

R. Neil Voss Researcher

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WHAT MAY THE CHI MACHINE DO FOR YOU?

1. Would you like to increase circulation and help the veins and capillaries?
2. Would you like to get an aerobic exercise for 10 minutes that equals 5,000 steps walking when you have little time to exercise?
3. Would you like to increase oxygen throughout all of the cells of the body?
4. Would you like to have an **aerobic exercise** that you can do at work that does not cause you to perspire?
5. Would you like to stimulate and increase the movement of the lymph?
6. Would you like to enhance the immune system?
7. Would you like to relax and reduce stress in every part of the body?
8. Would you like to balance the left and right sides of the brain to increase focus and performance when stressed and slow any brain wave disfunction patterns?
9. Would you like to cause the brain to relax and slow down so it can rest?
10. Would you like to reduce the pressure on the eyes?
11. Would you like to give the muscles, ligaments, organs, and spine a massage?
12. Would you like to relax blood pressure and slow (or modulate) the heart rate?
13. Would you like to correct vasodilatation (forcing the blood out) when heavily exercising?
14. Would you like to trim your thighs, hips, and stomach and lose weight?
15. Would you like to return oxygen to the body after “over exercising” or doing heavy **Anaerobic exercises**?
16. Would you like to literally take excess stress and anxiety away in 15 min.?
17. Would you like to reduce adrenal and thyroid overload and burnout?
18. Would you like to balance the energies in the heart?
19. Would you like to modulate all of the hormones in the body?
20. Would you like to balance the neurotransmitters; GABA and Serotonin?

CHIROPRACTORS, DENTISTS, LASIC EYE SURGEONS

1. Puts the patient in **relaxed**, Parasympathetic state, free of **anxiety & tension**
1. **Relaxes muscles of the Eyes** (Eye Surgeons)
2. **Increases the Immune System**, less Colds & Illnesses
3. **Returns Hormones** more **toward balance**
4. **Detoxification** of the cells and body systems
5. **Increase of Oxygen** to the cells and body systems.

HEALTH CLUBS, REHAB SPECIALISTS

1. **Virtually Eliminates Pain**
2. **Recover** from “**Exhaustion**,” “**Overreaching**,” & “**Over training**” quicker.
3. **Corrects Vasodilatation** (Blood is squeezed out during heavy exercise)
4. **Recover** from **Adrenal Exhaustion** more quickly
5. **Reduction of Lactic Acid buildup**.
6. **Detoxification** of cells and body systems with more ease
7. **Increase of Aerobic Oxygen** to the cells and body systems
8. **Tone and reduce Hips, Thighs, Stomach, Tendons, and Muscles**

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PSYCHOLOGISTS, HYPNOTHERAPISTS, COUNSELORS

1. **Mind and Body are “entrained”** in a relaxed, balance state by the Parasympathetic Nervous System.
2. **Lack of Mental Stress** allows the Patient to **reach a deeper level** in 5 min.
3. **Eliminates lost time in Therapy** for the Therapist, Doctor, or Counselor.
4. Increases efforts for Anger Management, ready to go to work with deep subconscious issues immediately

ATHLETES, COACHES, SPORTS MEDICINE

1. **Increases Performance**
2. **Increase Endurance and Stamina**
3. **Increase aerobic Oxygen uptake.**
4. **Reduce Lactic Acid Buildup and body aches.**
5. **Decreases recover time to injury and performance.**
6. **Controls “Overreaching” and “Over training.”**
7. **Return the body to balancing of all body systems, muscles, & joints.**
8. **You can exercise the body without being in a sweating position.**
9. **Resolves vasodilation (blood is forced out into the lymph) after exercise.**

BUSINESS EXECUTIVES, SALES CONSULTANTS, PRODUCERS

1. **Increased Focus, Concentration, and Mental Clarity by slowing the brain wave patterns down (Beta to Alpha).**
2. **Balance and Reduce the high levels of Stress Hormones-Cortisol & etc.**
3. **Increase Thinking Abilities (Balance Brain Function & Oxygen levels)**
4. **Increase Production (Sales, Performance, and Quality)**
5. **Get a “No Sweat” aerobic exercise. Easy in business attire.**
6. **Increases Communication Effectiveness**
7. **Increased Job Satisfaction**
8. **Reduce Stress and Fatigue**
9. **Increased Creativity, Teamwork, Innovation, and Empowerment**
10. **Increased Job Satisfaction and Increased Emotional Self-management**

MASSAGE THERAPIST, ENERGY WORKER, DAY SPAS, RETREAT

1. **Relax the Muscles, Joints, Tendons, Spine, and Body Systems**
2. **Increase the Oxygen Content to the cells, muscles, tendons, and body systems.**
3. **Releases the tension of the Fascia (Netting)**
4. **Reduces Body Aches & Pains**
5. **Chelating of Heavy Metals**
6. **Causes the therapy to be easier, deeper, and faster for the therapist**
7. **20 Minutes will change the acids to alkaline.**

STUDENTS, DISADVANTAGED KIDS

- 1. Anger Management**
- 2. Increase Positive Attitudes**
- 3. Greater Ability to Focus and Concentrate.**
- 4. Increased Motivation**
- 5. Improved Performance on Tests**
- 6. Corrects Dyslexia, ADD/HD with *use*, temporarily**
- 7. Oxygenates the Brain, Brain Functions, Cells, and Body Systems**

SCIENTIFIC BASIS for the ACTIVATION PROPERTIES of the CHI MACHINE

I want you to time yourself and hold your breath for as long as you can. “A Healthy Brain consumes 25% of the body’s oxygen supply and 70% in the blood glucose. Cut off blood supply for more than 4 minutes, and brain cells quickly begin to die. Even if blood flow is just slightly reduced, the resulting reduction in oxygen, if chronic, can contribute to damage from impaired thinking to disorders of senility.” In addition there are 75 trillion cells dependent upon you for oxygen. One needs oxygen for every cell, tissue, and organ to function correctly.

