# About the LENS

LENS was developed over 25 ears ago by Len Ochs, PhD. This gentle, non-invasive neuro and bio feedback technique is helping people all over the world regain brain function and reclaim their lives! Think of this as a way to painlessly "re-boot" and "reenergize" your brain, allowing greater ease in learning, work, and play. Clearer thinking, better sleep, emotions that are easier to manage, better memory, and so much more can be yours!

LENS encourages the brain to regain flexibility which in turn allows improved quality of life. When the brain in injured, it 'locks' itself down in an attempt to protect itself, causing forgetfulness, difficulty completing tasks, reactive emotions, and so much more. LENS increases the blood supply, awakens and balances the parts that aren't as active as we need them to be, thus allowing us to reclaim and create the life we would like for ourselves.

STRESS RELIEF is a treatment done with clips on the ear lobes and a sensor that is moved to each fingernail. Your stress levels are reviewed at the start and at the end of the treatment, the vast majority of clients experience a dramatic drop in anxiety, agitation and stress levels. What a relief!

BODY LENS works to "re-boot" or "re-set" nerves that forget to turn off after an injury of some kind. This painless treatment can potentially completely change your life... One lady had chronic neck and shoulder pain for the last 40 years... in one treatment it went from 7-8/10 pain to 1/10 pain... for some, it is just that quick. For others, it takes more time. One woman's foot was swollen and bruised, 8/10 pain, from dropping a piece of furniture on it... after BODY LENS, it was 4/10... in 105 seconds.

Low Energy Neurofeedback System (LENS for short), resets the neural-connectivity of the brain and nervous system. It allows the brain to communicate better with itself, and in doing so the brain optimizes its own functioning. As a result, it has the capacity to address numerous symptoms and deficits. Results can be seen quickly, often beginning within the first session, and are lasting.

Neurofeedback is based on electrical brain activity, the electroencephalogram, or EEG. Neurofeedback is training in self-regulation. Self-regulation is a necessary part of optimal brain performance and function. Self-regulation training allows the nervous system to function better.

How Is the LENS Different from Other Types of Neurofeedback?

Each client's EEG signals are unique to them and constantly changing. The LENS measures these ever changing signals of the client, and matches the treatment to the client's own physiological (neurological) fingerprint. Traditional neurofeedback requires conscious attention to stimuli for sessions that are 45-60 minutes long. Results are typically attained over 40 or more sessions.

LENS does not require any focused attention, and the person does not need to do anything specific during the session. The treatments themselves last between a few seconds and a few minutes (more than one area may be treated during a session), and results are typically seen in 7-20 sessions. This makes LENS an

excellent option for all individuals, including those who are unable to attend for lengthy periods of time and/or who are unable to understand instructions.

There have been hundreds of clinical studies as well as double blind studies done, we have compiled most of them on our "Research Attachment"

# What is LENS?

**LENS**, or **Low Energy Neurofeedback System**, is Biofeedback, by way of a specific neurotherapy method.

The aim of the LENS is to modulate the frequencies of the brain's electrical activity and to interrupt its dysfunctional patterns

As a result, **your patients** obtain a **significant improvement** in their ability to **self-regulate**. This enables an easier and faster integration of the therapeutic process.

# What are the applications of LENS?

LENS Neurofeedback addresses the **functional blocking** of the **Central Nervous System** that <u>underlies</u> a variety of **diagnoses**:

- mood, emotional lability
- attention, sequencing, concentration, memory
- anger, sadness, explosiveness
- motor coordination
- motivation to begin and/or complete tasks
- agitation, rumination, respiratory distress, palpitations
- sleep interruption
- hyper-reactivity, hypersensitivity
- social interaction
- attachment and trauma

# Is it medical equipment?

LENS Neurofeedback is a biofeedback tool that is FDA Registered.

This means that it does not have a declared, specific purpose of serving for diagnosis, treatment or relief of any medical or psychological condition.

LENS Neurofeedback strengthens your **capacity to self-regulate** and this can mean a change in the way you **react** to the **symptoms of the illness** while allowing the brain and neurology to reorganize itself.

LENS Neurofeedback is not intended to be a replacement or substitute for any form of conventional medical treatment.

# Who can benefit from the LENS method?

LENS Neurofeedback is suitable for **all types of patients**, regardless of their age (from 6 months)

and their ailment. Your skill and expertise as a LENS professional will determine whether it is suitable for use in complex cases.

# What is a LENS session like?

A LENS Neurofeedback session, within a therapeutic process, normally occurs as follows:

- 1. **First** the LENS professional assesses the **progress of their patient** since the last session
- 2. **Then** the professional selects the **application and the number of sites** on the scalp where the LENS feedback is going to be sent, depending on the patient's characteristics and progress
- 3. The **time** during which the patient is receiving **feedback** is normally just a **few seconds** for each position. The patient does not have to "do" anything specific
- 4. **Once finished**, the professional goes over the changes in the brain through the proprietary LENS brain mapping system.

