The SCIO/Eductor Technology in Naturopathic Medicine

Quotes about the CES from Super-Learning 2000 by Sheila Ostrander and Lynn Schroeder

"Instruments like the CES for instance, generate frequencies that evoke both IQ- and memory-boosting chemicals while also proving to be powerful healers of addiction and depression." Page 96

"The implications of this work are stunning," says physicist Bob Beck, the expert on electromagnetic fields, long employed as a consultant to the Department of Defense.

Beck, a close friend of Meg Patterson, was soon swept into an adventure of discovery. He studied all her research and everything he could uncover in the Defense Department. Working with spectrum analyzers and sophisticated equipment, he came up with a device: the Brain Tuner 5+, which broadcasts the frequencies of the three "magic" ranges of neurotransmitters – enkephalins, catecholamines, and beta-endorphins. He set up the frequencies in bundles. Instead of sounding one for each neurotransmitter separately, he put 256 frequencies together like a resonating chord of music. His device, smaller than a Walkman, runs on a 9-volt battery and is safe. The Brain Tuner has electrodes on a stethoscope-like headset that fit in the hollows behind the ears. Acupuncture points behind the ear effectively circulate electro-stimulation on the "Triple Warmer" Meridian. You wear the device just twenty minutes per day.

"Double-blind studies were done at the University of Wisconsin on the CES capabilities to overcome drug-withdrawal symptoms and it did the job. Studies at both Wisconsin and the University of Louisiana showed it could boost IQ from twenty to thirty points. CES stimulation appears to enhance neural efficiency," researchers stated.

'Users report the CES reduces stress, improves short and long term memory, helps learning, increases energy, improves concentration and reduces pain, anxiety, depression, and sleep requirements.'

"Dr. Donald Kubitz, of San Francisco, one of the first American doctors to study Dr. Wen's work with electro-acupuncture on addicts, believed electro-stimulation could be enormously beneficial for autistic and other mentally handicapped children. Both the CES and electro-acupuncture could prove powerful new ways to open fabulous new dimensions of mind as well as overcome disabilities and addictions."

Reference to Dr. Meg Patterson: "Scottish surgeon Margaret Patterson studied Wen's methods in Hong Kong. Back in England she developed highly sophisticated machines that produced neurotransmitters by electro-stimulation of the brain. Then she set up her own treatment center in California. Famous clients were flown in, some on stretchers – rock superstar Peter Townshend for one, guitarist and composer for The Who and creator of the hit rock musical Tommy. A drug addict for years, Townshend had spent a fortune trying to kick his habit. Within forty minutes of applying the device, the heroin was counteracted. Ten days of treatments later he was over his addiction to heroin, alcohol, and cocaine, with no withdrawal symptoms." Page 204

Mega Brain Power, Michael Hutchinson, 1994

Chapter Nine: "Recharging the Batteries"
"Beth was given anesthesia when she gave birth to her first baby and later found that she had lost part of her memory. She was forced to give up her job in an aerospace plant. Years later a friend gave her a small cranial electro-stimulation (CES) device and she began using it.

‘Almost overnight,’ she said, ‘all my memories started coming back, including everyone’s telephone extensions at the plant. It was uncanny – all those old extension numbers of people I hadn’t thought of in years.’

"This story, told to me by researcher Bob Beck, Ph.D., provides graphic evidence of a key fact: We have electrically-powered brains. Each of the billions of neurons in our brains is a tiny electrical generator, as complex as a small computer, firing an electrical signal that triggers the release of various neurochemicals and links it with thousands of other neurons."

Guide to Quality CES Devices

"The Brain Tuner (BT 6) was devised by Bob Beck, Ph.D., It uses a complex waveform that, according to Dr. Beck, produces over 250 frequency harmonics simultaneously – “all known beneficial frequencies for the natural stimulation of the brain’s neurotransmitters.”

Chapter twenty-six "Full Speed Recovery"

RESTORING BRAIN CHEMICALS – Electrical Stimulation of Brain Chemicals

"Since addiction, withdrawal, and anhedonia are the result of insufficient levels of certain brain chemicals, or undeveloped pleasure centers and pleasure pathways, the most direct way of eliminating them is to restore optimal levels of the brain chemicals, to stimulate the pleasure centers and pleasure pathways. One of the most exciting breakthroughs in the treatment of addiction has been the discovery that stimulating the brain quickly to pour out large quantities of the neurochemicals that have been suppressed by addictive substances.

"As an electrotherapy researcher, Bob Beck described it to me, this was originally discovered when scientists analyzed the brains of rats that had been addicted to opiates"

The rats that were addicted had been getting so much opiate that the little endorphin factories in the brain would shut down and basically say, "Look, our body’s got too much of this. Quit manufacturing it..."...

