

IASIS MCN: Micro Current Neurofeedback

Informed Consent

What is IASIS MCN?

Micro Current Neurofeedback (MCN) is designed to help the brain rebalance and reorganize itself. The process involves applying small sensors to the head and neck that detect and monitor brainwaves and then send the resulting electronic signals to a computer and a specialized EEG processor. The IASIS computer returns a tiny impulse that is virtually a mirror image of the brain's own waves. The extremely weak electromagnetic pulses come from the EEG cables and will be neither visible nor "feelable", yet produces a measurable change in the brainwaves during the feedback session. For reference, a cellular telephone generates a signal at least millions of times the power of the IASIS MCN: Micro Current Neurofeedback feedback signal. The intensity of our field is less than a trillionth of a watt and is on for a few seconds during each session. A background signal approximately a thousand times less than the feedback signal is also present as soon as the EEG begins to read the brainwaves. No instances of problems with the emissions from the feedback have ever been recorded.

To paraphrase Dr. Nicholas Dogris, Ph.D., the process is "...a simple whisper of energy needed to nudge the brain and evoke change in a positive direction... People get better because the brain makes the correction not the doctor." The MCN signal directly correlates with the dominant brainwave frequency and thus requires no conscious effort and can't be the wrong signal. The changed brainwave state has much greater ability for the brain and nervous system to regulate itself including the sympathetic and parasympathetic nervous systems. Brain chemistry is also affected in ways that are still not fully understood. MCN enables the brain to release fixed patterns. By promoting (allowing) the brain to reorganize itself and shift from its formerly fixed patterns, MCN is like rebooting a computer, your brain. The body responds by developing new neural pathways, increasing neuroplasticity. It literally allows the brain and nervous system's chemical imbalances to self-regulate. After successful treatment, prescription drugs may often be reduced or discontinued with professional guidance. MCN has been used with approximately 75,000 patients. In clinical use, MCN has been observed to be significantly helpful in treating a variety of conditions.

Conditions to consider for application of IASIS MCN

Although there is no guarantee, conditions that IASIS MCN has been reported to benefit include:

- **Anxiety** including symptoms of panic attacks, generalized anxiety and PTSD, impulse control, irritability, emotional outbursts or wide emotional fluctuations, anger and rage, explosiveness, fears
- **Depression** including bipolar conditions, lack of joy and flat emotions, social withdrawal, feelings of helplessness, deep sadness, loss of energy, lack of motivation, and loss of sense of humor
- **Head trauma** including those with mild/moderate Traumatic Brain Injury (TBI), concussions, blast injuries, strokes, brain or cranial surgeries, seizures
- **Cognitive dysfunction** including ADD/ADHD, some learning disabilities, brain fog, cognitive deficits from stroke, poor memory, being unable to do more than one thing at a time, problems following conversations and reading material, problems absorbing and understanding what people say, problems of clarity, thinking and estimating clearly, Oppositional Defiant Disorders.

- Closed-head injury symptoms of irritability and explosiveness, loss of energy, motivation, and sense of humor, problems of clarity, thinking and estimating clearly, memory difficulties, sleeping problems.
- Post-traumatic stress disorder symptoms of: anxiety hypervigilance, fears, anger/rage, deep sadness, irritability and restlessness, feelings of helplessness, sleeping problems.
- Obsessiveness including compulsions, individuals who say their brain won't stop, some aspects of autistic spectrum disorders, sleep disorders
- Addictions including those to alcohol, prescription medications, nicotine/cigarettes, and recreational substances (cocaine, marijuana, etc.)
- Fatigue and Pain conditions including fibromyalgia, chronic fatigue, chronic pain, neuro-inflammatory states

How can IASIS MCN Treat So Many Conditions?

All the conditions mentioned above have a common denominator: the brain is “frozen” or “stuck” in a dysfunctional pattern. This is why medications often are unable to satisfactorily address the above conditions - increasing a chemical through supplements or medications, blocking a reaction or receptor, etc. does not help the brain achieve its natural state of flexibility, self-regulation, and focus. When the IASIS processor sends a very brief very tiny impulse to the brain at a programmed rate, a temporary fluctuation in the brainwaves occurs and prompts the brain to adjust itself. This temporary change allows the brain to reorganize itself, re-orient itself, and become more flexible as it is intended. It gets “unstuck” from its mal-adaptive state. The brain rapidly and seemingly automatically gets accustomed to a better level of function - its natural ideal state that is free of unwarranted anxiety, pain, confusion, etc. Thus IASIS does not train the brain like traditional neurofeedback, but instead “dis-entrains” the brain by allowing it to reorganize itself and release itself from frozen, stuck patterns. As said above, this is analogous to re-booting a frozen or malfunctioning computer.