What **causes** us to have **reduced oxygen**?

1. Stress and anxiety literally “takes your breath away.”
2. We eat oxygen-depleted food (microwave) and drink oxygen-depleted water.
3. Some “over exercise” or do too much heavy “anaerobic exercises.”
4. Various body systems may have poor circulation.
5. The energy demands for producing our lifestyle may cause “adrenal burnout.”
6. Pain may be causing us to have shallow breathing and limited oxygen.
7. Our Sympathetic Nervous System and Adrenals are on “overload” or “burnout” (and it is operating anerobically- too much carbon dioxide).

New Research shows how oxygen can be increased through the influence of the Heart without being Controlled by the Brain.

“The Heart starts beating in an unborn fetus before the brain is formed. The heartbeat doesn’t need a connection to the brain to keep beating. The heart has its own independent nervous system. There are at least **forty thousand neurons in the heart** – as many as are found in various subcortical centers of the brain.”

“Core heart feeling affects both branches of the autonomic nervous system. This *reduces* the activity of the sympathetic nervous system (the system which speeds up the heart & brain) and *increases* the activity of the parasympathetic nervous system (which slows down the heart, brain, and relaxes the body’s inner systems) with increased efficiency. These two branches of the nervous system balance and enhanced the body systems.” McCraty, R.

In our bodies, there are body systems that get out of sync with each other because there may be **poor communication between body’s systems** or there may be **blockages** (in energy flow).” “Because the heart is the strongest biological oscillator in the human system, even beyond the brain, -- the rest of the body’s system can be **pulled into entrainment with the heart’s rhythms**. As an example, when we’re in a state of deep love, (understanding, compassion, caring,) or appreciation, the brain synchronizes –comes into harmony—with the

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heart’s harmonious rhythms. This state of head/heart “**entrainment**” occurs precisely when the heart rhythms complete **one cycle every ten seconds** (0.1 Hz.). When the brain waves entrain with heart rhythms at 0.1Hz., subjects in our studies report **heightened intuitive clarity** and a **greater sense of well-being.**” “According to our studies, we transcend our ordinary performance and feel in harmony with something else – what we’re really coming into sync with is ourselves. Not only do we feel more relaxed and at peace, but **the entrained state increases our ability to perform well** and offers numerous health benefits. In entrainment, we’re at our optimal functioning capacity.” (McCraty) This is the **approximate resonating motion frequency of the Chi Machine.**

“However, the **brain can override the heart** when we **overanalyze** situations, going around and around in an attempt to figure things out, keeping us from **seeing other options.** The head often leads us into **rationalizing** and **conceptualizing an issue** instead of **actualizing what the heart already knows and has communicated.** When we **react to life from the head** without joining forces with the heart, our single-mindedness often leads us into childish, inelegant behavior.” (Martin)

“Most scientists previously believed the brain made all of the decisions. The Laceys found that when the brain sent “orders” to the heart through the nervous system, the **heart didn’t automatically obey.** Instead, the heart responded as if it had its own distinctive logic. The selectivity of the heart’s response indicated that it wasn’t a merely mechanical organ responding to a signal from the brain. Rather, the heart’s response appears to depend on the nature of the **particular task at hand** and the **type of mental processing** it required. (Lacey)

“Even more intriguing, the Laceys also found in their studies that **the heart appeared to be sending messages back to the brain** that the **brain not only understood but obeyed.** It appears these **messages from the heart** could actually **influence a person’s behavior.** (Lacey)

“Rhythmic beating patterns of the heart are transformed into neural impulses that directly affect the electrical activity of the higher brain center—those involved in cognitive and emotional processing.” (Fryinger & McCraty) “The **heart can override and balance the Brain** through **Entrainment** through the **Parasympathetic Nervous System.**”

Evaluations by this researcher on the QXCI Computer before and after getting on the Chi Machine show the Beta Waves decreasing, (meaning the stress levels are decreasing in the body), the alpha waves increasing (meaning the body systems are relaxing), and the theta waves increasing (meaning the ability to have deep sleep, and ease of sleep).

Percentage Before CHI Machine	Percentage 10 Minutes after Chi Machine
66% - Beta Waves (High %=High Stress)(30-35 CPS)	55%
20% - Alpha Waves (Low –Difficulty relaxing) (16-25 CPS)	25%
41% - Theta Waves (Low – Difficulty going to sleep)(10-15 CPS)	20%
9% - Delta Waves (Low – Difficulty with deep sleep)(4 CPS)	15%

Blood Pressure Before: 153/85 | 30 Minutes after Blood Pressure After: 129/78
PULSE RATE Beginning: 57 | 30 Minutes after Chi: 49 | 60 Minutes after Chi: 40

Also, the QXCI shows changes in the before and after defective brain wave patterns. It appears that everyone has these abnormal or deformed brain patterns from the food, water, toxins, wrong food combinations, and

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negative thinking patterns we create. These abnormalities were observed on over a thousand people I analyzed at the Young Life Medical Research Clinic using the QXCI device. These brain dysfunctions are:

Value Before CHI Machine		Value 60 Minutes after Chi Machine
51	Normal Brain Patterns	56 (Above 40 is Normal)
46	Slow Wave Function Patterns	19
15	ADD/HD Patterns	13

CHRONIC SYMPATHETIC (NERVOUS SYSTEM) ACTIVATION

“When we accumulate too many stressors (in a day), the body may fail to terminate the physiological responses. This can lead to chronic stress (sympathetic activity burnout and adrenal fatigue) accompanied by inappropriate elevations of cortisol, insulin, CRH, Catecholamines, adrenaline, epinephrine, noradrenaline, and other stress hormones. This leads to immunosuppression, which is associated with subsequent infection, illness, and even potential long-term psychiatric complication.” (Fry, A.& Chrousos, G.) “Excess stimulation of the Sympathetic Nervous System causes Leptin resistance in the fat cells leading to adrenaline resistance (causing one to get fat).” (Bryon Richards)

“Some of the other health complications include higher levels of phobic anxiety and or panic, depression and an increased risk of cardiac death.” Cardiac Disease alters Cardiac Autonomic balance of cardiac neural regulation (i.e., decreased parasympathetic coupled with increased sympathetic activity) are also the patients at greater risk for sudden death. (Billman) “The Medical Conditions caused by too much **Sympathetic stimulation of excessive stress** are: **Obesity, Insulin Resistance, Diabetes, Hypertension, Congestive Heart Failure, Sleep Apnea, Depression, and Anxiety.** Psychosocial/Behavioral conditions lead to: **Chronic Stress, Smoking, Social Isolation, Hostility, Sleep Deprivation, Unhealthy Diet, Sedentary Lifestyle, and Abuse of Stimulants.**” (Curtis) “A well-designed study demonstrates those who suffer emotional stress are more likely to experience physical stress and vice versa.” (Singh)

“Disorders associated with Disregulation of the Stress System causes **Severe Chronic Disease, Anoraxia Nervosa, Melancholic Depression, Panic Disorder, Obsessive-Compulsive disorder, Chronic Active Alcoholism, Alcohol and Narcotic Withdrawal, Malnutrition, Hyperthyroidism, Premenstrual Tension Syndrome.**”

“There is a an immediate reduction in pain in patients with continuous chronic pain when there is a highly significant **reduction in sympathetic activity, heart rate, amplitude of waves in finger plethysmology, and blood pressure.** Also, seen is further objective evidence for the physiologically **relaxing effect of pH.**” (Lindgren, Maryclaire) It has been this researcher’s experience that we have been able to lower blood pressure by putting a person on the chi machine for 20 minutes several times a day.

“Eventually (too much stress) may lead to a no-stress response. The body is just too tapped out to mount an attack. The system might be producing so many stress hormones chronically that when there’s an additional challenge, it can’t produce more. The gas pedal is already to the floor.” Berardi

“**Aerobic exercise** has been found beneficial for anxiety (conditions of Sympathetic burnout), but **weight training exercise did not reduce chronic sympathetic activation.**” (Raglin) “It is well established that **aerobic exercise can alter autonomic balance** (increasing parasympathetic activity and decreasing sympathetic activity). Billman, *Journal of Applied Physiology*, 92 (2): 446.

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“**Exercise training too frequently, excessive exercise, or one who may not allow for adequate recovery from intensive exercise, or too much sympathetic stress stimulation** creates a symptom of “overtraining” and “overreaching” causing **decreased motor coordination, decreased force production, altered immunity, hormonal, and autonomic nervous system exhaustion activity, and emotional, mood, and sleep disturbances. The symptoms can last for a few days up to 2 months.** If left unchecked, it could be a full year before you can feel good again.” (Fry)

“**Exercise drives the activation of the Sympathetic Nervous Activation System (anaerobic) *Excess sympathetic over stimulation* results in performance incompetence, hyper excitability, high fatigue, apathy, altered mood state, altered immune and diminished reproductive function, increased neural demand, hypoglycemia, high plasma lactate, depleted testosterone, high cortisol, and a need to increase oxygen requirements.**” (Fry)

WHAT HAPPENS WHEN WE ARE SICK OR OVERLY STRESSED?

There are 4 main Neurotransmitters involved: (The Sympathetic Nervous system is being over stimulated and the following things happen:

1. **Epinephrine is increasing and gets higher.**
2. **Acetylcholine** (the traveling speed of energy in the nerves) **slows down and we feel tired.**
3. **Gaba decreases and we feel unbalanced in the brain and have difficulty focusing. There are “electrical dysrhythmias” (short circuits) in the Corpus Callosum** affecting the balance of the right and left brain functions.
4. **Serotonin decreases and we feel low in energy and the brain races at the speed of Beta Waves (12-16 cycles per second).** There are also “electrical dysrhythmias” (short circuits) in the brain causing one to feel unbalanced.

In addition there are the following conditions taking place under Sympathetic overstimulation:

1. **Lungs** – “**The Bronchial muscles partially close decreasing** oxygen and causing an anaerobic condition of the bronchioles requiring one to breathe harder.”
2. **Circulation** – “**The circulation of blood flow is decreased.**” Oxygen becomes limited or blocked and you feel a tightness in the chest
3. **Lymph** – **The slowing of the blood’s movement entrains the Lymph to slow.**
4. **Immune** – **is decreased because of the need for energy systems elsewhere.**
5. **Adrenals & Medulla** – **The stress and regulation of hormones** are at a high production level of stress.
6. **Iris (Eye Muscle)** – “**The Pupil dilates**” and **eye muscles, veins, and arteries, bulge** increasing the strain on the eyes decreasing circulation.
7. **Lacrimal Eye Duct Openings: decrease** stimulation and decreases circulation.
8. **Salivary Glands** – “**Causes Saliva production to decrease.**”
9. **Heart** – “**The Heart rate increases and blood pressure increases.**”
10. **Stomach** – “**Gastric juice secreted slows and motility decreases.**”
11. **Small Intestine** – “**Digestion decreases, causing metabolism to decrease.**”
12. **Large Intestine** – “**Secretions and motility** (forward movement of food through the digestive system) **slows to stop.**” Many sick people take days for food to process.
13. **Liver** - **Increased levels of blood sugar are demanded.**
14. **Gall Bladder: decreases** cause it to work harder.
15. **Intestines: Decreased stimulation (motility)** so they work harder.