... and it would take anywhere from a week to three weeks before the brain of each rat would begin manufacturing beta-endorphins again. Whereas in the brains of the control rats that had never been addicted, you would find the normal, expected levels of beta-endorphin. And then they would take a third group of addicted rats, cut them off ‘cold turkey’ from the heroin, clip miniature electrodes to their ears, and within 20 minutes of electrical stimulation... the brain of each rat began showing that the endorphin production had started up again. So, those rats wouldn’t go through withdrawal symptoms!

"This evidence quickly led to the use of CES devices in the treatment of humans."
"Homeostasis can be defined as the tendency for intrinsic balance within a system. Application of a range of CES appears to enhance the Balance of the biological central nervous system. A change in one system within the individual will have correlative effects upon other systems. Improvements in mood, cognitive function, self image, shift of locus, control to oneself, and sense of well being can be measured. When CES works, it enhances one's ability to handle or deal with situations that were previously beyond the range of one's control."

Memory loss probably affects the majority of us in one way or another. More often than not, it is a momentary memory lapse; nothing to worry about – it happens to the best of us. However, when memory lapses begin to become a regular occurrence, it is wise to dig a little deeper and seek. Memory can be affected by a number of factors, some more sinister than others: it may simply be lack of sleep; fatigue due to over-work, lack of exercise, or poor diet; or stress-related. These are all issues about which we can do something constructive to help us. However, memory problems can also be the result of deeper-rooted issues such as brain disease, tumours, or the onset of a brain cell deteriorating disease such as Alzheimer's. Sufferers that have any doubts at all should always seek medical advice with regards to continued memory lost.

The Tenuous Past: Memory and the Ways it Fails
Dana Bakalar

"I remember it like it was yesterday!" you say. But how well do you really remember it? How well do you remember yesterday? Here's a quick quiz: What time did you have lunch yesterday? What exactly did you eat? What did you say? What did the people around you say? If you read the paper yesterday, name all the stories you read and summarize them briefly. Don't remember yesterday as well as you thought? Don't worry, nobody does. Our memories are often thought of as recording devices, mechanically noting what has happened during the day and replaying these events like a tape. In truth, memory is a function of the brain, which is constantly in flux, organic, and does not behave like a machine. Your memory can be affected in many ways by many things, which can cause you to forget, to change memories around, to repress memories, and even to invent completely new ones!
Doctors think memory works in three steps, first is registration, sensory memory comes into play here, we perceive our surroundings and make our observations ready for storage. Retention is the second component followed by recall. If sensory memory is considered important it is rehearsed, repeated, mulled over, and kept in STM for a time. Generally, we can only juggle about seven facts at a time in STM.

When new facts enter, they displace the old, which are either lost or, if they have been rehearsed enough, saved in LTM.

Dr. Daniel Schacter of Harvard University lists "7 Sins of Memory," ways in which our memories fail us.

**His list features:**

**Short-term memory:** (STM), immediate, or working memory is the ability to remember a telephone number for the time it takes to dial it. The item you are going to the closet to get is stored in short-term memory until you get there and retrieve it. You are supposed to forget these things after a brief period, otherwise your head would be full of trivial facts.

Sensory memory- also in the immediate category, includes the ability to recognize smells, sounds, and sights. Unless considered important, visual memory usually lasts only half a second and sounds last a few seconds. Sensory memory is only lost in cases of brain injury and is usually considered as part of the process of perception. Recent memory- is the ability to recall day to day events and is involved in learning new information.
Long term memory (LTM), or remote memory, concerns itself with the more distant past, life events such as your childhood, or your visit to Paris last fall or the doctor last week.

Declarative memory - or is often considered part of remote, or LTM it includes semantic memory - the ability to remember the meaning of words, facts, and a generalized knowledge of the world and episodic memory - your autobiographical memories.

Episodic memory is often effected by amnesia.

Procedural memory - another part of LTM consists of remembering motor skills, knowing how to do things, such as how to walk, ride a bike and eat.

Prospective memory refers to the ability to remember that you need to do something in the future such as planning, organizing, i.e. remembering to bring your purse with you when going to the store.

To this list, some would add "repression," the conscious or unconscious suppression of traumatic memories. Repression was first conceived of by Freud, who felt that people could push memories out of their awareness (1).

This theory enjoyed new fame in the 1990’s, when hundreds of people, mostly women, 'recovered' repressed memories of abuse, fueling a Satanic Ritual Abuse scare during which many people were convicted of heinous crimes they may not have committed.

