

Bio-Kinetics Health System™

Also Known As Bio-Kinetics Re.S.E.T. – Reactive Stress Elimination Technique

Overview of Seminar Topic:

The scientific and neurological aspect of this seminar will explore the concept that hemisphericity (lateralization) of the brain is not only a passive process based on decreased afferent input causing decreased central integrative states of suprasegmental neurons in cortical, subcortical, brainstem and cerebellar areas but also an active process based on reactive memories stored in various cortical areas and in the subconscious mind. These reactive stress memories are created based on stressful events experienced by the individual and operate to protect this individual against all future threats, whether real or imagined. Once triggered, they cause a sympathetic cascade resulting in the activation of the freeze component of the 'fight/flight/freeze' reaction, subtly affecting the hemispheric balance and causing a lateralization that is reflected throughout the body in various autonomic and somatic sequelae. I will be presenting the neurological basis of reactive stress memories as well as various methods of interrupting these facilitated memory loops, including the Bio-Kinetics Health System™ procedure which uses small repeated micro-bursts of afferent input into specific well populated receptor rich areas in the upper cervical area using the small hand-held mechanical NewStim instrument as these reactive stress memories are triggered.

Background of Instructor:

I am a Carrick-trained diplomate of the American Chiropractic Neurology Board since 1997. I began my studies with Dr. Carrick in Los Angeles (U.S.C.) in 1993. Once I completed the required hours of training in 1995, I repeated the program in San Francisco from 1995 to 1997. I took the board certification examination in Key West, Florida in 1997. I continued my neurology education sporadically at Parker College of Chiropractic, participating in the research study that Dr. Carrick did and published for his PhD dissertation (I cannot remember the specific year). I also participated in the cut-score certifying process of the A.C.N.B. for future board examinations during the process of the board becoming accredited with the Commission for the Accreditation of Graduate Education (CAGEN) and the Accreditation Council for Continuing Medical Education (ACCME). I have been studying neurology ever since and stay abreast of the research and latest advancements as best as I can considering a full time practice and active family life. I did publish an original paper in the Journal of the California Thermographic Association back in the 1980's entitled "The use of pain maps in Thermal Imaging applications" although this is just an opinion piece and not a peer-reviewed clinical study.

Neurological Background and Historical Chiropractic Perspectives:

The neurological system controls the function of the entire body. This has been one of the foundational scientific principles of the chiropractic profession since its inception over a century ago. Further Chiropractic foundation principles include the concept of neurological interference at the spinal level. Once the interference was corrected, the innate intelligence of the body would then return the body to normal function and heal

the body. This concept was revolutionary at the time and has helped millions worldwide achieve and maintain a higher level of health. But this assumes that 'Innate' intelligence always knows exactly how to run the body and create 'health' at all times. But what if the "Innate" intelligence of the body learns to respond in an abnormal way, and then keeps sending abnormal signals through the nervous system to various organs, tissues and muscles of the body?

Why would Innate Intelligence do this? For the survival of the organism.

Innate Intelligence's primary responsibility is not perfect health. It is survival. Health is a secondary responsibility. This might seem like a strange concept but what good is a healthy body if you are being eaten by a tiger? You would run over a field of broken glass or off a cliff to avoid being eaten, which are not the healthiest things in the world but may help keep you alive.

The Bio-Kinetics Health System™ is a revolutionary concept that expands the chiropractic principle into a whole new realm of science and philosophy. Discovered and developed by a chiropractic pioneer, Dr. Lawrence E. Newsum, this system seeks to normalize neurological function at the deepest level, restoring healthy function and healing to the body. These new revelations discovered by Dr. Newsum involving Neurological Reactivity, utilize neurological corrections to help the brain and nervous system function at higher levels. It gets into the 'code' that operates through the nervous system, determining function at a cellular level.

But to fully understand this, we first have to review some basic facts about the nervous system and how it works.

FOUNDATIONAL NEUROLOGICAL PRINCIPLES

Firstly, the brain and nervous system are primarily a reflexogenic system. This means that a certain input will lead to a certain output. This can be a simple spinal cord reflex loop such as with deep tendon reflexes that everyone likes to test (tapping on your knee and watching it jerk), to more complex withdrawal responses that involve varying degrees of cortical processing. Even organs and the body's autonomic system function mostly through reflexogenic activity. Examples of this are stretch receptors in the intestines triggering peristalsis, increased need for oxygen triggering increased cardiac rate, and increased muscle activity triggering dilation of blood vessels and sweating, are all primarily reflexogenic activities. There must first be accurate and uninterrupted sensory input to the brain, then proper information processing followed by an appropriate and uninterrupted motor response with appropriate sensory feedback of outcomes. This loop completes the cycle of neural regulation. Any level of breakdown in this loop has a consequence. The traditional 'safety pin cycle' demonstrated this concept very elegantly however left off the central processing component. Dr. Newsum's work completed this picture by addressing errors in cortical processing due to functional memory circuits. The breakthrough that Dr. Newsum discovered involves neurological reactions that are learned or programmed, and how to interrupt them to return the brain and body to a more optimal healthy function.