What results are expected from IASIS MCN?

Over 85% of clients who respond to treatment are by their own assessment very meaningfully helped. For example, > 85% of those with mild/moderate Traumatic Brain Injury (TBI) respond positively and notice a reduction in head pain, brain fog, impulsivity and better sleep during the first few sessions. The same is true for anxiety and Post-Traumatic Stress Disorder (PTSD).

The normalizing changes associated with IASIS MCN have been shown in preliminary studies to be clearly evident on sophisticated brain mapping techniques (MEG). Even more impressive is that the benefits generally are long lasting. Most individuals report feeling a mood or condition shift during or within 24 hours of the initial session. Family and friends may also notice the shift in one to three sessions. Initial changes are often temporary, but due to the cumulative nature of MCN, the improvements last longer with each session. By the end of a series of 12 IASIS MCN sessions, improvements are usually substantial and long-lasting. While some individuals require “tune-ups,” for the most part the benefits endure. It seems that the brain regains a healthier homeostasis, balancing its neuro-chemicals, and its lifelong ability to adapt and learn (neuro-plasticity). The results of a series of IASIS MCN sessions creates a natural resistance to returning to a dysfunctional state. The number of sessions to achieve sustained optimal brain function depend on the individual, their condition and acuity. There is data on patients for over 10 years after neurofeedback treatment showing that their improved condition is “holding.”

The IASIS MCN Procedure

Some electrode gel or cream will be applied to the skin on certain sites on the head. Two sensors are attached behind the ears, to improve the quality of the recording. A third sensor will then be pressed to your neck as the reference or ground. The fourth and fifth sensors are moved to other scalp sites. No invasive procedures are used.

The equipment assesses a client's brainwaves -- extremely faint electrical signals measured at discrete locations on the scalp. After a short assessment of these brainwaves by a clinician, the equipment itself then generates extremely faint, battery-generated signals that the brain may respond to in beneficial ways.

Duration of Treatment

You will have as many sessions as you need, each session lasting between 25-60 minutes. Some of the time will be spent, as needed, talking about what effects, if any, the feedback has had on you. The initial session may take 45-60 minutes in total or shorter as needed. Follow up sessions may take 25-30 minutes.

IASIS MCN is practically 100% Safe

IASIS MCN employs an FDA registered EEG amplifier and is extremely safe. The amplifier is small, lightweight and portable and puts out a signal that is about 3 picowatts (0.000000000003 watts), which is 1/300th the strength of a cell phone signal and lasts only 1/100th of a second. To put it another way, IASIS emits a signal that is only 5 billionth of the average of output of a AA battery held to prepped skin for only 120 nanosecond (which is 1/10th of a microsecond). The intensity is far below anything a human can feel, sense, or detect. Your brain and body is exposed to far stronger electromagnetic impulses from the typical environment many, many times a day. There is really no medical condition, age, medication, allergy, etc. that would be a contraindication for using IASIS MCN. Even a pregnant women or young child would not be restricted from IASIS! Pets seem to love being treated with the IASIS. Does Micro Current Neurofeedback affect only negative patterns? Will it change my positive qualities? Only frozen, stuck patterns are affected. Healthy, functional brainwave patterns are flexible and resilient. When there is a tiny fluctuation they automatically spring back to their healthy patterns. With the over 100,000 clients using the system, there have been no reports of injury or undesirable outcomes. Because IASIS is a registered medical device, neurofeedback is not intended for home use and is only to be administered to patients by trained doctors and clinicians. The decision to use IASIS on any one is solely up to the clinician.

What are some of the possible responses to the MCN session?

The most commonly reported responses are mental clarity, a sense of calmness, clearer vision and senses, and more restorative sleep. The return of energy during the day, restful sleep at night, a sense of humor, motivation to get things done, ease in completing tasks, memory and recall, ability to read and listen with little or no distraction, and the absence of depression, irritability, impatience, and explosiveness have been observed repeatedly. Those with head injuries and/or psychological traumas

have reported their ability to function in their work and personal life has been regained. In the first few MCN sessions, about 1 in 20-25 (~5%) individuals experience temporary fatigue, “light headedness” or a feeling of being “revved up.” Transient mild headaches, nausea, insomnia, or light/noise sensitivity have also been mentioned. These symptoms are always temporary and typically last only a few minutes to a few hours. Taking ¼-½ teaspoonful of baking soda (sodium bicarbonate) in 4-6 ounces of water may help shorten the reaction. These temporary reactions are expected to be even less common with the new protocols in our updated IASIS device.

