ENERGY MEDICINE
For the 21st century
The FUTURE is NOW!

Webinar presentation with
Dr. Garry F. Gordon, MD, DO, MD(H)
February 19, 2013
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**Cancer Treatments Made to Order:** Personalized Treatment for Cancer with frequent monitoring, captures and sequences malignant cells, detects changes and optimizes therapy.

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http://www.insightec.com/
Activated by a pulse of laser light, nanobubbles can kill diseased cells while leaving healthy cells untouched.

Nanobubbles are created when gold nanoparticles are struck by short laser pulses. The short-lived bubbles are very bright and can be made smaller or larger by varying the power of the laser. Because they are visible under a microscope, nanobubbles can be used to either diagnose sick cells or to track the explosions (apoptosis) that are destroying them.

After the laser pulse, red-stained sick cells show evidence of massive damage from exploding nanobubbles, while blue-stained healthy cells remained intact, but with green fluorescent dye pulled in from the outside. (Credit: Plasmonic Nanobubble Lab/Rice University)

We are all light deficient and this deficiency may be the source of our physical and emotional problems.”
~ Dr. John Ott, Light Therapy Pioneer

UV radiation in natural daylight are required for both physical and mental health, muscle strength, civilized behavior, energy and learning.

Mankind adapted to the full range of the solar spectrum, wrote and artificial distortions of that spectrum -- malillumination, a condition analogous to malnutrition -- may have biologic effects.

"Every nutritional substance, medicine and drug," says Dr. Ott, "has a specific wavelength absorption. If those wavelengths are missing in the artificial light source a person is exposed to, then the nutritional benefits of the substance will not be utilized." UV functions as a nutrient and as a co-factor in body utilization of other nutrients.
The Earth’s Electro-Magnetic Field is Weakening

Over the last 165 years, scientists have measured the Earth's magnetic field and have recorded a decline of its' strength. It is estimated that the field of the Earth 4,000 years ago was 5.0 gauss.

Today the magnetic field of the Earth is measured at 0.5 gauss…
*That is a decrease of 90%!*  

Every organism on earth (that includes people) has evolved under the influence of natural electro-magnetic signals of the earth, and the part of the solar radiation that is able to penetrate our atmosphere.

These electro-magnetic signals are of great importance to internal regulation of every organism.
Electromagnetic Spectrum

Light, heat, radio signals, and medical X-rays are all forms of electromagnetic radiation—waves moving through space that are delivered by mass-less particles called photons.

The only thing that differentiates one type of electromagnetic radiation from any other is the energy carried by its photons.

Electromagnetic energy is created at the atomic level, as electrons release energy while switching from higher-to lower-energy orbits, or while freeing themselves from atomic bonds. This movement of electrons results from the need to maintain energy balance within the atom under the input of some form of external energy.

http://www.pbs.org/wgbh/nova/physics/electromagnetic-spectrum.html
The Power of LIGHT Color Therapy.

I’ve long been an advocate of the cleansing effects of infrared light. It’s penetrating frequency delivers heat deep inside the body, improving circulation and aiding in detoxification.

Our bodies consist of tiny electro-magnetic particles that vibrate. When color and light strike you, they influence that vibration… and, in turn, the way your body functions.

Different bands of the light spectrum produce different effects in the human body. Project a part of the spectrum (blue, for example) onto an ailing or distressed body area and the healing results can be astounding! Purple can bring great relief to asthma sufferers. Indigo helps heal burns, while banishing pain. Yellow and magenta are beneficial for heart ailments. Orange can halt digestive problems, including diarrhea. In fact...

For almost every illness, there is a corresponding color that can heal!
Cells emit and absorb photons…

Photons are energy particles or waves of light in the electromagnetic spectrum. A bio-photon is a photon of light emitted from a biological system, and detected by biological probes as part of the general electromagnetic radiation of living biological cells.

Cells absorb photons and transform their energy into ATP (Adenosine Triphosphate), which is a form of energy that cells utilize. The resulting ATP is then used to power metabolic processes and to synthesize DNA and RNA (proteins & enzymes.) ATP is needed to repair and regenerate cellular components, foster an abundance of cell reproduction, and increase circulation thus restoring balance to the body.

Quantum biology-based energy medicine, including LED light therapy, low level laser therapy (LLLT), ultrasound resonance therapy, and pulsed electromagnetic frequency (PEMF) therapy, are all safe, effective, non-invasive modalities being used to restore cellular energy and functioning.
A Review of Mechanical Adjuncts in Wound Healing: Hydrotherapy, Ultrasound, Negative Pressure Therapy, Hyperbaric Oxygen and Electrostimulation
Christopher L. Hess, M.D., Michael A. Howard, M.D., Christopher E. Attinger, M.D.

Chronic or non-healing wounds may develop in the setting of many diseases and are the source of considerable morbidity as well as health costs. These problem wounds can develop after trauma, infection, cancer, radiation therapy, frostbite, animal bites, and immobility. They become more complex when the patient suffers from diabetes mellitus, peripheral vascular disease, autoimmune disease, neuropathy, steroid dependence or venous stasis.

Failure for wounds to heal is the result of four intertwined conditions: hypoxia, infection, edema and metabolic abnormalities. Each factor exists to varying degrees within each wound.

Despite considerable laboratory and clinical study no single therapy has proved beneficial for all types of wounds. However, several devices that stimulate wound healing have found constructive, adjunctive niches. They include hydrotherapy, ultrasound, negative pressure therapy, hyperbaric oxygen and electrostimulation.

http://hessplasticsurgery.net/pdf/wound-healing.pdf
NASA Space Technology Shines Light on Healing

Doctors at the Medical College of Wisconsin in Milwaukee have discovered the healing power of light with the help of technology developed for NASA's Space Shuttle. Using powerful light-emitting diodes, or LEDs, originally designed for commercial plant growth research in space, scientists have found a way to help patients here on Earth.

This LED technology developed by NASA has been scientifically proven by many recent clinical trials to re-regulate cellular function in the treatment of many common conditions, restoring the body's natural ability to heal itself.