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16. **Kidney** – “**Decreased Urine Secretion,**” constrict blood vessels decrease urine formation.
17. **Oral/Nasal Mucosa** – “**Mucus Production is limited.**” This allows the lining of the mouth, stomach, lungs, urinary bladder, urethra, uterus, vagina, eyelids, sinus become unprotected **from harmful bacteria and infections.**
18. **Bladder** – “**The bladder wall expands and the Sphincter muscle becomes tighter**” causing the body to have more difficulty urinating.
19. **Pancreas** – **Insulin is on overload,** perhaps becoming insulin resistant.
A recent study found the amount of insulin decreased 20 min. after using the Chi Machine!
20. **Stress Hormones** are at peak production.
21. **Nutritional Nutrients** and **minerals** become depleted, particularly calcium, magnesium, sodium, and potassium, and you feel exhausted.

WHAT CAUSES The CHI MACHINE to SHIFT the SYMPATHETIC NERVOUS SYSTEM “OVERLOAD” to the PARASYMPATHETIC NERVOUS SYSTEM

When putting clients who were stressed out or ill on the QXCI Bio Meridian Computer before putting them on the Chi Machine, they would have an indication as per the following: “Sympathetic Overload,” “Sympathetic Fear Patterns,” “Vagus Nerve Imbalance,” “Thoracic Sympathetic Imbalance,” “Lumbar Sympathetic Imbalance,” and “Unmanaged Sympathetic Stress.” After putting them on the CHI Machine these patterns disappeared and showed the body’s system now operating in the Parasympathetic Nervous System for the time being.

There were instances when clients showed the Parasympathetic Nervous System was imbalanced and usually an indication of “Brain Fatigue,” “Covert Emotional Tension,” “Fear Patterns,” and/or “Emotional Stress.” What the CHI Machine was doing was bringing up the heavy, deep seated emotional patterns to the surface. When I would do emotional release therapy with the Client, the Client would be instantly ready to tackle these deep issue without first going through the usual introductory preparation that is the normal practice with each client at the beginning of the interview.

HORMONES can CHANGE with AEROBIC PARASYMPATHETIC EXERCISE

“When the **Sympathetic Nervous System (anaerobic exercise) decreases** in activity and the **Parasympathetic system dominates,** one can expect the following **outcomes** listed by Kraemer and Fry:

1. **Decreased total testosterone levels**
2. **Decreased total testosterone/cortisol ratios**
3. **Decreased free testosterone/cortisol ratio**
4. **Decreased total testosterone/SHBG (sex-hormone binding globulin) ratio**
5. **Altered Cortisol Levels**
6. **Decreased Sympathetic Tone**
7. **Decreased Nocturnal and resting Catecholamines**
8. **Increased Sympathetic Stress Response**
9. **Increased Creatine Kinase**
10. **Decreased exercise-induced Lactic Acid**

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These studies involved males and it might be assumed that females would have corresponding levels of their hormones decrease more toward balance. We might assume that the Chi Machine, being an **aerobic exerciser**, would have these same benefits.

HOW DOES the CHI MACHINE CAUSE YOU to LOSE WEIGHT or REDUCE THIGHS, HIPS, and STOMACH?

The Chi Machine influences the **Cortisol, Testosterone, Estrogen, Catecholamines, and Lactic Acid to decrease by shifting the body to the Parasympathetic Nervous System (aerobically)**. When **Cortisol** tends to balance, people report losses of weight. If the CHI Machine balances Cortisol, then this may be one of the mechanisms explaining why **many people lose weight, or lose inches in the thighs, hips, and stomach. (My aunt, 84, lost 4 dress sizes in 4 months.)**

“Aerobic exercise action activates the Parasympathetic Nervous System causing the following to happen:

- 1. Epinephrine turns off.**
- 2. Acetylcholine tends to increase (the traveling speed in the nerves & brain) and returns to normal.**
- 3. Gaba tends to increase and returns to balance.**
- 4. Serotonin tends to balance.**
- 5. Lungs – “The Bronchial muscles contract” or constrict** allowing the uptake of oxygen to increase, because of the aerobic condition of the bronchules.
- 6. Circulation – “The circulation of blood flow is increased.”** Oxygen gets to places that were limited or blocked --this is the feel you get when the machine turns off.
- 7. Lymph – The movement of the body and blood entrains the Lymph.**
- 8. Immune – Increases because of entrainment.**
- 9. Adrenals & Medulla – The stress and regulation of hormones** begin to **balance** and get a chance to rest so they can return to normal production.
- 10. Iris (Eye Muscle) – “The Pupil constricts” and eye muscles relax** –helping the eyes to recover. This reduces strain on the eyes as circulation is increased.
- 11. Lacrimal Eye Opening:** increased stimulation and circulation.
- 12. Salivary Glands – “Causes Saliva production to increase.”**
- 13. Heart – “The Heart rate may decrease and blood pressure may normalize.”**
- 14. Stomach – “Gastric juice secreted increases and motility can increase.**
- 15. Small Intestine – “Digestion is increased, causing metabolism to increase & improve.”**
- 16. Large Intestine – “Secretions and motility (forward movement of food through the digestive system) increases.”** Many sick people take days for food to process.
- 17. Liver -Increased conversion of Glycogen (Energy) from glucose sugar.**
- 18. Gall Bladder: increase stimulation** causes it to work better.
- 19. Intestines: Increased stimulation (motility)** so they work better.
- 20. Kidney – “Increased Urine Secretion”** allows your **kidneys to improve.**
- 21. Oral/Nasal Mucosa – “Mucus Production is increased.”** This allows the lining of the mouth, stomach, lungs, urinary bladder, urethra, uterus, vagina, eyelids, sinus to have **increased protection from harmful bacteria and infections.**
- 22. Bladder –“The bladder wall contracts and the Sphincter muscle relaxes”** allowing the body to increase urination.
- 23. Pancreas – Insulin tends to balance,** unless insulin resistant.
- 24. Hormones** tend to balance at least temporarily

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Source: Dr. Chudler, Professor, Washington State University, “Benefits of the Parasympathetic Nervous System

The **CHI MACHINE** scientifically activates the **Parasympathetic Nervous System**, which causes an **Aerobic reaction, stimulating the same reactions in the body systems as above as well as balancing the Sympathetic Nervous System.**

“For good health, **sympathetic and parasympathetic systems should be in balance.**” Mackinnon 1992; Wang, 1993. “The parasympathetic system controls resting activities (of all organs and body systems), slowing heart rate, lowering blood pressure, speeding digestion, and **activating cleansing processes of the body.** The sympathetic system controls activity ranging from responding to emergencies to normal physical exercise, in which heart rate increases and blood is shunted away from digestive and excretory organs, and (normal daily functioning). **Balance between parasympathetic and sympathetic systems strengthens the immune system.** Unfortunately, stressful lifestyles elicit a sympathetic response, keeping individuals chronically out of balance.” (Gale)

There seems to be some benefit derived from use of the CHI Machine with an effect on the third Nervous System, the **Enteric Nervous System**, which includes the motor and sensory neurons, information processing circuits, glial cells directing the muscles surrounding the gut-brain system. This system has set programs which run the body systems in this area of the body. It regulates the normal digestive system and metabolism, but not much is known about this complex system.” (Cudler)

The Chi Machine and Far Infrared Hot House seem to have some effect on this area of the body, but the complexity of this Nervous System is unknown at this point.

Rhythmic Theta Brain Waves – GABA Deficiencies

“A balanced brain creates and receives electricity in a smooth, even flow. When your brain is not producing enough GABA, your brain’s electricity is generated in bursts. This is called a brain arrhythmia and can upset your body systems in a variety of ways, none more pronounced than your emotional well-being. The number of arrhythmic events that occur during a half second of auditory and visual brain stress testing if listed below:

“The Corpus Callosum provides the electrical connection between the right and left hemispheres of the brain, allowing the two sides to coordinate their tasks. Left brained individuals tend to focus on thinking, analysis, and accuracy. They tend to be introverted and rely strongly on their practical skills. They tend to be very disciplined and well organized and to see things in terms of parts or sequences. Left-brainers are GABA-dominant and consume lots of GABA.” Lack of GABA and Acetylcholine causes the Left and right hemispheres to disassociate with each other for a time.

Dysfunctions Associated with the Left Hemisphere: (Deficiency of GABA)

Dysgraphia	Dyslexia	Impaired rhythm
Impaired singing	Language impairment	Verbal memory deficit
Rt. Side motor impairment	Mathematical impairment	

Number of Arrhythmias GABA IMBALANCES

1 “Allergies, light-headedness, restlessness, transient muscle tension or aches

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- 2 “Feelings of dread, blurred vision, protein cravings, impulsive attention Errors, cold or clammy hands, butterflies in stomach, lump in throat
- 3 “Dizziness, coughing or choking, temporomandibular joint syndrome, Paresthesia (prickling or tingling sensation, phobias.
- 4 “PMS, irritable bowel syndrome, night sweats, protein cravings.
- 5 “Tachycardia (rapid heartbeat), mood swings, various mild pain Syndromes, various anxiety disorders, hypertension.
- 6 “Delusion, unexplained chronic pains, trigeminal neuralgia, & facial pains
- 7 “Short or violent temper, chronic insomnia, neuropathy (nerve pain) , fibromyalgia (chronic muscle pain.)
- 8 “Severe heart arrhythmias, carbohydrate cravings, severe migraines, rage.
- 9 “Severe tinnitus, severe pain, manic depression, seizures.
- 10 “Marijuana abuse, alcoholism (Severely GABA deficiency)

GABA Deficiencies – Related Illnesses Physical Issues:

Abnormal sense of smell	Action tremors	Allergies
Appetite: significant change	Backache	Blurred Vision
Butterflies in stomach	Carbohydrate cravings	Cardiac arrhythmias
Chest pain or discomfort	chronic pain	Cold or Clammy hand
Constipation	Coughing or choking	Decreased libido
Diarrhea	Difficulty swallowing	Dizziness
Dry mouth	Excessive sleeping	Flushing
Headache	Hypertension	Hyperventilation
Hypo tension	Insomnia	Instability
Irritable bowel syndrome	Lump in throat	Muscle loss
Muscle tension	Nausea	Paresthesia
Premenstrual syndrome	Excessive menstrual bleeding	Protein cravings
Seizures	Shortness of breathe	slow movements
Stroke	Sweating	Tachycardia
Palpitations	Tinnitus	Trembling
Twitching	Feeling shaky	Urinary frequency
Vomiting	Significant weight change	