Herpes simplex virus in humans has long been known to prefer temporal lobe and limbic sites; and not only are olfactory nerves a possible route for infection, but so too might oral cavities provide entry: "Inoculation of murine tooth pulp with HSV selectively infected the mandibular division of the trigeminal nerve and caused encephalitis predominantly affecting the temporal cortex and limbic system, a pattern of disease similar to human HSE [herpes simplex encephalitis]."

For years, physicians and Alzheimer's experts have said that the earliest symptoms of the disease typically don't appear until you're in your 60s, 70s, or beyond. But now there's reason to believe that the first warning signs may actually crop up much earlier than that, and in a seemingly much more benign way: as cold sores, those embarrassing blisters that can erupt on the lips of people who are sick or run-down.

Besides the more everyday ways memory fails, there are many diseases which can affect it. Alzheimer's is probably the most well-known of these. Alzheimer's impairs judgment and changes personality as well as affecting memory.... It occurs most often in older people, who make up about 50% of the population with the disease, and is very rare in individuals under 40..... The memory loss in this disease, as well as in other brain-altering diseases, comes from changes in the physical structure of the brain, rather than from normal brain mechanisms.

"Beth was given anesthesia when she gave birth to her first baby and later found that she had lost part of her memory. She was forced to give up her job in an aerospace plant. Years later a friend gave her a small cranial electro-stimulation (CES) device and she began using it.

'Almost overnight,' she said, 'all my memories started coming back, including everyone's telephone extensions at the plant. It was uncanny – all those old extension numbers of people I hadn't thought of in years.'
"This story, told to me by researcher Bob Beck, Ph.D., provides graphic evidence of a key fact: We have electrically-powered brains. Each of the billions of neurons in our brains is a tiny electrical generator, as complex as a small computer, firing an electrical signal that triggers the release of various neurochemicals and links it with thousands of other neurons."  

Bob Beck, Ph.D

**Memory**
What is it? Webster's defines memory as "The mental capacity or faculty of retaining or recalling facts, events, impressions or previous experiences." Scientists still do not understand how memory works witnessed by the numerous confusing categories and terms, they usually divide it into three types - immediate, recent and remote - based on time.

Children and young adults are often proud of their memories while as adults we generally complain about ours. Achievement in school and the work place is largely dependent on the ability to memorize facts and social success is tied to the ability to remember names and faces. When we reach our forties things change.

Did you ever find yourself looking in the closet but not knowing what you are looking for only to remember what it was when you got back to the kitchen? This is a normal consequence of aging and usually only effects short-term memory.

**Alzheimer's and Autism are linked?**
There are 7 different types!

Herpes simplex type 1 (HSV-1) and type 2 (HSV-2) causes cold sores and genital herpes. Many experts suspect HSV-1 may be involved in Bell's palsy and some other neurological disorders. Herpes zoster is responsible for chickenpox and shingles.

Cytomegalovirus, another member of the herpes family, can cause some cardiovascular diseases and eye disorders, and is particularly dangerous to developing fetuses, newborns, and people with depressed immune systems. The Epstien-Barr virus (EBV) is the virus that causes infectious mononucleosis. Human herpes virus type 6 (HHV-6) and 7 (HHV-7) are suspected of triggering autoimmune disorders, including multiple sclerosis, and roseola, a common illness of early childhood.

Human herpes virus type 8 (HHV-8) is very closely related to the Epstien-Barr virus, and may lead to cancer of the bone, chronic fatigue syndrome, Kaposi's sarcoma, and infection of the lymphatic system.

The good news is - we do become more intelligent and wise as we do age. Wisdom is demonstrated by our increased ability to make associations or links between past experiences and new. This function becomes easier as we accumulate more experiences with time.

Does our memory fail or does it just slow and require more maintenance? This is controversial subject in medicine. Remember that all of the statements made concerning memory loss are based on studies that measure averages of groups of people not individuals. We all know of an 80+ year old who is as sharp witty and intelligent as ever.

"It's all about stimulation and evolution of the mind. Most of us carry too much fear from our childhood, then get lost in coping with the stress of adult life. Some people have the ability to easily take on new experiences and thus pushing the brain to further growth and expansion. Life is intrinsically evolutionary and we are made to evolve and explore our world."

Unknown

The brain shrinks as we age, some of the shrinkage is due to cells dying, but cell death is less of a factor than previously thought. Cell death begins as early as 40 but measurable intellectual slowing does not begin until age 60 and does not accelerate until age 80. Other cells take over the
dying cell function and cell death alone does not significantly affect memory. The neurotransmitter acetylcholine decreases over time and may contribute to age associated memory impairment.

Many studies have shown that low-level electrical stimulation actually promotes cell growth and regeneration. A recent NIH study showed that low-level electrical stimulation of neurons increased the production of the all important myelin cells in the brain.