Contrasted to many widely accepted therapies where vital tissue is intentionally damaged to create a healing response, using LED light to "re-energize" cellular function in a non-invasive manner allows the body to maintain vitality as nature intended.

"LED reacts with cytochromes in the body," explains Dr. Harry Whelan, professor of pediatric neurology and director of hyperbaric medicine at the Medical College of Wisconsin. "Cytochromes are the parts of cells that respond to light and color. When cytochromes are activated, their energy levels go up, and that stimulates tissue growth and regeneration."

Visible light (400–800 nm) at high intensity was previously found to kill bacteria that are frequently found in infected wounds, while low-power white light enhances bacterial proliferation. The phototoxic effect was found to involve induction of reactive oxygen species (ROS) production by the bacteria. The aim of the present study was to identify the most effective wavelengths in the visible range for inducing a bactericidal effect.

ROS production in Staphylococcus aureus and Escherichia coli as a function of wavelengths in the visible range (400–500, 500–800, 415, and 455 nm) was studied using the electron paramagnetic resonance (EPR) spin trapping technique.

ROS production following blue (400–500 nm) light illumination was found to be higher than that of red (500–800 nm). Within the blue range, light of 415 nm induced more ROS than 455 nm, which correlated with results obtained for the reduction in colony count of S. aureus and E. coli following illumination using equal intensities of these two wavelengths. At low fluencies, both 415 and 455 nm enhanced proliferation of S. aureus but reduced viability of E. coli.

Intense blue light, preferably at 415 nm, could be used for bacterial eradication. However, it should be noted that low intensity of visible light can be dangerous since it may promote proliferation of the microorganisms.
Exposure to lasers as well as LED light is currently applied in therapy. The most effective irradiation is that in the red and near infrared range of the spectrum.

Light-emitting diodes (LED) is widely used by physical therapists and dentists (to reduce pain), dermatologists (treatment of edema, eczema, and dermatitis), surgeons (treatment of persisting ulcers, burns, diabetic foot), rheumatologists (either to relieve pain or treat chronic diseases, arthritis and arthrosis), therapeutists, in veterinary medicine, sports medicine, and rehabilitation centers [1, 2, 7, 8].

According to Medline data (search by key words laser and therapy), 1700 to 2400 papers on therapeutic application of lasers have been published over the past 10 years.
LASER
Light Amplification by Stimulated Emission of Radiation

Types of light/laser therapy include:

- LED (light emitting diode)
- LLLT (low level laser)
- Infrared laser (monochromatic, single wave-direction)
- Laser therapy (combined light and vibration)

Laser Classifications:

- 1 to 5 milliwatts (mw) are class 3a lasers
- 5 to 500 milliwatts (mw) are class 3b lasers
- 500 and above (mv) are class 4 lasers
How Do Lasers Work?

- Increase cellular regeneration – which involves the physiology of cell metabolism, the mitochondria and the synthesis of ATP

- Increase cellular communication – which involves the nervous system, phospholipid cell membrane, and the integrin system
Erchonia FDA Clearance

- Jan 17, 2002 – 1st FDA market clearance: 635 nm laser; Chronic neck and shoulder pain
- Sept 30, 2004 FDA market clearance: 635 nm laser; laser assisted liposuction of hips, thighs and stomach and pain associated
- May 2, 2005 FDA market clearance: 405 nm laser; Inflammatory acne vulgaris
- April 24, 2008 FDA market clearance: 635 nm laser Post surgical pain associated with bilateral breast augmentation
- Sept 15, 2010 FDA market clearance: 635 nm laser; circumference reduction of waist, hips and thighs
Energy Drives the Chemistry

“Free energy from this redox chemistry is converted into an electrical potential across the inner mitochondrion, which ultimately drives the production of ATP. Cytochrome c oxidase plays a central role in the bioenergetics of the cell.”

Ten Lectures on Basic Science of Laser Phototherapy; 2007 pg: 120
Cell Communication

- "On the basis of quantum physics, the living matrix must produce coherent or laser-like oscillations"

- His predcations were confirmed in a number of laboratories. Energy therapists have always recognized the importance of vibratory phenomena (including light) in healing, but academic molecular science was focused on other matters.
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*More power does not mean better!*
Wavelength is measured in nanometers - nm.
The Basic Discovery

Important photon receptors on the phospholipid cell membrane are called ‘integrins’.

Integrins link the cellular matrix with the extra-cellular matrix and all of the connective tissues throughout the entire body.

High-Speed Branched Chain Processes

A single photon can trigger a reaction in one cell that causes the emission of several photons. These then trigger photon emissions in other cells, and the effect spreads from cell to cell to cell, like a chain reaction.
The Living Matrix

Is an excitable medium. It allows communication between all parts of the body.
Acupuncture Enhances Generation of Nitric Oxide and Increases Local Circulation

Tsuchiya M, et al. Departments of Biochemistry, Osaka City University Medical School, Abeno-Ku, Japan.

Abstract
Although it is widely used, the mechanisms and effects of acupuncture on pain are not completely understood. Recently, increased nitric oxide (NO) synthase activity has been found in meridians and acupoints. Because NO is a key regulator of local circulation, and because change in circulation can affect the development and persistence of pain, we propose that acupuncture might regulate NO levels.

NO concentration in the plasma from the acupunctured arm was significantly increased by 2.8 +/- 1.5 micromol/L at 5 min and 2.5 +/- 1.4 micromol/L at 60 min after acupuncture. Blood flow in palmar subcutaneous tissue of the acupunctured arm also increased, and this correlated with the NO increase. These changes were not observed in noninvasive sham-acupunctured hands and forearms. In conclusion, acupuncture increases the NO level in treated regions and thereby increases local circulation. These regulatory effects might contribute to pain relief provided by acupuncture.
Acupuncture has long been a major component of Oriental medicine and considerable evidence supports that acupuncture is effective in the treatment of pain and various disorders.