Personality Issues:

Adjustment disorders	Anxiety	Depression
Feeling of dread	Guilt	Worthlessness
Hopelessness	Lack of emotional maturity	Manic depression
Obsessive-compulsive disorder	Mood disorders	Phobias or fears
Poor emotional stability	Psychosis	Rage
Restlessness	Short temper	Thoughts of death
Consider suicide		

Memory Issues:

Global memory problems	Poor verbal memory
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Attention Issues:

Difficulty concentrating	Disorganized attention	High anxiety
Impulsive attention errors	Jumping the gun	Erratic craving
Inability to think clearly		

The Chi Machine appears to balance the GABA because it balances the left and right hemispheres, the front and back, and the top and bottom of the brain. “When the four pairs of frontal Lobe, Parietal Lobe, Temporal Lobe, and Occipital Lobe over the cerebrum are balanced electrical currents from the nervous system are translate them into biochemical signals. The location of any biochemical surplus or deficiency is what ultimately controls your personality and your health.” The Chi Machine appears to compensate for the deficiencies of GABA by balancing the various hemispheres of the brain, so the body can balance itself.

WHAT CAUSES ARRHYTHMIAS in the BRAIN? – SEROTONIN DEFICIENCIES

“Electricity in the brain can be seen in the form of brain waves. There are four types of brain waves, each providing us with a level of physical as well as mental consciousness. The first type is called beta, which travels at a rate of twelve to sixteen cycles or pulses per second. When your brain is transmitting beta waves, **you feel alert**. The second type is called *alpha*, and travels at a rate of eight to twelve cycles or beats per second. When your brain is transmitting alpha waves, **you feel creative**. The next type, *theta* waves, travel at a rate of four to eight cycles or beats per second. When your brain is transmitting *theta* waves, **you begin to feel drowsy**. Last are *delta waves*, which travel at a rate of one to four beats per second. When your brain is transmitting a predominance of delta waves, **you are at some level of sleep.**”

“Whatever your state of consciousness, these four brain waves always appear in combination (if operating normally). (Resting periods are required to allow balancing throughout the day.) Synchrony occurs when the four brain waves are balanced throughout the day. At night, our brain heals itself from the day’s traumas by synchronizing the output of the four brain waves. If these brain waves are out of sync, then you might feel like you are going off the edge-you are not getting restful sleep, your (you are burning too much dopamine, acetylcholine, GABA, and/or Serotonin), mind wanders, and your personality is out of control.”

WHAT CAUSES the BRAIN to be OUT OF BALANCE? – SEROTONIN EXCESS and DEFICIENCIES

Serotonin is “produced within the occipital lobes and helps to create the electricity for sight and rest, and it also controls your cravings. The four brain waves appear in varying combinations throughout the day, but at night serotonin calls the brain to recharge and rebalance. If these brain waves (or neurotransmitters) are out of sync, the left and right sides of your brain will be out of balance, and you might feel like your are going off the edge: you are overtired, out of control, and unable to get restful sleep.

“When your serotonin is unbalanced, your brain’s ability to recharge itself is compromised. Serotonin burnout can occur from experiencing too much excitement, not getting enough protein or nutrition, or not getting enough sleep. When this happens you simply cannot think clearly. The following chart shows varying degrees of serotonin

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Out of sync: varying degrees of electrical dysrhythmias or serotonin imbalance:

Low Serotonin

- 0. Prolonged severe drug experimentation, extensive hallucinogen use, Thought confusion, schizophrenia
 - 1. No sleep for days, stroke, severe learning disability, schizoaffective Order.
 - 2. Alcoholism, major depression, hypersomnia (sleeping for hours.
 - 3. Addiction, bingeing, moderate learning disabilities, severe mood disorders and moderate depression.
 - 4. Wide range of perimenopausal disturbances, loner behaviors, sever osteoarthritis, rheumatoid arthritis.
 - 5. Irregular heartbeat, obsessive-compulsive disorder, severe PMS, moderate dysthymia, shyness, persistent arthritis, uncontrolled hypertension.
 - 6. Insomnia, masochistic tendencies, conversion disorder, lack of coordination, dizzy spells, tinnitus, mild dysthymia (a disorder related to depression)
 - 7. Mild osteo-rheumatoid arthritis, mild hypertension, premature ejaculation, allergies, mild PMS, overexcitability or overemotionality, mild learning issues.
 - 8. Nausea, delayed sexual response, poor temperature regulation, blues.
 - 9. Constipation or irritable bowel syndrome, vaginal dryness.
 - 10. Perfect brain: complete left/right synchrony.
 - 11. + Too High Serotonin (See List Below)
- Source: Dr. Eric Braverman MD, "The Edge Effect", p 142.