This could be an important discovery since myelin is shown to be decreased in patients with certain disorders and diseases, including bipolar disorder, schizophrenia, and multiple sclerosis.

*How often have you asked yourself the question:* 

"Why can’t I remember everything I read?"

The problem with poor memory is not confined to reading. It is more generalized in that we also have difficulty remembering:

- dates and times
- telephone numbers
- codes, passwords
- events and occasions
- business facts and figures
- jokes
- etc, etc

"Double-blind studies were done at the University of Wisconsin on the Brain Tuners’s capabilities to overcome drug-withdrawal symptoms and it did the job. Studies at both Wisconsin and the University of Louisiana showed it could boost IQ from twenty to thirty points. Brain Tuners stimulation appears to enhance neural efficiency," researchers stated.

"Users report the Brain Tuners reduces stress, improves short and long term memory, helps learning, increases energy, improves concentration and reduces pain, anxiety, depression, and sleep requirements."

It is not ONLY remembering what you have now read, but remembering what you read yesterday, last week, a month ago, a year ago, and so on.

The problem is not because you are running out of brain storage space. Even when we reach old age, we still have plenty of unused brain capacity available.

"Only one who devotes himself to a cause with his whole strength and soul can be a true master. For this reason mastery demands all of a person." - Albert Einstein
The problem is not TIME. Information simply cannot "leak" out of our ears over time. Why can we remember vivid details of childhood yet the details of last week's newspaper are vague? We remember perfect details of scenes that only happened once, yet information drummed into the brain just simply will not "stick".

Reference to Dr. Meg Patterson: "Scottish surgeon Margaret Patterson studied Wen's methods in Hong Kong. Back in England she developed highly sophisticated machines that produced neurotransmitters by electrostimulation of the brain.

Then she set up her own treatment center in California. Famous clients were flown in, some on stretchers – rock superstar Peter Townshend for one, guitarist and composer for The Who and creator of the hit rock musical Tommy. A drug addict for years, Townshend had spent a fortune trying to kick his habit. Within forty minutes of applying the device, the heroin was counteracted. Ten days of treatments later he was over his addiction to heroin, alcohol, and cocaine, with no withdrawal symptoms."

OMNI Magazine, Volume 5, Number 4, January 1983 an Article was written by Kathleen McAuliffe, "The Black Box: Secret Drug Treatment of Rock Superstars" described how a "Brain Tuner" black box was used by Dr. Margaret A. Patterson, MD., to cure British rock star Pete Townsend of "The Who" of his addiction to heroin.

Cranial electrical stimulation may be a very useful alternative to drug treatments in individuals that have treatment resistant anxiety and/or depression. Furthermore, CES used in combination with the natural amino acids may convert the amino acids more rapidly to neurotransmitters resulting in greater effectiveness.

Eric Braverman, M.D.

21st Century Medicine & Learning
This response submitted by Ronald B. Keys, JD, PhD.
Slow learners and, or, those with impaired nervous system development may have their brains and nervous system jump started. Little did we know back in the 1950s when the movie, Forbidden Planet, with Leslie Nielson, Ann Francis and Walter Pidgeon, that the technology to stimulate brain growth, with a form of cranial electrical stimulation, might be in use in the 21st century.

"Cranial Electrotherapy Stimulation (CES) is the application of low-level pulsed electrical currents (usually less than 1 milliampere) applied to the head for medical and/or psychological purposes. There is now better than 20 years of medical experience with CES in America. Presently, its use requires a prescription by a licensed health practitioner in the United States. It is available without a prescription throughout the rest of the world."
So, what other Perhaps is the cause of the memory problem? Every computer’s hard drive is organized. The aim of loading information onto the hard drive is not to leave it there, untouched and inaccessible, but to use it. Much thought was put into how the information will be filed away so that when it is needed it can be accessed quickly and easily. Your computer has a filing system to access all information placed in any possible location.

The key to enhancing human memory is very similar to the thinking behind a hard drive’s storage and retrieval system. To now, you have been uploading your information to your brain without an organized system. Getting the information in is no problem; it’s the retrieval process that needs polishing.

For young men like Rich P., who wonders what’s in store for him in the decades ahead, this would appear to be an enormous scientific misstep — particularly since Rich believes he’s seen firsthand the link between herpes and Alzheimer’s. His girlfriend’s father, the one who passed away from Alzheimer’s? He battled cold sores all his life. Source

Cranial electrical stimulation (CES) may improve memory, attention and focus; important studies are emerging on the uses of mild electrical current to enhance cognition and aspects of intelligence.