Pulses of ultrasonic energy can stimulate classical acupoints, eliciting a response similar to that produced by standard needling. **Ultrasonic stimulation of the acupoints offers many advantages over conventional methods (no pain or sensation or temperature rise during treatment) and provides an extremely useful tool for the scientific study and quantitative evaluation of acupuncture.**

In addition, quantitative ultrasound methods have shown that acupoints represent regions of enhanced ultrasonic attenuation, which change in size, shape, and location over short periods of time. Our study also suggests that an ultrasonic acupuncture system could be developed that would locate the acupoint (using quantitative ultrasound methods), and then stimulate the acupoint (using pulses of higher ultrasonic energy). "Ultrasonic Acupuncture" would seem to combine the best of Oriental medicine with the best of Western technology for the improvement of health care.
Qi or Chi… According to the principles of traditional Chinese medicine, illness is caused when qi does not flow properly throughout the body. Acupuncturists determine whether qi is weak, stagnant or otherwise out of balance, which indicates the points to be stimulated.

Electroacupuncture is useful for conditions in which there is an accumulation of qi, such as in chronic pain conditions, or in cases where the qi is difficult to stimulate.

One advantage of electroacupuncture is that a practitioner does not have to be as precise with the insertion of needles. This is because the current delivered through the needle stimulates a larger area than the needle itself. The advantage of this procedure is that it can be used by people who have a fear of needles or a condition that prohibits them from being needled.
Abstract

Photobiomodulation (PBM) is a modulation of laser irradiation, monochromatic light, hot color light such as red, orange or yellow, or cold color light such as green, blue or violet (LI) on biosystems.

Since its introduction in the early 1960s, laser has transformed phototherapy on biosystems. There is little research on PBM dynamics although its phenomena and mechanism have been widely studied. The PBM was discussed from dynamic viewpoint in this paper.

It was found that the primary process of cellular PBM might be the key process of cellular PBM so that the transition rate of cellular molecules can be extended to discuss the dose relationship of PBM.

There may be a dose zone in which low intensity LI (LIL at different doses) has biological effects similar to each other, so that biological information model of PBM might hold. LIL may self-adaptively modulate a chronic stress until it becomes successful.
In addition to the cytochrome c oxidase mediated increase in ATP production, other mechanisms may be operating in LLLT. The first of these we will consider is the "singlet-oxygen hypothesis."

Certain molecules with visible absorption bands, like porphyrins lacking transition metal coordination centers and some flavoproteins, can be converted into a long-lived triplet state after photon absorption.

This triplet state can interact with ground-state oxygen with energy transfer leading to production of a reactive species, singlet oxygen. This is the same molecule utilized in photodynamic therapy (PDT) to kill cancer cells, destroy blood vessels, and kill microbes.

Researchers in PDT have known for a long time that very low doses of PDT can cause cell proliferation and tissue stimulation, instead of the killing observed at high doses.
There are perhaps three main areas of medicine and veterinary practice where LLT has a major role to play (Figure 1).

These are (i) wound healing, tissue repair and prevention of tissue death; (ii) relief of inflammation in chronic diseases and injuries with its associated pain and edema; (iii) relief of neurogenic pain and some neurological problems.

The proposed pathways to explain the mechanisms of LLLT should ideally be applicable to all these conditions.
The Role of Nitric Oxide in Low Level Light Therapy (LLLT)
Hamblin MR
Wellman Center for Photomedicine, Massachusetts General Hospital, Department of Dermatology, Harvard Medical School, Harvard-MIT Division of Health Sciences and Technology

The use of low levels of visible or near infrared light for reducing pain, inflammation and edema, promoting healing of wounds, deeper tissues and nerves, and preventing tissue damage by reducing cellular apoptosis has been known for almost forty years since the invention of lasers.

Red and near-IR light is primarily absorbed by cytochrome c oxidase (unit four in the mitochondrial respiratory chain). Nitric oxide produced in the mitochondria can inhibit respiration by binding to cytochrome c oxidase and competitively displacing oxygen, especially in stressed or hypoxic cells. If light absorption displaced the nitric oxide and thus allowed the cytochrome c oxidase to recover and cellular respiration to resume, this would explain many of the observations made in LLLT.

Studies suggest that mitochondria are responsible for the cellular response to red visible and NIR light; Increased proton electrochemical potential and ATP synthesis, increased RNA and protein synthesis, increase in polarographically measured oxygen uptake, major stimulation in the proton pumping activity, increased oxygen consumption, increased phosphate potential, energy charge and enhanced activities of NADH: ubiquinone oxidoreductase, ubiquinol: ferricytochrome c oxidoreductase and ferrocytochrome C: oxygen oxidoreductase.
Effect of red or near IR light on cellular respiration, oxygenation

Explanations why:
Normal cells and tissue generally do not respond
Hypoxic cells, damaged cells, and tissue at risk of death respond well
Effects continue for long time after light is switched off
Released nitric oxide temporarily increases blood flow in illuminated area
Released nitric oxide reduces swelling by dilating lymphatics and increasing drainage
Currently, light therapies are widely used in both human and veterinarian medicine. The application of light to clinical therapeutics includes:

- Photodynamic therapy, used to kill cancer cells;
- UVA therapies, used to treat a variety of skin diseases; and
- Photobiomodulation, used to promote cell growth and recovery from injury.

Photobiomodulation uses light emitting diodes (LEDs) or low energy lasers, which emit light in the visible red to near infrared range.

Three recent findings provide important new insights… First, nitric oxide has been implicated. Second, cytochrome c oxidase, an enzyme known to reduce oxygen to water at the end of the mitochondrial respiratory chain, has been shown to have a new enzymatic activity -- the reduction of nitrite to nitric oxide.

This nitrite reductase activity is elevated under hypoxic conditions but also occurs under normoxia. And third, low intensity light enhances nitric oxide synthesis by cytochrome c oxidase without altering its ability to reduce oxygen.
Laser light - a new, non invasive treatment for Erectile Dysfunction: a placebo-controlled, single blinded pilot study

Y. Yacobi M.D., A. Sidi M..D.
Department of Urologic Surgery,
The Wolfson Medical Center, Holon, Israel

In vitro and animal studies have shown that the application of laser light may induce vasorelaxation, which is the event that produces penile erection. The hypothesis was that application of laser light to the vascular bed of the penis might restore erectile function.

To prove this hypothesis, a specifically designed device, emitting laser light, was externally applied to the penis of patients with erectile dysfunction (ED). This study has been conducted to prove the efficacy and safety of laser therapy for the treatment of ED.