DEFICIENT SEROTONIN –RELATED SYMPTOMS & CONDITIONS

“Results of a serotonin deficiency cause a disconnect between the mind and the body. The disconnect can manifest itself in a variety of ways, including any of the following:

PHYSICAL ISSUES

- | | |
|-------------------------------|------------------------------------|
| Abnormal sense of smell | Hypersomnia |
| Abnormal sleep positions | Hypertension |
| Aches and soreness | Insomnia & early-morning awaken |
| Allergies | Lump in throat |
| Arthritis | Muscle tension |
| Backache | Nausea |
| Blurred Vision | Night sweats |
| Butterflies in stomach | Palpitations |
| Carbohydrate cravings | Paresthesia |
| Choking sensation | PMS & excessive menstrual bleeding |
| Cold or clammy hands | Premature ejaculation |
| Diarrhea | Premature orgasm for women |
| Difficulty swallowing | Salt cravings |
| Dizziness or light-headedness | Shortness of breath |
| Drug and alcohol addiction | Tachycardia |
| Drug reactions | Tinnitus |

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Dry Mouth
Flushing or pallor
Hallucinations
Headache
High pain/pleasure threshold
Hypersensitivity

Tremor
Urinary frequency
Vomiting
Weight gain
Yawning

PERSONALITY ISSUES

Codependency
Depersonalization
Depression
Impulsiveness
Masochistic tendencies
Obsessive-compulsive disorder
Paranoia
Perfectionism

Lack of artistic appreciation
Lack of common sense
Lack of pleasure
Loner behaviors
Phobias
Rage
Self-absorption
Shyness

MEMORY ISSUES

Confusion
Memory Loss

Too many ideas to manage

ATTENTION ISSUE

Difficulty concentrating
Hypervigilance

Restlessness
Slow reaction time

“Obviously, no one person will have all of these symptoms at once and certainly some are more serious than others. GABA and serotonin are the electrical off switches: they create electricity necessary for calming the body and producing sleep. Because their functions are similar, similar symptoms may occur when either is deficient. For example, deficiencies in both serotonin and GABA affect your ability to sleep. But too little serotonin can produce night sweats and the inability to sleep, while too little GABA will leave you feeling fatigued throughout the day. (Braverman)

TOO MUCH SEROTONIN CAUSES IMBALANCE

“There are certain metabolic imbalance (anaerobic, parasympathetic, and ketogenic) that are incapable of producing an adequate stress response with catecholamines. Raising serotonin levels also potentates the activity of epinephrine, norepinephrine, and in some cases dopamine. Higher levels of serotonin has shown:

- “Five times as likely to commit suicide.
- “Cause helplessness, apathy, aggression, and sedation.
- “Raised estrogen is associated with aggression.
- “Are elevated in autistic children.
- “Are associated with some forms of panic reactions.
- “Schizophrenic patients have excess serotonin.

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“Serotonin syndrome (excess serotonin) causes tremors, altered consciousness, poor coordination, cardiovascular disturbances, and seizures.

“St. John’s Wort has been reported to cause “serotonin syndrome.”

“Hans Selye showed injection of serotonin caused muscular dystrophy. Subsequent studies suggest serotonin excess is involved in both muscular and nervous dystrophy or degeneration.

“Increased serotonin impairs learning. Decreasing serotonin improves learning & alertness.

“Interferes with slow-wave sleep (Delta), resembling depression or old age.

“The amount of serotonin in the brain increase with old age.

“Causes high blood pressure and spasms of the blood vessels and promotes clotting.

“Stimulates both the production of Cortisol, estrogen, ACTH and aldosterone production.

“Stimulates cell division in connective tissues contributing to age-related thickening and fibrotic changes of soft tissues.

“Causes edema, histamine reactions, constriction of the bronchial tubes (asthma), suppression of the immune system, and joint swelling.

“The ability to convert blood sugar into energy is impaired by serotonin.

“Lowers body temperature and decreases the metabolic rate.

“Activates glycolysis and increases the formation of lactic acid, interfering with cellular energy production.

“Interferes with muscle mitochondria, and is associated with the pain sensitivity seen in Fibromyalgia.

“Increases the secretion of the stress hormone prolactin, which is known to be elevated in Fibromyalgia.

“Low thyroid function increases serotonin.

“High serotonin inhibits thyroid function.

“Protein deficiency produces an inflammatory state that involves extreme serotonin dominance.

“Excess raises the testosterone in male animals. Inhibiting serotonin synthesis increases libido.

“High amount have been documented in preeclampsia, toxemia of pregnancy, eclampsia, and post partum depression.

“Is a precursor of Melatonin. Melatonin lowers body temperature and decreases alertness, and suppresses thyroid and progesterone. In animal studies, supplementation with Melatonin accelerates the development of tumors.

“Carbohydrate craving increased by both serotonin and Melatonin.

“Migraine headaches are associated with excess serotonin.

(See sources at end)

The Chi Machine appears to help balance and modulate Serotonin as it slows or increases the brain waves changing Beta waves to Alpha, and in many cases even into Theta Waves.

HOW DO WE GET BETTER SLEEP WITH THE CHI MACHINE?

“**The Parasympathetic Nervous System is fueled by the neurotransmitter Serotonin.** Serotonin is created from Tryptophan. Serotonin also makes Melatonin which enables us to sleep better. Being on the CHI Machine **triggers the Parasympathetic Nervous System** and the **brain waves slows down** the beta waves to Alpha or Theta waves. The brain is into its optimal sleep pattern when its brain waves are in Theta if Melatonin is being created. If there is as much as a quarter size of light shone on the back of the leg, it will turn Melatonin off.

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HOW DOES CIRCULATION EFFECTED BY THE CHI MACHINE & HOT HOUSE?