Think of the cells in your body as being a bit like a dry cell battery in your car. When the battery is fully charged, the car starts and everything works fine. When the car battery is discharged or flat, sometimes all its needs is a “jump start”, a small amount of electricity, and everything is fine again. 82% of participants in one study suffering from an anxiety disorder reported a significant improvement in their symptoms after treatment with CES.


Sick cells are merely like discharged cells: This may be an oversimplification, but is the best way to explain the technology of Micro-Current Therapy in lay person terms.

Scientists have found that different micro-current frequencies have different effects meaning this revolutionary medicine contains infinite applications and possibilities, especially in the areas of healthy new cell renewal and stimulation. The applications of Micro-Current Therapy appear to be endless!

“"In the 1960’s Robert O. Becker (1985) demonstrated that electrical current is the trigger that stimulates healing, growth, and regeneration in all living organisms. He found that repair of injury occurs in response to signals that come from an electrical control system, and suggested that this system became less efficient as we age."

It is also believed that micro-current stimulation restores cellular electrical balance by changing potentials across cell membranes. This may alter the levels of certain ions and molecules toward a desirable equilibrium. Other physiological effects are believed to be produced: reduction of alkalinity proximate the passage of electrical current and the production of low levels of hydrochloric acid which can scavenge free radicals; attraction of oxygen to the region; localized vasoconstriction and vasodilation; reduction of local hemorrhage; sedation; increased tonicity of local tissues; antiseptic; production of desirable fibroplasia; and reduced neuromuscular irritability

So, it is believed that, if electrical stimulation is provided to the cells before they die, blood vessel permeability is increased, a more normal cellular electrical potential will be achieved, the ATP levels will increase, and protein synthesis will occur again.

“Adenosine triphosphate is an essential factor in the healing process. Large amounts of ATP, the cell’s main energy source, are required to control primary functions such as the movement of vital minerals, like sodium, potassium, magnesium and calcium, into and out of the cell. It also sustains the movement of waste products out of the cell. Injured tissues are deficient in ATP.
As MET restores circulation and replenishes ATP, nutrients can again flow into injured cells and waste products can flow out. This is necessary for the development of healthy tissues. As ATP provides the energy tissues require for building new proteins, it also increases protein synthesis and membrane transport of ions.

This has important implications also for increased nerve conduction. By increasing the flicker fusion resolution and refresh rates Micro-current therapy increases signal strength to the brain.

Chapter Reprint: Don’t Go Blind! Patient guide for treating Macular Degeneration and Retinitis Pigmentosa and other chronic eye diseases using Micro-Current Stimulation Therapy by Thomas W Harold, Dr. Darrell DeMello, MD and Dr. Larry B. Wallace, OD, FCSO

A 386% increase in attention span test results after just 20 minutes of a single CES treatment in healthy volunteers - Southworth S, A Study of the Effects of Cranial Electrical Stimulation on Attention and Concentration, Integrative Physiological and Behavioral Science, 1999, Vol 34:1, 43-53.

To date, several thousand Americans are treated with CES annually and more than eleven thousand persons own CES devices, which have been prescribed for their home use. Possibly the most exciting application of the CES is for drug addiction.

Further studies are needed to fully document use of the device for these purposes. In this technological age when we are surrounded by electromagnetic fields and currents, CES treatment may be necessary as an antidote and for maintenance of fully optimum health.

Electromagnetic "pollution" from video screens, televisions, stereophonic equipment, microwaves and phone lines may be destroying our health and may require a device of this type to counter these negative effects. CES may provide natural levels of supplementary current to keep the brain healthy in the electrical age.

Eric Braverman, M.D

“Micro-Current Therapy is a form of electric medicine used to naturally and safely stimulate cell growth, renewal and healing. It uses extremely low amounts of electricity measured in millionths of an Amp that most people can hardly feel.”

**CES SCIO Eductor Technology - A Unique Non-drug Therapy**

Every twenty-four to thirty-six hours, from 50 to 80 % of adults in the United States and the United Kingdom swallow a medically prescribed chemical. In the United States, the volume of the drug business has grown by a factor of 100 during the current century; 20,000 tons of aspirin are consumed per year, almost 225 tablets per person. In England every tenth night of sleep is induced by a hypnotic drug and 19% of women and 9% of men take a prescribed tranquilizer during any one year.

In the United States, central-nervous-system agents are the fastest growing sector of the pharmaceutical market, now making up 31% of total sales. Dependence on prescribed tranquilizers has risen by 290% since 1962, a period during which the per capita consumption of liquor rose by only 23% and the estimated consumption of illegal opiates by about 50 percent, leading Ivan Illich in Medical Nemesis, to note how that by 1975, "Medical addiction ...had outgrown all self-chosen or more festive forms of creating well-being."