The treatment performed by the laser parameters used in this study has showed improvement in ED. The improvement duration in average was of 6 month. Further studies are needed for optimization of treating parameters: wavelength, dose and sessions.

http://www.laser.nu/lllt/lllt_editorial11.htm#Laserlight
Mitochondrial signal transduction in accelerated wound and retinal healing by near-infrared light therapy
Janis T. Eellsa, Margaret T.T. Wong-Rileyb, James VerHoeevec, et al.

Photobiomodulation by light in the red to near infrared range (630–1000 nm) using low energy lasers or light-emitting diode (LED) arrays has been shown to accelerate wound healing, improve recovery from ischemic injury in the heart, and attenuate degeneration in the injured optic nerve.

Recent evidence indicates that the therapeutic effects of red to near infrared light result, in part, from intracellular signaling mechanisms triggered by the interaction of NIR light with the mitochondrial photoacceptor molecule cytochrome c oxidase.

We have demonstrated that NIR-LED photo-irradiation increases the production of cytochrome oxidase in cultured primary neurons and reverses the reduction of cytochrome oxidase activity produced by metabolic inhibitors.

Gene discovery studies conducted using microarray technology documented a significant upregulation of gene expression in pathways involved in mitochondrial energy production and antioxidant cellular protection. These findings provide a link between the actions of red to near infrared light on mitochondrial oxidative metabolism in vitro and cell injury in vivo. NIR-LED photobiomodulation represents an innovative and non-invasive therapeutic approach for the treatment of tissue injury and disease processes in which mitochondrial dysfunction is postulated to play a role including diabetic retinopathy, age-related macular degeneration, Leber's hereditary optic neuropathy and Parkinson's disease.
Near Infrared Light Reduces Oxidative Stress and Preserves function in CNS Tissue Vulnerable to Secondary Degeneration following Partial Transection of the Optic Nerve


Traumatic injury to the central nervous system (CNS) is accompanied by the spreading damage of secondary degeneration, resulting in further loss of neurons and function. Partial transection of the optic nerve (ON) has been used as a model of secondary degeneration, in which axons of retinal ganglion cells in the ventral ON are spared from initial dorsal injury, but are vulnerable to secondary degeneration.

We have recently demonstrated that early after partial ON injury, oxidative stress spreads through the ventral ON vulnerable to secondary degeneration via astrocytes, and persists in the nerve in aggregates of cellular debris. In this study, we show that diffuse transcranial irradiation of the injury site with far red to near infrared (NIR) light (WARP 10 LED array, center wavelength 670 nm, irradiance 252 W/m$^{-2}$, 30 min exposure), as opposed to perception of light at this wavelength, reduced oxidative stress in areas of the ON vulnerable to secondary degeneration following partial injury.

The WARP 10 NIR light treatment also prevented increases in NG-2-immunopositive oligodendrocyte precursor cells (OPCs) that occurred in ventral ON as a result of partial ON transection. Importantly, normal visual function was restored by NIR light treatment with the WARP 10 LED array, as assessed using optokinetic nystagmus and the Y-maze pattern discrimination task. To our knowledge, this is the first demonstration that 670-nm NIR light can reduce oxidative stress and improve function in the CNS following traumatic injury in vivo.
Mitochondrial mechanisms of photobiomodulation in context of new data about multiple roles of ATP
Karu T.

Various cellular responses to visible and IR-A radiation have been studied for decades in the context of molecular mechanisms of laser phototherapy, also called photobiomodulation, low-level light therapy (LLLT).

LLLT uses monochromatic and quasimonochromatic light in the optical region of 600–1,000nm to treat in a nondestructive and nonthermal fashion various soft-tissue and neurologic conditions. This modality also was recently used to reverse toxic effects of neurotoxins, to treat strokes and acute myocardial infarction, and to stimulate stem cell proliferation.

It is generally accepted that the mitochondria are the initial site of light action in cells, and cytochrome c oxidase (the terminal enzyme of the mitochondrial respiratory chain) is the responsible molecule.

This multiplicity of conditions treated with photobiomodulation has persuaded many unbelievers of the value of such an universal method.
Low Level Laser Energy
When our body absorbs the laser beam, a number of simultaneous chain reactions occur: blood flow invigoration, cell activity excitation, and intensification of inter-cell communication.

- Influences the permeability of cell membranes, the penetration of passage of the ions Ca++, Na+, K+, and causes increased nerve activity.
- Increases ATP (adenosene triphosphate) levels, activates and stimulates enzymes in the target cells and cAMP molecules which carry inter-cell signals.
- Increases the synthesis of endorphins - hormones that relieve pain.
- Increases S.O.D. (super oxide dismutase) which fights inflammation and reduces damage from free radicals.
- Activates immunization chain reactions; macrophage and mast cells that help in wound healing.
- Accelerates synthesis of collagen, elastin and keratinocytes – main components of the epidermis.
- Reduction in pain level.
- Anti-inflammatory activity.
- Faster wound healing and reduced scarring.
- Skin rejuvenating, anti-aging and wrinkle reduction.
B-Cure Laser  Soft laser for Strong Relief

NOW available for Home Use...

By utilizing proprietary technology the B-Cure Laser delivers an exceptional combination:

- The power and full coherence of a clinic’s soft-laser machine utilizing the selection of the best penetrating 808nM wavelength emitting 5 Joules per minute over a large area of 4.5 cm².

- With a portable, rechargeable, safe and easy-to-use machine.

Approved Uses for European CE markets:

- Knee Pain
- Lower Back Pain
- Neck & Upper Back Pain
- Achilles Tendonitis
- Muscle Pain
- Carpal Tunnel Syndrome

Dental Benefits:

- Reduce intensity & period of pain
- Decreases swelling & bruising
- Accelerates the healing process

• Tennis Elbow
• Sports Injuries
• Arthritis & Joint Disorders
• Myofacial Pain Syndrome
• Acupuncture
Almost everyone begins treatment skeptical, but all end up with a smile!