Between Sessions: While many people feel energy, ease, clarity, and happiness after a treatment these positive feelings may precede feelings of fatigue, depression, and anxiety between sessions. Those “rebounding” from good feelings often feel discouraged and doubtful about their ability to finish treatment. The rebound appears to be the brain’s way of struggling to remain in the old, familiar, and dysfunctional state. With continued neurofeedback, both the intensity of the good feelings and the unpleasant rebound periods tend to become shorter and less intense until the exaggerated feelings no longer occur. Relief from life-long problems can be uneven. The symptoms can feel at times sharper than they were before; then pass, and then tend to rise less in subsequent cycles of rising and fallings. It is not unexpected that during each cycle, you may become anxious and filled with doubt about the wisdom of this strategy. It is important to know that since MCN was introduced, no one has remained worse, 3% remained the same, and the rest have improved. Never the less, there is no guarantee of improvement or that you will remain free from these problem cycles.

Fee Policies:

Single Treatments:

Fee for Neurofeedback treatment is \$125.00 for the first session and \$100.00 for subsequent treatments. Minimum of 10 sessions is recommended with 15-20 being optimal.

Package:

An initial 5-Session Package (To include consultation and first treatment):

\$500 (25.00 savings) Paid in full

Discounts offered to families coming together.

Veteran’s, active military and first responders

\$100/treatment

Any cancelations less than 24 hours is subject to a \$50.00 fee paid at your next session.

Consent For Treatment

I, _____, give my full permission to Tricia Imel RRT, BS, ICP or other staff of her office to use any data collected during the preparation and participation in the Iasis MCN: Micro Current Neurofeedback sessions, and I give up all implied and actual ownership of any data collected.

You will need to attend a minimum of 1 to 2 sessions per week for, on average, 10 to 20 neurofeedback sessions. Initially, two or more sessions per week are preferred for optimal results. Please note that while many people can complete neurofeedback treatment in 10 to 20 sessions, some patients require many more sessions to successfully complete treatment.

As a general rule, neurofeedback treatment frequency decreases as the severity of the cognitive, emotional, or behavioral disorder decreases. Successful attainment of your treatment goals is highly dependent on consistent attendance at neurofeedback training sessions as well as daily practice of skills (if applicable).

Before beginning this neurofeedback program, please be sure that you can commit to and have time for your treatment plan and can attend all scheduled sessions even when doing so may become inconvenient, uncomfortable, emotionally challenging, or even boring at times.

In order to ensure the best chance of steady progress and prevent setbacks, it is advisable to schedule the start of this training program when you are sure you will not leave town for an extended period or have other distractions that would interfere with attendance.

Initial here: _____

Physician Consultation and Medication Monitoring:

Because neurofeedback can influence (as well as be affected by) certain types of medication and medication levels, all individuals entering treatment who are currently under the care of a physician are asked to: 1) inform their prescribing physician of their intent to begin neurofeedback and; 2) grant written permission to this facility to contact their physician for medical consultation and monitoring of the effects of the neurofeedback treatment on their physical condition and medication levels.

In addition, the patient should immediately inform the neurofeedback provider of any changes in medication (increases, decreases, implementation of new medications) that occur while in treatment. As neurofeedback training progresses, know that over-medication effects can occur. If this happens, a patient must also notify his/her physician that medication adjustments may be needed (often to decrease medication). This will help to ensure that neurofeedback is able to work and to avoid possible over-medication effects such as irritability, hyperactivity, and other potential changes in behavior.

Initial here: _____

Confidentiality of Session Information:

Neurofeedback sessions are protected by the same HIPPA and other privacy guidelines that you consented to on the initial paperwork you completed for this office. Information is kept strictly confidential and not disclosed without your written permission. Exceptions are those required by law, such as: (1) Danger to yourself or others (i.e. threats of homicide or suicide); (2) Abuse of children or the elderly; (3) under court order; (4) in the event that legal action is brought against this clinic or the providing clinician. With these exceptions, any data released or published will not identify you by name.

Initial here: _____

I acknowledge that I have been given an opportunity to ask questions regarding this new treatment and that these questions have been answered to my satisfaction.

I acknowledge that I have been given, read, and understand the informed consent, and agree to participate in this treatment.

I understand that I may discontinue treatment at any time, and that I may refuse to consent without penalty.

I hereby give my consent to Tricia Imel RRT, BS, ICP or the staff of her office, to record both benefits and unpleasant effects from IASIS MCN.

Initial here: _____

I understand that if for any reason I must cancel an IASIS session appointment giving less than 24 hours notice, I am responsible for a \$50.00 CANCELLATION FEE and agree that I may be charged for the canceled session.

Initial here: _____

Signature

____/____/____
Date