Some people take the wrong medication; others get an old or contaminated batch, and others a counterfeit; others take medications in dangerous combinations. Some medications are addictive, others are devastating emotionally and physically from their side effects. Every year a million people--that is 3 to 5% of all hospital admissions --are admitted primarily because of a negative reaction to medications. The situation has become especially exacerbated by the medical profession's propensity to dole out medication like candy for the slightest sign of depression, anxiety, or insomnia, helping make drugs like prozac as chic in the suburbs as crack is in the inner city. This has led to that plague of legal drug addiction, documented so well by Peter Breggin in his definitive study of the topic in "Toxic Psychiatry"

Well, I do not espouse an extremist position with regard to psychotropic medication such as Peter Breggin does but I believe that consumers should be aware that some of these substances are very powerful and will benefit people as
much as they are intelligently prescribed and intelligently taken.

Worse yet, is the subversion of our independence. We are self-regulating beings in possession of our own pharmaceutical laboratory which our brain draws on judiciously on our behalf. An increased reliance on external drugs interferes with that self-regulatory process, reducing our ability to cope --to develop, strengthen, and effectively employ our own inner resources.

People speak today of being captive of unpleasant emotional states. The answer to this problem, however, does not lie exclusively with the development of better and more efficient drugs. Emotions are in part products of the chemical soup, and the elaborate electrical neuro circuitry which make up the working environment of our brain. To reclaim control of our life we have but to learn how to alter that chemical composition and reorient that circuitry. CES is a tool to help us achieve that end. As a similar ethic can ideally and practically guide pharmaceutical usage, CES offers a unique and viable "bioelectric" alternative. Personal autonomy and a gain with insight and self awareness is resultant because the learning of the intelligent application of CES permits individuals to have an amazing increase in their ability to experience a positive perception, to in effect reset the controls of their perception.

CES’s primary goal is wellness, defined as peak emotional, mental, and physical health--a state of proper alignment -the balanced interplay of body and mind attained through personal empowerment rather than dependency. You know that nothing is good or bad intrinsically, it’s more how it is utilized or misused. So I do not want to really put down the pharmaceutical industry, but actually want to extend the options available to people looking for answers and positive change. Pharmaceuticals may be used intelligently and wisely, both on the part of the professional and the patient.

What is homeostasis? Homeostasis can be defined as the tendency for intrinsic balance within a system. Application of a therapeutic range of micro-current intracranially seems to enhance the homeostasis of the biological central nervous system. An effect on one system within the individual will correlative effects upon other systems within the individual. Improved mood can be measured. Many times improved cognitive function can be measured. Improved self image, and sense of well being can be measured. An improved sense of locus of control or self determination can be easily measured. If a tool works it enhances one's ability to handle or deal with situations previously that were beyond the range of one's control.

Intelligent choice, what is it? We have the ability to learn. We have the ability to gain experience. We have the opportunity to change and grow. We have the ability be in control of our lives. We can learn about anything we like.

This researcher wants to acknowledge Delbert T. Goates, M.D. who was instrumental in many areas of research during his career, including work with the CES. He was an exceptional human being who finished this life earlier this month. He will be greatly missed. CES is a simple treatment employing mild battery-powered electronic stimulation through clip-on electrodes that attach to the earlobes or by pre-gelled electrodes placed behind the ears. Current flow is limited so that the most a user will experience during the process is a brief tingling sensation. Its most immediate impact is reduction of anxiety. For most people, anxiety reduction is experienced in the course of treatment, but it also may be first seen hours, or as late as several days after. After a CES session you are left feeling both alert and relaxed . Psychologists call this an “alpha state”. The effect differs from pharmaceutical treatments in that people report feeling that their bodies are lighter and more relaxed and their mind more alert and clear. The results are cumulative and lasting.

CES has major implications in a number of areas. In the war on drugs, it is a formidable new weapon in the treatment of the symptoms accompanying detoxification and withdrawal. For those suffering from depression and anxiety, it means relief with none of the unpleasant side effects of prescription drugs. For those seeking nothing more than a good night’s sleep, it is an alternative to habit-forming tranquilizers. For a public increasingly concerned with the effects of stress on physical health and emotional well being, it provides a way of addressing that stress in a safe and effective manner. CES—a treatment modality whose time has come.

CES has a proven track record as far as safety is concerned. There are no known negative side effects associated with its use. It also has a substantial body of research to support its claims. But because of the pharmaceutical bias in Western medicine, its deployment has been restricted and its use limited. It has also been difficult for people to find information on the topic. It has been challenging to define easy to understand parameters across traditional boundaries. This website seeks to be the definitive site for dissemination of information on CES and by doing so, nurture an expanded dialogue on health and wellness.