“People can perform the treatment as often as needed, can treat themselves, and after we instruct them on exactly what to do, and what they are expected to feel, they are independent. I began using it to treat patients, and for some it was like a miracle, it changed their lives.” ~ Dr. Hagai Amir, director of the Orthopedic Rehabilitation Department at Sheba Tel Hashomer Hospital, Israel.
Healing of injuries from motorcycle accident

Without a doubt, the motorcycle accident was the harshest event ever experienced by Hagai, a young man who had his whole life ahead. Because he hadn’t worn gloves, his hands were seriously injured, as were other parts of his body.

“… my right hand was completely opened,” he recalls. “I started the rehabilitation process, and one of my best friends, a regular user of the B-CURE LASER, visited after my accident and explained to me how to use it. I sat down, followed his instructions, and it was just amazing.”

I was surprised to see how tremendously successful it was. It was incredible how my hand healed, all the skin healed, as it did around my hip too. When I was young, I was often wounded, and the healing time was far longer and the process was more complex. I am so pleased that I came to know about this device. In my opinion, everyone needs to know about it.”
**B-Cure Laser** for the Treatment of Sports Injuries, Pain and Inflammation

The B-Cure is used by soccer teams, such as the Maccabi Haifa and Maccabi Tel Aviv, Maccabi Haifa basketball team, the dancer and choreographer Ido Tadmor, and the Israeli National Gymnastic team.

Professional tennis player Julia Glushko, who says “the B-Cure Laser is great, it helps me a lot for my constant back pain”.

Mr. Pini Sharon, Physiotherapist, Maccabi Haifa Sports Club: “B-Cure Laser provides immediate relief for a wide variety of pain and it is very easy to use. The use of the laser device improves the level of pain immediately in cases of acute and chronic pain. The advantage of this device is that the player can take it home and treat himself.”

Alon Harazi, Maccabi Haifa Football Player: “The device treated both fresh and old wounds exceptionally. Today I do not go on the field without using it. I highly recommend it for every athlete, and anyone who suffers from any type of pain.”
More B-Cure Laser TESTIMONIALS – doctors and patients

The gymnasts daily use of B-Cure Laser LLLT 808 device substantially decreased the pain without the use of pain killers. Decreasing the pain also enabled greater maintenance of flexibility and increased level of concentration in the exercises. I thank you on behalf of the girls on the team and recommend the use of B-Cure Laser wholeheartedly.

Sincerely,
Ira Vigdorchik
Coach of the Israeli Women’s Rhythmic Gymnastics Team
Beijing 2008 Olympic Games

My name is Michael Zilber and I suffer from joint aches, as well as gum and teeth ache. After a treatment of about three months using the B-Cure Laser device, with plenty of patience, the pain in the arm wrists that lasted several years decreased by 80%-90%. Amazing!! In addition, the teeth and gum aches disappeared after two treatments only with the device and the healing time of a burn I suffered from shortened significantly after using the device. In conclusion: this is a very simple, domestic device that works wonderfully.

Thank you, Michael

Natural Healing with Intranasal Light Therapy

Intranasal Light Therapy is a way to stimulate self-healing and boost immunity by illuminating the blood capillaries through the nasal cavity.

VieLight is a small light diode of certain specifications designed to be inserted into either nostril for 25 minutes per day. Homeostasic stimulation is achieved through the response of the mid-brain area, particularly the hypothalamus being in close proximity to the nasal cavity, and the stimulation of redox signaling molecules and their subsequent distribution through the nasal capillaries and the circulatory system.

The facial area also responds directly to the light, often resulting in the immediate treatment of sinusitis, congestion, headache and, facial and pain in the neck area.
History of Light Therapy and its Side Effects

1967:
Hair growth in mice

1986 to present:
Intravenous Blood Irradiation

1995 to present:
Intranasal Light Therapy

3000+ clinical studies
NO MAJOR SIDE EFFECTS
Capacity of Body Systems:

- Immune system
- Circulatory system
- Brain / neural

depends on...

Systemic Homeostasis

Free radicals

Anti-oxidants
Blood vessels of the Human Head

The most concentrated area

Light source
Illuminating the Mid-brain

Hypothalamus
ILIT Biomechanism: Olfaction
Improvement in brain blood flow

Source: Single photon emission computed photometry by Prof Xiao XC
Evidence supports intranasal light therapy for brain-related conditions such as mild cognitive impairment, Parkinson’s Disease, migraine, stroke.

We analyzed the literature to arrive at reference parameters for optimum brain stimulation with low level light. Studies lead us to select parameters that involve low level light in the near infrared red (NIR) range that pulses at 10 Hz to draw superior neural response.

More specifically, the parameters could include a wavelength of 810 nm from a LED source, supported by a power density of 10 mW/cm², over daily treatment session of 25 minutes, and a duty cycle of 50 percent.

The LED beam footprint spans the underside of the brain, including the mid-brain area. With these specifications, the energy is 7.5 J/cm² (net of duty cycle) per session. Users reported improved neurological outcomes, although the results are more mixed (but without negative effects) from those without prior medical conditions.
Brain Cell Healing

In vitro post-oxidative stress. 670nm, 3 mW, 20 sec/day, 5 days

A natural treatment for insomnia and sleep disorder
Lew Lim, MedicLights Research Inc and Vielight Inc.
August 2012

Conventional “light therapy”, especially that is involved with regulating sleep rhythm involves the use of bright blue light in the morning. Bright blue light has the effect of suppressing melatonin, a hormone that encourages the body to go into sleep mode and regulate the sleep cycle (or circadian rhythm).

However, red light as used in our therapy, appears to have the opposite effect to the blue light by working with the melatonin to regulate the sleep cycle. Related studies demonstrate correlation between its use and the presence of increased levels of melatonin in patients with sleep disorder.

