

## 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% of its 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 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 anaerobically.

### 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 **40,000 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) and *increases* the activity of the parasympathetic nervous system (which slows down the heart 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 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 0.1 Hz., subjects in our

CHI MACHINE RESEARCH

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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.” (Frysinger & 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%
<b>Blood Pressure Before: 121/82</b>	<b>Blood Pressure After: 100/80</b>

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

**CHI MACHINE RESEARCH**

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combinations, and 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:

<b>Value Before CHI Machine</b>	<b>Value 10 Minutes after Chi Machine</b>
12 Normal Brain Patterns	45 (Above 40 is Normal)
24 Cerebral Dysfunction Patterns	10
56 Slow Wave Function Patterns	5
12 Amplitude Wave Patterns	0
13 Epileptic Wave Patterns	0
14 General Asymmetry Patterns	0
15 Injury Profile Patterns	0
16 Bilateral Sync Patterns	0
17 Deep Spatial Symmetry Patterns	0
18 Personality Dysfunction Patterns	0
40 ADD/HD Patterns	10

**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.”(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,
- Diabetes,
- Congestive Heart Failure,
- Depression, and
- Insulin Resistance,
- Hypertension,
- Sleep Apnea,
- Anxiety.

**Psychosocial/Behavioral conditions lead to:**

- Chronic Stress,
- Social Isolation,
- Sleep Deprivation,
- Sedentary Lifestyle and
- Smoking,
- Hostility,
- Unhealthy Diet
- 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 Dysregulation of the Stress System causes:**

- Severe Chronic Disease,
- Melancholic Depression,
- Obsessive- Compulsive Disorder,
- Alcohol and Narcotic Withdrawal,
- Hyperthyroidism,
- Anorexia Nervosa,
- Panic Disorder,
- Chronic Active Alcoholism,
- Malnutrition,
- Premenstrual Tension Syndrome.”

“Eventually (too much stress) may lead to 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.

“**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)

**The Chi Machine causes the Body to Shift from  
Sympathetic Nervous System  
to a 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 Pattern,”
- “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 most of the time.

There are a number of instances showing the Parasympathetic Nervous System was imbalanced and usually an indication of:

- “Brain Fatigue,”
- “Covert Emotional Tension,”
- “Fear Patterns,” and/or
- “Emotional Stress.”

## CHI MACHINE RESEARCH

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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 issues without first going through the usual introductory preparation that is the normal practice with each client at the beginning of the interview.

### Hormonal Changes 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.

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 then same benefits.

(\* Catecholamines any of a group of chemicals including epinephrine and norepinephrine that are produced in the medulla of the adrenal gland [endocrine](#), [hormone](#), [internal secretion](#) - the secretion of an endocrine gland that is transmitted by the blood to the tissue on which it has a specific effect [noradrenaline](#), [norepinephrine](#) - a catecholamine precursor of epinephrine that is secreted by the adrenal medulla and also released at synapses [Adrenalin](#), [adrenaline](#), [epinephrin](#), [epinephrine](#) - a catecholamine secreted by the adrenal medulla in response to stress (trade name Adrenalin); stimulates autonomic nerve action.)

### How Does The Chi Machine Cause You To Lose Weight Or Reduce Thighs, Hips And Stomach?

The Chi Machine may cause the **Cortisol, Testosterone, Estrogen, Catecholamimes, and Lactic Acid to decrease by shifting the body to the Parasympathetic Nervous System (aerobically)**. There is a Doctor who runs a commercial on television selling a product to **balance your Cortisol** and people report dramatic losses of weight. If the Chi Machine balances Cortisol, then this may be one of the mechanism explaining why so **many people lose weight**, but mostly **lose inches in the thighs, hip, and stomach**.

CHI MACHINE RESEARCH

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

1. **Lungs** -- **“The Bronchial muscles contract”** allowing uptake of oxygen to increase.
2. **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.
3. **Lymph** -- **The movement of the body and blood entrains the Lymph.**
4. **Immune** -- **Increased because of entrainment.**
5. **Adrenals & Medulla** - The **stress and regulation of hormones** begin to balance and get a chance to rest so they can return to production.
6. **Iris (Eye Muscle)** - **“The Pupil constricts”** and **eye muscles relax** - helping the eyes to recover. It reduces strain on the eyes.
7. **Salivary Glands** -- **“Causes Saliva production to increase.”**
8. **Heart** - **“The Heart rate and blood pressure can be decreased.”**
9. **Stomach** - **“Gastric juice secreted increases and motility can increase.”**
10. **Small Intestine** - **“Digestion is increased, causing metabolism to increase.”**
11. **Large Intestine** - **“Secretions and motility** (forward movement of food through the digestive system) **increases.”** Many sick people take days for food to process.
12. **Liver** - **Increased conversion of Glycogen (Energy)** from glucose sugar.
13. **Kidney** - **“Increased Urine Secretion”** allows your kidneys to improve.
14. **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.
15. **Bladder** – **“The bladder wall contracts and the Sphincter muscle relaxes”** allowing the body to increase urination.
16. **Pancreas** - **Insulin begins to balance** unless insulin resistant.

Source: Dr. Chudler, Professor, Washington State University.

**“The Chi Machine scientifically activates the Parasympathetic Nervous System, which causes an Aerobic reaction, stimulating the same reactions in the body systems as above.**

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 cell 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 “complex system.” (Cudler)

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

### How do we get better Sleep?

“**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 slow down** into Alpha or Theta. The brain is into its optimal sleep pattern promoting Melatonin only when it is completely dark in the room.

### How Circulation Is Affected By The Chi Machine & HotHouse

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 (Aerobic exercise action) and the Far Infrared warms the body.

### Adrenal “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(l): 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).
2. The **Thermogenic effect of the food** to about 5-10% of the energy expended due to digestion and metabolism.

## CHI MACHINE RESEARCH

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3. The **Physical** activity is the largest variable affecting energy expenditure.
4. 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 HotHouse can be of great benefit in increasing and balancing blood temperature.

## Benefits of the Chi Machine & Far Infrared HotHouse

### Chiropractors, Dentists, Lasic Eye Surgeons

1. Puts the patient in **relaxed, Parasympathetic state**, free of **anxiety & tension**.
2. **Relaxes muscles of the Eyes** (Eye Surgeons).
3. **Increases the Immune System**, less Colds & Illnesses.
4. **Returns Hormones** more **toward balance**.
5. **Detoxification** of the cells and body systems.
6. **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**.

### Psychologists, Hypnotherapists, Counselors

1. **Mind and Body** are “**entrained**” in a relaxed, balance state in 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.

### Athletes, Coaches, Sports Medicine

1. Increase **Performance**.
2. Increase **Endurance and Stamina**.

### CHI MACHINE RESEARCH

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3. Increase Aerobic Oxygen.
4. Reduce Lactic Acid Buildup and body aches.
5. Decreases recover time to injury and performance.
6. Controls “**Overreaching**” and “**Over training.**”

#### Business Executives, Sales Consultants, Producers

1. Increased **Focus, Concentration, and Mental Clarity.**
2. Balance and **Reduce** the high levels of **Stress Hormones.**
3. **Increase Thinking Abilities** (Balance Brain Function).
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. Release the tension of the Fascia (Netting).
4. Reduces Body Aches.
5. Chelating of Heavy Metals.
6. Causes the therapy to be easier, deeper, and faster for the therapist.

#### 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.

## Research

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