Secondly, Dr. Ted Carrick showed that spinal adjustments are a form of afferent stimulation into the brain to increase spatially summative effects on central neurons. This means that nerve signals coming into the brain from neuroreceptors in the body activate cortical, sub-cortical, brain stem and cerebellar neurons, driving them to a more optimal firing potential and improving their central integrative state. This 'supra-segmental' approach sets up a functional window that actually changes brain function and has a 'top-down' cascade effect on all post-synaptic neurons and systems under their control.

Research by Bardwell, Long, Byers and Schisler [1] that studied EEG brainwave patterns showed conclusively that the chiropractic adjustment "altered cortical brain patterns." and "Within the first 10 EEG pre and post studies, it was obvious that the adjustments were dramatically changing brain wave patterns... across all frequencies."

Further research by Dr. Heidi Haavik, PhD [2] demonstrated that cervical spine manipulation altered cortical somatosensory processing and sensorimotor integration. "A review of her work shows that Chiropractic adjustments (termed manipulation) have an effect on lower limb muscle strength, altered motor control, altered reflex excitability, improved brain reaction time, changes in cortical processing, improved prefrontal activity, and improvement in muscle strength following the adjustment."

The Chiropractic Adjustment

The way that chiropractic adjustments have this effect is because adjustments stimulate receptors/nerve endings in the joints and muscles in and around the spine and other joints of the body. Applying chiropractic adjustments to stimulate higher brain centers must be done specifically to the neurological 'lesion' or brain imbalance. This brain imbalance is termed a 'hemisphericity' (or "laterality") and is the direct result of disafferentation or abnormal afferent input to the brain. According to Dr. Carrick, this can be the result of decreased joint movement or altered tension of muscle stretch receptors diminishing activation of neuroreceptors and nerve endings in these areas and therefore diminishing activation of specific areas of the brain. Restoring joint movement, normalizing muscle tension and applying neurologically appropriate rehabilitation exercises and activities increases afferent input and therefore helps improve brain balance and function.

Early on in Dr. Newsum's discoveries, he began to recognize that there was much more going on within the brain and body than simply keeping a static neurological balance. There was a moving balance that was expressed in a variety of neurological and physiological responses. This 'laterality' of brain function, or brain imbalance, was an active and adaptive process. In other words, the brain went into this state of imbalance actively based on memorized or learned neurological patterns and responses.

These abnormal learned neurological patterns are the result of 'stress' reactions within the brain from various stressors, including physical, emotional, chemical and electromagnetic stressors. These stressors include physical injuries, emotional traumas

and chemical or electromagnetic exposures, and stimulate the amygdala and other limbic areas, which triggers neurons in the hippocampus to form and maintain a 'stress memory'.

Using the concept of afferent stimulation into the brain, he developed a small hand-held instrument that he named the 'NewStim' that is tuned to deliver a precise amount of neuronal activation from neuroreceptors in the upper cervical spine into areas of the brain where these stress memories are stored. This stimulation interrupts the entrained neurological patterns and allows the brain to reprocess the pattern in a healthier way. Once the pattern is cleared, the brain no longer automatically or reflexively runs this program in the background, allowing the brain to more accurately respond to real-time health needs and to shift this energy from protection back to healing.

Some examples of Bio-Kinetics Health System™ and various conditions:

Bio-Kinetics for Pain Modulation

The Bio-Kinetics Health System™ is a whole brain activating system. The mechanism of action for pain modulation with this system utilizes afferent stimulation to affect ascending and descending pain modulatory circuits that have inputs from multiple areas, including the hypothalamus, the amygdala, and the rostral anterior cingulate cortex. These areas modulate the pain pathways so the pain is not debilitating, however continues to activate the subconscious system so the body stays on alert.

Bio-Kinetics and Emotional Release

A large part of the effect of the Bio-Kinetics Health System™ is through clearing old emotional patterns or feelings that are stuck in the person's subconscious. The micro-burst of afferent stimulation provided by the NewStim device activates directly into the hippocampus, limbic and basal ganglionic systems, interrupting the engrained pattern and allowing the brain a chance to re-evaluate the emotional trauma and release it.

Bio-Kinetics and the Immune System

"The flight/fight response can render individuals suffering from chronic stress highly vulnerable to infection." [2]

"An environmental stress reaction stimulates the amygdala, which triggers neurons in the hypothalamus to secrete corticotrophinreleasing hormone (CRH) and argininevasopressin (AVP). CRH stimulates the secretion of Adrenocorticotrophic Hormone (ACTH). ACTH stimulates increased production of corticosteroids including cortisol and aldosterone, which **increases blood pressure, blood sugar, and suppresses the immune system**. Vasopressin increases reabsorption of water by the kidneys and induces vasoconstriction. The adrenal glands are activated almost simultaneously and releases catecholamine neurotransmitter hormones, such as adrenaline (epinephrine) or noradrenaline (norepinephrine), which facilitate immediate physical reactions associated with a preparation for violent muscular action." "The immune system breaks down and the most common way a person learns of their health challenge is through the development of signs or symptoms." [2]

Bio-Kinetics and Chemical Sensitivities

The body's reaction to various chemicals in a person's environment, including industrial and household chemicals, foods, biological items and more can be traced back to a neurological stress memory that gets triggered when an individual senses the chemical in his/her environment. Clearing these items using the Bio-Kinetics Health System™ protocols effectively dampens or shuts off the neurological reaction and allows a person to equilibrate into their environment in a more healthy manner.