In 2006, Wang F et al reported that they had treated 50 patients with insomnia with intranasal low level laser therapy that is of similar specifications to Vielight’s laser device for 60 minutes per session. Each session was conducted once a day over between 10 to 14 days. They found that the condition had improved significantly in 41 (82%) of the cases.
Intranasal Low Intensity Laser Therapy (ILILT) blood purifying effects

ILILT's Biostimulatory effects to blood

1. Increased ATP production by the mitochondria and increased oxygen consumption on the cellular level, which may result in muscle relaxation
2. Increased serotonin and increased endorphins
3. Increased anti-inflammatory effects through reduced prostaglandin synthesis
4. Improved blood circulation to the skin in cases like neuralgia and diabetes mellitus
5. Decreases permeability of the membrane of the nerve cells for Na/K causing hyperpolarisation
6. Increased lymphatic flow and decreased edema

Adjuvant therapy

Health care

- Hypertension
- Hyperlipidemia
- Hyperviscosity
- Stroke
- Sugar diabetes
- Insomnia

Blood health care
- Improve natural immunity
- Anti-ageing
- Protect the ischemic anemia
Nitric oxide and the paranasal sinuses.
Lundberg JO.
Karolinska Institutet, Department of Physiology and Pharmacology, Stockholm, Sweden. Jon.Lundberg@ki.se

Abstract
The discovery within the paranasal sinuses for the production of nitric oxide (NO) has altered the traditional explanations of sinus physiology... healthy paranasal sinus epithelium expresses an inducible NO synthase that continuously generates large amounts of NO, a pluripotent gaseous messenger with potent vasodilating, and antimicrobial activity.

This NO can be measured noninvasively in nasally exhaled breath. The role of NO in the sinuses is likely to enhance local host defense mechanisms via direct inhibition of pathogen growth and stimulation of mucociliary activity. The NO concentration in a healthy sinus exceeds those that are needed for antibacterial effects in vitro. In patients with primary ciliary dyskinesia (PCD) and in cystic fibrosis, nasal NO is extremely low. This defect NO generation likely contributes to the great susceptibility to chronic sinusitis in these patients. In addition, the low-nasal NO is of diagnostic value especially in PCD, where nasal NO is very low or absent. Intriguingly, NO gas from the nose and sinuses is inhaled with every breath and reaches the lungs in a more diluted form to enhance pulmonary oxygen uptake via local vasodilation. In this sense NO may be regarded as an "aerocrine" hormone that is produced in the nose and sinuses and transported to a distal site of action with every inhalation.

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Lowering high blood pressure naturally through intranasal light therapy
T Lew Lim, Mediclights Research Inc., Toronto, Canada
May 2010

There are commonly cited causes for high blood pressure or hypertension. These include being overweight, smoking, stress, inactivity, high sodium intake, low potassium, alcohol consumption, age and the intake of certain drugs. However Mayo Clinic.com states that in 90 to 95 % of the cases, there is no identifiable cause. This type of high blood pressure, called essential high blood pressure or hypertension, tends to develop over many years.... High blood pressure associated with high blood viscosity and red blood cell aggregation.

Chinese scientists treated 100 patients with hyper-viscosity with intranasal low level laser blood irradiation therapy for 30 min twice daily for five days. They found that blood viscosity, plasma viscosity, fibrinogen, erythrocyte aggregation index, erythrocyte deformability index and erythrocyte sedimentation rate decreased significantly.

They concluded that the irradiated blood mediated the decrease in viscosity. And as discussed, this will bring down the high blood pressure.

Blood improvements

The presence of RBC aggregation is attributed to inflammation which then stimulate the release of fibrinogen into the blood circulation system.

When inflammation is reduced through LLLT, the level of fibrinogen in the blood will also be reduced. As the result RBCs will be visibly disaggregated.

Before

After
Healing Distributed through the Circulatory System

The combined roles of singlet oxygen, ROS, Redox Signalling and the activity of SOD best explains the mechanism behind the healing success of Intranasal Light Therapy. The key to the efficacy of the intranasal pathway is that it is essentially an in vivo method without the invasiveness of the older intravenous method.

The rich vascular bed in the nasal cavity is an excellent starting point to carry and distribute Redox Signalling molecules throughout the body to stimulate the healing process.
Case study: 1st HIV Patient (no drug)
Case study: 2\textsuperscript{nd} HIV Patient (on drug)
Clinical Evidence for...

- Parkinson’s disease
- Alzheimer’s disease
- Dementia
- High Blood Pressure
- Flu
- Lung diseases
- Stroke
- Cancer
- Depression
- Insomnia
- Asthma
- Sinusitis
- Migraine
- Diabetes
- High Cholesterol
- Kidney failure
- Low energy
- Aging

and more....
System includes a therapy Mat, controller with 15 different programs, and a Half Ring.

Use both attachments together or use them separately.

Recommended for use 30 minutes at a time in session. Use daily as needed.

This type of PEMF Advanced Cellular Exercise is designed to influence the cells of the body horizontally and vertically, all at one time for maximum results.

For more information: info@nubiomed.us
PEMF Therapy Increases Cellular Membrane Permeability and Cellular Metabolism

As early as 1940, it was suggested that magnetic fields affect the TMP and the flow of ions in and out of the cells and might therefore influence cellular membrane permeability.

It has since been established that magnetic fields can influence ATP (Adenosine Triphosphate) production; increase the supply of oxygen and nutrients via the vascular and lymphatic systems; improve the removal of waste via the lymphatic system; and help re-balance the distribution of ions across the cell membrane.

Healthy cells in tissue have a voltage difference between the inner and outer membrane referred to as the membrane resting potential that ranges from -70 to -80 mV. This causes a steady flow of ions through its voltage-dependant ion channels.

As the magnetic field created fluctuates, it induces an electron flow or a current in one direction through the living tissue. As electrons always flow from a negative (cathode) to a positive (anode) potential, when the magnetic field vanishes, the direction of the electron flow is reversed. Therefore such induced polarized currents stimulate the exchange of ions across the cell membrane.
Autophagy in Human Health and Disease
February 14, 2013

This review discusses the cellular process of autophagy (“self-eating”), which plays key roles in normal development of the immune system and adaptation to stress, as well as in a wide range of disease states.

During exercise, autophagy is increased in cardiac and skeletal muscle, adipose tissue, and pancreatic beta cells. In mice, exercise-induced autophagy provides protection against glucose intolerance associated with a high-fat diet.