--------  Charles McCusker, Ph.D.
Psychologist, Salt Lake City, UT September, 1996

Disclaimer:
The following information is the result of years of thorough research and investigation. It has been supplemented with materials from experienced practitioners and acknowledged authorities in the field. This information however should not be interpreted as a substitute for physician's evaluation or treatment by a healthcare professional, nor provide or confirm a medical diagnosis.

A Unique Non-drug Therapy For a Centered State

CES Controls:
- stress and stress related disorders
  - anxiety
  - depression
  - insomnia
  - substance abuse

Helps:
- Supercharge the brain
- Attain a state of relaxed awareness
- Optimize cognitive functioning
- Achieve higher levels of mental performance
- Enhance memory capacity
- Facilitate recall
- Increase IQ

EDUCTOR
BIOFEEDBACK IS

1. THE MOST PUBLISHED AND RESEARCHED ENERGETIC MEDICAL DEVICE IN HISTORY
2. SCIENTIFICALLY VALIDATED AND LEGALLY REGISTERED FOR OVER 25 YEARS.
3. TAUGHT IN MEDICAL UNIVERSITIES
4. NATURAL MEDICINE WITH A HIGH TECH EDGE
5. SCIO BIOFEEDBACK IS PAID FOR BY MEDICARE, MEDICAID AND MAJOR INSURANCE COMPANIES
This Electro-Magnetic Device puts out a very weak, pulsing signal. When turned on the signal radiates in all directions. Held close the body’s EM nerve system picks up the signal and responds or resonates to it very weakly. Body response is 708 stronger if the contacts or electrodes are touching the body anywhere the whole system responds to the signal.

However, it is reasonable or logical to apply the contacts to the local area of the body causing pain or trouble -- though thousands of years of use of Acupuncture in the Orient has proven that this is not necessarily true. Because of the interconnecting nerve system -- or Meridians as they are called -- treatment in one part of the body can affect other parts.

In modern times the weak, pulsed electro-magnetic signal has replaced the twirling or vibrating of the gold and silver needles of Acupuncture.

Effectiveness of the NET or Brain Tuner device was established by a Chinese Acupuncturist, Dr. Wen, in Hong Kong in the 1970s by testing hundreds of patients at a clinic, most of whom were on drugs of one kind or another, alcohol, nicotine, heroin, etc, consciously or unconsciously trying to relieve stress, largely a mental condition?
It seems that the body -- or Brain -- gives up making its own pain-killers, Endorphins, when a person turns to drugs; but putting a weak EM signal into the body, especially the head area, stimulates the brain into producing Endorphins again.

**Amazingly, the craving for the drug disappears in three of ten days and without withdrawal symptoms!**

Dr. Wen found through experimentation that the most favorable place for the electrodes or contacts was the hollows under the ears. The EM signal does not have to be felt by the subject or patient, though in some devices with power controls the current can be turned up to where a slight tingle is felt. A stronger connection can be made if the contacts are moistened.

**Cigarettes**  
Use for 5-10 minutes until the urge for a cigarette goes away.

**Drugs/Alcohol**  
Use for 10-15 minutes 3-4 times daily

**Depression**  
Use when feeling down, as soon as mood lifts, stop using. Repeat when necessary.

Those office visits are important to a doctor. But a person with his or her own NET or Tuner can treat themselves as often as needed -- though a person should keep in mind that body cells react immediately to minute pulses of electric current and one can have too much of a good thing. Probably the most important part of treatment is the intention of the user.

They can be placed on other parts of the body if local treatment is desired there. The clinical approach is 15 or 20 minutes per treatment, once a day.

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**Doc Steve** I just worked with the head of emergency surgery at a local hospital diagnosed with Ovarian Cancer but she refused to do the Chemo & Radiation the Oncology Dept recommended....After only 2 sessions with me I told her to go for another biopsy...No trace of any Cancer was found! She was stunned and told me I had given her life back to her and called me a miracle worker but the real miracle was the SCIO that guided the protocol I created for her....
Factors that influence the body voltage and membrane potential are fatty acids in the cell membrane, minerals, especially salts, hydration water, oxygenation, stress, toxins and lifestyle.

The SCIO has been proven in tests to increase the electrical potential of the body. Increased cellular membrane potential makes osmosis increase, which increases detoxification, nutrient transfer and absorption, hydration, oxidation, and all cellular functions in general.

Only the Cybernetic Loop Technology of measuring and then autofocusing the treatment can Balance and thus correct deficiencies and or excesses.
Using MTENS and TVEP the SCIO can treat the spinal area for injury and pain. Sending in an auto-focused sophisticated pulse different for each patient based on their personal electrical needs.