What does the patient notice after receiving LENS sessions? The effects of the LENS on your patient are quite specific to each person. LENS feedback is totally painless and imperceptible.

Immediately **after** the feedback, your patient tends to feel **more relaxed, clearer and sleepy**. From that moment on, your patient's **nervous system** will start reorganizing itself, seeking a **new balance**.

Over the **next 24/48 hours** patients tend to notice **internal changes** depending on the problem that brought them to your practice: more mental clarity, more relaxation, deeper and more restful sleep, more emotional stability, more energy and zest.

Thus, the LENS will act as an excellent **ally** of your **therapeutic goals**. In **75% of patients**, the **changes** will begin to be apparent before the **5th session**.

# How long does a LENS session last?

The time that the therapist uses LENS with each patient varies from just **a few seconds to some minutes**, basically depending on the sensitivity and reactivity of each individual.

This is why LENS Neurofeedback combines so easily with any other therapeutic technique

# How many LENS sessions are needed?

The **number of sessions** that each patient needs depends on **two variables**: the type of **problem** being treated, and the **patient**'s characteristics (sensitivity, reactivity, resilience).

As a general rule, patients with a **functional past**, with non-congenital and **sudden onset** problems, require **few sessions** (between 7-10).

Most people notice profound results in multiple areas with 10-20 sessions, that are long lasting without need for repeated frequency of sessions.

By contrast, some patients with **low sensitivity** to feedback and with a **long history of multiple problems** could need up to 40 sessions.

In just a few circumstances such as spinal cord injuries, very serious head trauma and physiological impairments of genetic origin, MS, Parkinson's and other degenerative conditions the number of sessions can easily amount to hundreds in order to maintain a constant improvement in functions.

# How frequent are LENS sessions?

LENS Neurofeedback sessions are usually given weekly or fortnightly.

Therapists can administer LENS as frequently as they apply their therapeutic techniques.

#### What side effects have been observed?

LENS Neurofeedback can evoke some past symptoms in the patient that have not been fully overcome.

The LENS professional knows how to **graduate the intensity** of LENS feedback to **facilitate the integration** of said symptoms, avoiding unnecessary discomfort for patients.

#### Are there any contraindications?

LENS Neurofeedback is **100% safe**. In over 25 years, LENS has not hurt or injured any patients.

However, LENS can evoke the reappearance of **past symptoms** in the patient which have not been fully resolved, to later **integrate and overcome** them.

Given that LENS appears to cause a momentary vasodilatation, it is not advised for patients with very **low blood pressure**.

#### Are the effects of LENS lasting?

The changes are **lasting and stable** once the process has ended. A small percentage of patientswill need periodic reminder sessions.

### What professionals can administer LENS?

LENS Neurofeedback is exclusively used by health professionals in a therapeutic setting

who have been trained on the specific system.

## Can LENS be combined with other techniques?

LENS Neurofeedback is the **ideal ally** for combining with **any therapeutic techniques** that you use, because it takes up **very little time** in the session and because **it facilitates and enhances the** 

**results** of any therapy, such as <u>neurofeedback</u>, <u>electrical stimulation of the brain</u>, <u>behavioral</u> therapy, <u>EMDR</u>, <u>neurorehabilitation and physical therapy</u>, <u>etc</u>.

# How does LENS differ from traditional neurofeedback?

**Traditional neurofeedback** requires conscious awareness of the stimuli in sessions lasting between 45 and 60 minutes. Results are normally achieved over 40 or more sessions.

# LENS does not require any sustained care, and the patient does not need to do anything specific during the session.

The session lasts between a few seconds and a few minutes, and the changes are often apparent from the first session.

This means that LENS Neurofeedback is an excellent option for **all patients**, including people who can't sit still for long periods of time and/or cannot understand the instructions.

# How does LENS differ from pEMF - Pulsed Electro Magnetic Field?

Unlike **pEMF** systems, LENS feedback is not in the form of *pulses*, but travels in a **continuous carrier wave**. The **intensity and duration** of the wave is so **small** that many consider it non-existent. By contrast, the intensities and durations of pEMF sessions are much greater.

LENS Neurofeedback in addition is a **resonant system**, as it makes the feedback match your patients' physiology. None of the pEMF devices do it in the same way as LENS. The power of LENS is based on this resonance and its **unique brain** *mapping* system.

What Conditions Can LENS Help With?