Without this efficient system, cells could become choked with trash and malfunction or die. In recent years, some scientists have begun to suspect that faulty autophagy mechanisms contribute to the development of a range of diseases, including diabetes, muscular dystrophy, Alzheimer’s and cancer. The slowing of autophagy as we reach middle age is also believed to play a role in aging.
Electroporation, or electroporization, is a significant increase in the electrical conductivity and permeability of the cell plasma membrane caused by an externally applied electrical field. It is usually used in molecular biology as a way of introducing some substance into a cell, such as loading it with a molecular probe, a drug that can change the cell's function, or a piece of coding DNA.

Electroporation is done with electroporators, appliances that create an electro-magnetic field within the cell solution.

Electroporation is used in cancer treatment to help deliver drugs or genes into the cell by applying short and intense electric pulses that transiently permeabilize cell membrane, thus allowing transport of molecules otherwise not transported through a cellular membrane. This procedure is referred to as electrochemotherapy when the molecules to be transported is a chemotherapeutic agent or gene electrotransfer when the molecule to be transported is DNA.

http://en.wikipedia.org/wiki/Electroporation#Electroporators
Physical Mechanism of Electroporation

Electroporation allows cellular introduction of large highly charged molecules such as DNA which would never passively diffuse across the hydrophobic bilayer core. This phenomenon indicates that the mechanism is the creation of nm-scale water-filled holes in the membrane.

Although electroporation and dielectric breakdown both result from application of an electric field, the mechanisms involved are fundamentally different. In dielectric breakdown the barrier material is ionized, creating a conductive pathway. The material alteration is thus chemical in nature. In contrast, during electroporation the lipid molecules are not chemically altered but simply shift position, opening up a pore which acts as the conductive pathway through the bilayer as it is filled with water.

Schematic showing the theoretical arrangement of lipids in a hydrophobic pore (left) and a hydrophilic pore (right).

http://en.wikipedia.org/wiki/Electroporation#Electroporators
PEMF stimulates electroporation of the cell membrane, where tiny pores or “ion channels” are opened during pulses. This effect increases trans-membrane potential, electron transport, and free radical scavenging, which is significantly important for anti-ageing and treating chronic diseases including cancer.
Electroporation and alternating current cause membrane permeation of photodynamic cytotoxins yielding necrosis and apoptosis of cancer cells

Nelly Traitcheva, Hermann Berg.

To increase the permeability of cell membranes for low doses of cytostatic drugs, two bioelectrochemical methods have been compared:

(a) electric pore formation in the plasma membranes by single electric impulses (electroporation), and

(b) reordering of membrane structure by alternating currents (capacitively coupled).

These treatments were applied to human leukemic K-562 cells and human lymphoma U-937 cells, yielding apoptotic and necrotic effects, determined by flow cytometry.

Additional cell death occurs after exposure to light irradiation at wavelengths \( \lambda > 600 \text{ nm} \), of cells which were electroporated and had incorporated actinomycin-C or daunomycin (daunorubicine).

It is observed that drug uptake after an exponentially decaying electroporation pulse of the initial field strength $E_0 = 1.4$ kV/cm and pulse time constants in the time range 0.5–3 ms, is faster than during PEMF-treatment, i.e., application of an alternating current of 16 kHz, voltage $U < 100$ V, $I = 55$ mA, and exposure time 20 min.

However, at the low a.c. voltage of this treatment, more apoptotic and necrotic cells are produced as compared to the electroporation treatment with one exponentially decaying voltage pulse.

Thus, additional photodynamic action appears to be more effective than solely drugs and electroporation, as typically applied in clinical electrochemotherapy, and somewhat more effective than the noninvasive pulsed electromagnetic fields (PEMFs), for cancer cells in general and animals bearing tumors in particular.
Growth hormone-releasing hormone (GHRH) plasmid-based therapy for the treatment of chronic renal failure and its complications was examined.

Companion dogs (13.1 ± 0.8 years, 29.4 ± 5.01 kg) and cats (13.2 ± 0.9 years, 8.5 ± 0.37 kg) received a single 0.4 mg or 0.1 mg species-specific plasmid injection, respectively, intramuscularly followed by electroporation, and analyzed up to 75 days post-treatment; controls underwent electroporation without plasmid administration.

Plasmid-treated animals showed an increase in body weight (dogs 22.5% and cats 3.2%) compared to control animals, and displayed improved quality of life parameters including significant increases in appetite, activity, mentation and exercise tolerance levels.

Treated animals survived longer than control animals with 70% of dogs and 80% of cats surviving until study day 75. Only 17% and 40% of the control dogs and cats, respectively, survived to day 75.
Photodynamic effect on cancer cells influenced by electromagnetic fields
Panga L, Baciub C, Traitchevac N, Berg H.

The synergism of low-frequency electromagnetic field treatment and photodynamic effect on killing of cancer cells presented. The weak pulsating electromagnetic field (PEMF) generated by Helmholtz coils in the mT range influences the permeability of cell membranes for photo-sensitizers.

Several types of sensitizers were excited by visible light during incorporation without and with two kinds of PEMF treatment. In the first part suitable photo sensitizers were selected in the absorption range between 400 and 700 nm against human myeloid leukaemia K562, and human histiocytic lymphoma U937, cells by treatment of PEMF consisting of rectangular pulse groups.

In the second part amplitude and frequency dependencies were measured using sinuous PEMF and white light with the result that after 12 min the PEMF treatment enhanced photodynamic effectivity by more than 40% over the control value. Taking into account the influence of many parameters, an additional optimization will be possible by photodynamic PEMF synergism for an increased drug delivery in general.

MTS-7 Multiple Therapy System
6 in 1 - Home System

PEMF • LED Red Lights • LED Infrared Lights • E-Stim • Micro Current • Vibration Massage

Effective in treating the following conditions:

- Inflammation
- Pain Control
- Increased blood flow
- Increased oxygen levels
- Temporary relief of minor muscle and joint pain
- Promotes the relaxation of muscle tissue
- Relief of post-surgical or post traumatic pain

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M.I.C.E. = Magnetically Induced Cellular EXERCISE

Advanced Detoxification
With Electro-Nutrient Therapy (ENT) requiring PEMF as M.I.C.E. (Magnetically Induced Cellular Exercise)

Bioporation Nutrient Uptake

Active H-Minus Hydrogen
Bio En’R-Gy’ - C
Beyond Chelation Improved (BC-I)
Zeo-Gold

Autophagy Detoxification

Zeo-Gold
Bio En’R-Gy’ - C
Beyond Fiber
EDTA (calcium edta)
Electromagnetic Therapy
for energy production and cellular detoxification

In an article published in *Plos One*, November 2010, volume 5, issue 11 (Wang), page 4, Johns Hopkins’ researchers found a **38% increase** in ATP production in P12 cells that were placed in a static magnetic field device that we supplied.

