high level of reliability that is equal or superior to routinely used clinical tests such as mammograms, cervical screenings, blood tests, MRI and CAT scans. A comprehensive literature review in the Journal of Neuropsychiatry and Clinical Neurosciences reported, "Of all the imaging modalities, the greatest body of replicated evidence regarding pathophysiological concomitants of psychiatric and developmental disorders has been provided by EEG and QEEG studies." (Hughes & John, 1999)

Over the past 30 years, a method of QEEG analysis called Neurometrics has been developed at the Brain Research Laboratory of New York University's Medical Center, under grant from the National Institute of Health.
Neurometric analysis received FDA approval [510(k) 974748] as a diagnostic tool and presently is the only objective measure for many neurologically based disorders. This process is used in select hospitals, clinics and research centers around the world.
At Crossroads we also use this more objective, accurate and detailed diagnostic tool as part of our NeuroGeniSys Procedure™ to create the most effective report of findings and then make appropriate recommendations for programs, activities, therapies and protocols. This brain map provides us a baseline to work from while we retrain the brain. For independent reading and a closer look at the science behind QEEG please see the lists below. **References**
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Gunkelman, J. (2007) A longitudinal study of the impact of the qEEG phenotype approach in neurotherapy outcomes in an AD/HD psychology practice. Presented at Applied Neuroscience Conference; Nijmegen, The Netherlands, May 20, 2007
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