If you need more information on the SCIO and purchase details please get in touch with us:

Mandeville Ktc

Tel: +36 21 252 3503 | Web: www.qxsubspace.com | E-mail: info@qxsubspace.com
It is a scientific fact that when a low level voltage and micro-current pulse is applied to the body osmosis, enzyme activity, and healing are increased. The SCIO will let the patient’s body electric autolocus a harmonic pulse to maximize this effect. This current applied to the cranium has been shown to help autism, attention deficit, and hyperactive children. It has been shown helpful for anxiety, addictions, emotional disturbances, and insomnia.

There is published research on these therapies. The new world of energetic medicine can help you.
pictures on China, AC Milan, San Antonio spurs, Dennis Johnson

The first sport study with the Quantum Xrroid technology was on members of the Cleveland Browns football team in 1988. The results were amazing and all of the participants went all Pro over the next five years. Having worked with the power lifting team of Hungary in 1991 they went from moderate to gold medal performance.

AC Milan bought some systems and their injury level dropped 91%. This was because the system can stimulate and accelerate healing of injured tissue. They asked for us to develop the device to sharpen the athletic skills of the clients. With this in mind we developed a way to sharpen coordination endurance and strength. AC Milan won the European championship the next two years. We worked with Dennis Johnson ex twice NBA MVP in the San Antonio Spurs system. The results were amazing.

The Chinese Olympic team had us do a study. Out of their 487 athletes in the 2008 Olympic Games, they assigned 150 of the sick, old, weak, and tired to us. The study was to see if we could repair injured tissue and get an athlete back onto the field. The results were astounding. Out of the hundred medals won by the Chinese our 30% of the injured performers won 33 % of the medals. Our athletes were not supposed to win. And because of this Desire’ was awarded an honorary Gold medal.

Sports medicine has entered the energetic arena. There are those who want to win and they differ from those who want to conform.

Some of the best cyclists in the world have used the SCIO to win championships.
Eductor has a 2nd + 3rd Wave form Generator

With Quantum Biofeedback We can Deepen Meditation by Using ETM which is Electro-Transcendental Meditation. People can Attain Faster Results with More Mental Control, Less Effort, Relaxed Peace and Aware Enthusiasm
The SCIO will improve the body electric VARHOPE by five% as an average after just one session. The AutoFocusing Harmonic therapies of the Cybernetic Loop of measuring, stimulating, re-measuring, all guided at maximizing the body electric potential will improve your body electric by an average of five%. Improvements of Voltage, Amperage and thus power. Improvements of Resistance and Hydration that means improved enzyme and osmosis transfer of nutrients and detoxification. Improvements in Oxidation meaning more endurance. And improvement in Ph meaning more health. No wonder there are a mile long list of testimonials. Now we can understand why the sport athletes get such great results.

A five% improvement is a great edge for a professional sportsman. The patented and proprietary process of the SCIO and QOC have been proven on the world scientific stage to work wonders of improving and stabilizing the body electric.

If you need more information on the SCIO and purchase details please get in touch with us

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EDUCTOR AN ADVANCE IN SCIO TECHNOLOGY

IT IS A SCIENTIFIC FACT THAT A LOW LEVEL VOLTAMMETRIC PULSE CAN INHIBIT PAIN SIGNALS.

THE SCIO WILL LET THE PATIENT’S BODY ELECTRIC AUTOFOCUS A HARMONIC PULSE TO MAXIMIZE THIS EFFECT. THIS IS CALLED

MICRO-CURRENT TRANSCUTANEOUS ELECTRO-NERVAL STIMULATION
AND CAN HELP YOU TO REDUCE PAIN WHILE HELPING YOU FIND THE CAUSE...

If you need more information on the SCIO and purchase details please get in touch with us

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The Eductor is a registered EEG Biofeedback Device measuring the Electro-EncephaloGraph of each side of the Brain

CPT Code-- 90901

Recommended for Emotional Evaluations
CLINICAL EVALUATION

SCIO

EDUCTOR

measures & treats

Volts and Oscillations (EMG, EEG)
Amps and Oscillations (ECG)
Resistance (GSR)
Hydration
Oxidation (Redox potential)
Ph acid vs alkalinity
Reactivity evoked potential to voltammetric fields of substances (TVEP) over 228,000 measures a second of these energetic factors

Brain wave and emotions with (MCES)
Pain with (MENS) (TENS)

Trauma or wounds (EWH)
Electro Weakness Ph, Redox disorder (VARHOPE Correction)
Trickle charge the body electric

All designed to detect + reduce Electro-stress and Balance the Body Electric Automatically

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