Bio-Kinetics and Wellness

Neuroregulation is vital for health and wellness. Clearing disruptions to the brain's ability to neuroregulate the body before symptoms arise allows the brain optimum control over many vital body functions.

COURSE SYLLABUS

INSTRUCTOR: Donald J. Baune, D.C., D.A.C.N.B.

A. COURSE DESCRIPTION

Breadth of Teaching: This course teaches the Bio-Kinetics Health System™ protocols for clearing physical, emotional, chemical and electromagnetic reactive stress patterns for patients and self-care.

Depth of Teaching: This course will cover aspects of how this process developed and evolved, neurophysiological foundations, chiropractic philosophy as it relates to the neurological frequency-of-firing model, receptor activation, central temporal and spatial summative effects, reflexogenic systems, neurological and physiological mechanisms of action, stress circuits in the brain, fight-or-flight vs. rest-and-digest modes, autonomic function, neuro-emotional modulatory effects, neuro-immune modulatory effects, electromagnetic modulatory effects, stress-memory reactions, and clinical and practical applications.

B. EDUCATIONAL OBJECTIVES

1. To introduce students to the concepts of reactive stress and what affect it has on the health and well-being of individuals.
2. To review/introduce learners to the frequency-of-firing model of neurophysiology.
3. To provide learners with an understanding of dynamic hemisphericity and cortical imbalance.
4. To provide learners with simple and effective procedures to effect receptor activation that drives central spatial summative effects and therefore modulates the reflexogenic systems inside the brain.
5. To help learners practice and enhance their skills at applying this procedure so they can return to their practice and be proficient with this process.
6. To help learners explain and communicate their expertise in this procedure.
7. To teach learners self-care methods for their own self-care needs.

C. TEACHING METHODS

This program is taught in a lecture-lab course format in which the topics are presented by the instructor and various practical workshop-style labs are provided for the learners to become acquainted and proficient with the various aspects of this procedure.

D. COURSE SCHEDULE/TOPICS

Welcome/Introduction/Overview
What Health is and is not
Bio-Kinetics Background
History of Bio-Kinetics (Dr. Newsum Video)
Neurological and Neurophysiological Review
 Review of Basic Neuroanatomy and physiology
 Review of Resting Membrane Potential/Central Integrative State
 Review of Temporal and Spatial Summation
 Review of Receptor Activation and Afferent Effects to the CNS
 Overview of Reactive Stress on Central Mechanisms
Poster Presentation
 Stress-ReSET cycle
Clearing Reactive Stress overview
Examination methods for transient reactive dyspraxia
 Demo/Workshop – Testing
 Contact Point and Line of Drive Description
 Workshop and Practice
 Physical Reactive Stress Clearing
Description and Demonstration
Workshop and Practice
 Emotional Reactive Stress Clearing
Description and Demonstration
Workshop and Practice
 Self-Care Reactive Stress Clearing
Description and Demonstration
Workshop and Practice
 Chemical Reactive Stress Clearing
Description and Demonstration
Workshop and Practice
 Electromagnetic Reactive Stress Clearing
Description and Demonstration
Workshop and Practice
 Practice Integration
Sharing from experienced doctors
Final Thoughts and Comments
Questions

E. RECOMMENDED READING

Chronic Stress Can Damage Brain Structure and Connectivity,
<https://www.psychologytoday.com/us/blog/the-athletes-way/201402/chronic-stress-can-damage-brain-structure-and-connectivity>
How Stress Changes The Brain,
https://www.huffingtonpost.com/2014/11/18/brain-stress_n_6148470.html
Toxic Stress, <https://developingchild.harvard.edu/science/key-concepts/toxic-stress/>
The Chiropractor's Adjuster, D.D. Palmer

F. DISCLOSURE OF EXPENSES UNDERWRITTEN OR SUBSIDIZED BY VENDORS:

None

References:

[1] Barwell R, Long A, Byers A, Schisler C. The effect of the chiropractic adjustment on the brain wave patterns as measured by EEG. 2004 International Research and Philosophy Symposium October 9 -10 2004, Sherman College of Straight Chiropractic.

[2] Haavik-Taylor H, Murphy B. Cervical spine manipulation alters sensorimotor integration: a somatosensory evoked potential study. Clin Neurophysiol 2007;118(2):391-402.