When the body relaxes under the influence of the Parasympathetic Nervous System, “the **increase of peripheral blood flow** can be demonstrated by a simple thermometer or with Stress Dots either taped on the middle of one of your index fingers or with Stress Dots held between two fingers. Wait 1-2 minutes and determine the temperature of the skin. It will range from 65 degrees to up to 97 degrees. Ideally, you would like to warm your hands to 93-95+ degrees. When you get above 90 degrees Fahrenheit, the peripheral blood flow goes up.” Thus **circulation is increased**. John Mason, Ph.D. of Cotati, CA has extensive research on treating Panic Attack by just warming the hands and feet. The Chi Machine increases the circulation, see above chart, and the Far Infrared warms the body. Order one of our Stress Dots.

WHY ADRENAL and THYROID “OVERLOAD” and “BURNOUT”?

“People with adrenal hypofunction (high) never really feel well. They are typically chronically tired and/or have recurrent sub-acute illness, allergies, arthritis, colds, viruses, diabetic, hypoglycemic, poor stamina, chronic fatigue, and various sleep problems. **Excessive adrenal activity** can cause the **thyroid to atrophy** and therefore lead to an **under active thyroid**. Medically they treat the thyroid. However, if the thyroid is hypoactive (under active over long periods) due to excessive adrenal activity, treating the thyroid will do very little to correct the problem.” Houle and Billman, Heart and Circulatory Physiology, 276(1): H215

“The energy expended by an individual depends on four main factors:

- 1, “The **Basal metabolic Rate** necessary to maintain basic physiologic functions under standardized conditions.. it is lower in hypothyroidism (lower energy).
6. The **Thermogenic effect of the food** to about 5-10% of the energy expended due to digestion and metabolism.
7. The **Physical activity** is the largest variable affecting energy expenditure.
8. When the **environmental temperature** is low it causes loss of energy. When **temperature of the body is above the blood heat, extra energy is expended** and given off.” The Far Infrared Hot House can be of great benefit in increasing and balancing blood temperature.

WHAT are the BENEFITS of the CHI MACHINE for DIABETIC NEUROPATHIC PAIN?

“**Diabetic neuropathic pain affects the sympathetic nervous system function** by blocking neuronal uptake of catecholamines. . . (There is) evidence suggesting partial loss of sympathetic innervation.” “Painful diabetic neuropathies have sympathetic denervation in the affected limbs.” “Finding of **increased blood flow in the feet, increased skin flow, and increased venous oxygenation**” **benefit the reduction of pain.** (Tack) The CHI Machine may help by causing the sympathetic to shift to parasympathetic and/or increase blood flow, increase skin flow, and increase venous oxygenation hopefully to the reduction of pain.

BENEFITS of the CHI MACHINE & FAR INFARED HOT HOUSE TOGETHER

“A study of the extent to which **parasympathetic vasodilator responses** depend upon **release of nitric oxide**, a endothelium-derived relaxing factor (EDRF) within the submandibular gland.” (Edwards) It appears that with the Far Infrared Hot House increasing Nitric Oxide in the body and the CHI Machine working in the Parasympathetic Nervous System there is a **benefit to using both at the same time**.

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**DOUBLE BLIND STUDY – FLINDERS UNIVERSITY, AUSTRALIA
REDUCTION OF VENOUS ADEMA –Using the Chi Machine for a 3 week Period
Professor Neil Piller – Department of Public Health – School of Medicine
Team Leader of the Lymphoedema Assessment Clinic
Flinders Surgical Oncology at Flinders Medical Centre**

Defined by Varicose Veins, Vascular Disease, and Deep Tissue Thrombosis.

The study involved 40 Stroke Victim, 27 Prostate Patients, and 1 person in a wheel chair.

Blood Pressure was reduced. There was significant limb size reduction.
There was significant increase in activity in quality of life and daily living.
Stopped the use of the Chi Machine after 3 weeks and testing from the 5th to 8th.week.
Some symptoms did increase, but did not return anywhere near the original starting place.

The avg. reduction in 3 weeks was 440Mls. The avg. Weight Reduction was 1.6 Kilos.
The average circumference reduction was .3 Cms.
Diet Management would be of benefit, but it was not studied.

Range of Movement	-increased 60%	Ability to exercise	-increased 58%.
Walking up stairs	-increased 40%	Improved Sleep	-increased 25%.
Positive Sleep	-increased 20%	Deep Depression	-decreased 56%
Feeling of Control	-increased 80%	Positive Impact	-increased 52%

	Began	Ended		Began	Ended
Pain	4	1	Tightness	5	2
Heaviness	5	2	Skin Dryness	5	2
Lymph	7	3			

LYPHHEDEMA STUDY – Using the CHI MACHINE

The Study involved 40 patients with Surgery on the Lymph (30%), Venous Edema (5%).
The group studied involved Cancer Patients, surgery of the bowel, cervical, melanoma, and prostate patients.

The Study measured:

Tonometry – Tissue Hardness -- Perometry – Leg Circumference & Fluid Volume - Blood Pressure and Pulse -
-- Bioimpedance –Body Compensation & Fluid in Lymph
Lymphoscintigraphy -- Assessment of the Lymph System.

Lymphatic – went down 50% Fluids went down.
Average weight loss 336 MLS. in 3 weeks. (Didn't go back to original starting place.)
Weight average 5 KGS. in 3 weeks Circumference of Leg reduced.4 Cm.
Using the Lymphoscintigraphy Scan machine you can see significant and dramatic
Changes in the liver and the full Lymph System.

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Range of Movement	increased 55%	Ability to Exercise	increased 36%
Ability to walk up stairs	increased 21%	Improved Sleep	increased 25%
Positive Sleep	increased 20%	Deep Depression	decreased 21%
Feeling of control	increased 67%	Positive Impact	increased 45%

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