Functional Areas	Diagnostic Area	Underlying Functional Areas to Address
Cognition	ADD, TBI, Autism, Asperger's, learning disabilities	Problems sequencing, memory, providing and maintaining attention, concentration, clarity, organization
Mood	Depression, prolonged or incomplete grieving, PTSD, bi-polar, reactive attachment disorder	Anger, sadness, explosiveness, road rage.
Motor	Paralysis, spasticity, clumsiness, progressive disease (Parkinsons, Alzheimer's, MS), stroke	Lack of grace, problems of eye-hand coordination, balance, increased muscle tone (from spasticity),
Motivation	Depression, lack of motivation	Problems initiating tasks, shifting from one activity to another, and/or completing tasks
Anxiety	The experience of anxiety, ADD, ADHD, anxiety attacks, PTSD, dissociative problems, sleep disorders, OCD	Too much uncomfortably-contained energy: persistent "anxiety", restlessness, rumination, agitation, distraction, difficulty breathing, palpitations, tremor exacerbation, and sleep interruption
Reactivity	Personality disorders, borderline, seizures (epileptic form and non-clinical)	Hyper reactivity, hypersensitivity, multiple chemical sensitivities
Pain	Fibromyalgia, migraines, unresolved body pain	Brain-generated pain (mismapping the origins and qualities of the signals); vascular pain
Addictions & Dependencies	Drug or alcohol addiction and dependency; eating disorders; substance abuse	Lack of clarity about emotions and self-comforting; defensiveness, argumentativeness, cynicism

**Cognition** – Problems sequencing, memory, providing and maintaining attention, concentration, clarity and organization.

**Seizures** – Restores normal brain function, interrupts the pattern running the seizures giving the brain the time and space needed to re-harmonize. **1 EXAMPLE:** LENS was used it to treat a fellow who had to go off his seizure medicine after 40 years and was having somewhere in the neighborhood of 20 grand mal seizures a day and 100 absentia seizures. In this case, the patient was able to eliminate all grand mal seizures and brought the patient down to about 15 absentia seizures after 40 sessions.

Mood – Anger, sadness, explosiveness.

**Motor** – Lack of grace, problems of eye-hand coordination, balance, increased muscle tone (from spasticity) and tremors.

Motivation – Problems initiating tasks, shifting from one activity to another, and/or completing tasks.

**Anxiety** – Problems of anxiety system activity (too much uncomfortably-contained energy), persistent "anxiety", restlessness, rumination, agitation, distractibility, difficulty breathing, palpitations, tremor exacerbation, and sleep interruption.

Reactivity – Hyperreactivity, hypersensitivity, multiple chemical sensitivities.

Pain – Brain-generated pain (mismapping the origins and qualities of signals), and vascular pain.

Addictions/Dependencies – Lack of clarity about emotions and self-comforting, defensiveness, argumentativeness and cynicism.

**Fatigue** – Fatigue; or fatigue as a phenomenon secondary to the effort of trying to overcome the pain and/or the above impediment to functioning more easily.

**Limbic System** – brain dysregulation and pattern disruptions between the brain and the heart can create a number of different symptoms and emotional imbalance. Anger, fear, joy, etc. Emotions, memory, arousal and response-reaction.

Performance Optimization – Increases in functioning in the above areas in absence of any diagnosis.

The LENS works well with symptoms of Central and Peripheral Nervous Symptom dysfunction. These include symptoms of ADD, ADHD, Seizures and sub-clinical seizure activity, severely disruptive behavior disorders such as Conduct Disorder, Reactive Attachment and Bipolar Disorder, Autistic spectrum and pervasive developmental delay, Cerebral palsy, concussive injuries, PTSD, POTS, Acquired Brain Injury, and Birth Trauma.

The LENS works extremely well with the symptoms of Traumatic Brain Injury, no matter how long ago the incident occurred. The trauma can be from a physical blow, a concussive injury, a psychological incident (PTSD), or any other incident(s) which results in a decrease in cognitive ability. Depending upon severity of the TBI results have been seen in as little as 10 sessions and for more serious injury as many as 40.

Many children have sleep problems that can be helped such as bed wetting, sleep walking, sleep talking, teeth grinding, nightmares, and night terrors.

The LENS can also be helpful with many of the symptoms of adolescence including drug abuse, suicidal behavior, anxiety and depression.

The LENS can also help in maintaining good brain function as people age.

# What Is the Success Rate with the LENS?

LENS has an extremely high success rate when the proper # of sessions is met as well as each individuals "Recipe for Health". There is no panacea in life, however there is always a "magic recipe" in which people report at times miraculous level changes int heir mood, behavior and physical health. It turns out that among the vast majority of clients the actual outcome exceeds the prior expectations. When success is not forthcoming, or the gains cannot hold, there is usually a reason for that which needs to be pursued. In the normal course of events, neurofeedback ought to work with everybody. That is to say, nearly everyone should make gains that they themselves would judge to be worthwhile. Our brains are made for learning, flexibility, growing new pathways and skill-acquisition.