This increase could be much higher *in vivo* with the brain's pulsed DC electromagnetic field interacting with an enhanced earth-type field resulting in increased resonance of the mitochondria. All of this leading to enhance electron transfer in the creb cycle resulting in more ATP production.

↑ ATP equals ↑ Na+ K+ pump function
which leads to ↑ charge of the cell wall and ↑ metal excretion.
Can electrons act as antioxidants? A review and commentary.
Oschman JL. PMID: 18047442 [PubMed - indexed for MEDLINE]

It is well established, though not widely known, that the surface of the earth has a limitless and continuously renewed supply of free or mobile electrons as a consequence of a global atmospheric electron circuit.

Wearing shoes with insulating soles and/or sleeping in beds that are isolated from the electrical ground plane of the earth have disconnected most people from the earth's electrical rhythms and free electrons.

Studies have demonstrated that connecting the human body to the earth during sleep (earthing) normalizes the daily cortisol rhythm and improves sleep. It is also suggested that free electrons from the earth neutralize the positively charged free radicals that are the hallmark of chronic inflammation. The research summarized here and in subsequent reports provides a basis for a number of earthing technologies that restore and maintain natural electrical contact between the human body and the earth throughout the day and night in situations where going barefoot on the earth is impractical.

It is proposed that free or mobile electrons from the earth can resolve chronic inflammation and pain by serving as natural antioxidants.
PEMF creates a Negative-Potential energy field to induce subtle current flows and generate a very large amount of negative ions inside the human body. Negative ions stimulate the activity of the \( \text{Na}^+/\text{K}^+-\text{ATPase} \) to enhance \( \text{Na}^+/\text{K}^+ \) pump and to maintain the cell potential at 70 – 90 mV.

Increasing cellular energy and membrane potential assists in uptake of oxygen, H2O, anti-oxidants and other critical nutrients into the cell...while toxins, cellular waste and carbon dioxide are purged.

**PEMF Exercise Therapy can Increase the Effectiveness of Anti-oxidants 100 Fold!**

Low energy “sick” cell < 70mV  
Normal healthy cell = 70-90 mV
Natural zeolites *chabazite/phillipsite/analcime* increase blood levels of antioxidant enzymes.


Abstract

Imbalance between reactive oxygen species generation and antioxidant capacity induces a condition known as oxidative stress which is implicated in numerous pathological processes. In this study we evaluated whether natural zeolites (chabazite/phillipsite/analcime) may affect the levels of different antioxidant enzymes (gluthatione peroxidase, superoxide dismutase, gluthatione reductase), total antioxidant status and oxidative stress in 25 clinically healthy men, both non-smokers and smokers. Measurements were performed on whole blood or on plasma samples before (T0) and after 4-weeks zeolites intake (T1). At T1, gluthatione peroxidase, superoxide dismutase and gluthatione reductase increased compared to T0 levels, both considering all subjects as joint and after subdivision in non-smokers and smokers. Differently, a reduction in total antioxidant status was observed at T1. Anyway, total antioxidant status resulted higher than the reference values in both groups at each time point. A decrease in lipid peroxidation, a major indicator of oxidative stress assessed by monitoring thiobarbituric acid reactive substances, was observed in all subjects at T1. Our results suggested that natural zeolites may help to counteract oxidative stress in apparently healthy subjects exposed to different oxidative stress risk factors, such as smoking, thus representing a particular kind of food with potential antioxidant properties.
Generally, ZeoGold™ powder has superior DETOX capacity and performance for inorganic metallics vs. other zeolite DETOX products, because of the higher CEC capacity, ultrahigh surface area available for sorption and optimized particle size. The natural zeolites remove Pb or other metal cations present in water solutions and biological, aqueous milieu via:

a) exchange for ions (e.g., Na, K, Ca, H+) in the zeolite, crystallites for the Pb or other metal cation.

b) by direct, surface sorption.

c) by physically, removing particulate forms of Pb or trace metals that get “trapped” in the zeolite, micro-crystals or pore structures.

d) indirectly, by altering the intestinal tract microflora and/or bio-film layer that can alter the utilization or processing of trace metals.

The mechanism for removal of Pb and other toxic, trace metal cations for ZeoGold™ is the same as for Clinoptilolite products, but superior DETOX performance can be expected from the ZeoGold™ doses (100 to 250 mg/day) than the Clinoptilolite products.
THE ENHANCED ZEOLITE
that creates negatively charged micro-bubbles of Hydrogen.

Hydrogen is the most needed nutrient as it assists in maintaining the electrical balance that enables cell structures to communicate and function properly.

When MicroHydro Zeolite CEA (cation exchange activator) is added to water, the pH shifts to a slightly alkaline state as multitudes of negative ions, as stable MICROBUBBLES, cascade into solution.

The effect is a rapid change of the oxidation-reduction potential (ORP) toward the high negative millivolt range.
In a new study, published online today in *Science Translational Medicine*, Boston Children’s Hospital pediatric critical care physician, Dr. John Kheir and colleagues report the development of microparticles filled with oxygen gas that can be injected directly into the bloodstream. The particles quickly dissolve, releasing the gas and keeping organs, such as the brain, from suffocating.

These microparticles are tiny bubbles whose surface membranes are already used clinically to administer chemotherapy drugs and ultrasound dyes.

But while those microparticles release their contents slowly, Kheir and his collaborators designed oxygen-containing particles that would dissolve as soon as they hit the bloodstream. They tested the microbubbles in rabbits breathing air low in oxygen. Within seconds of receiving the microbubbles, the levels of oxygen in the rabbits’ blood rose from a dangerously low 70% to nearly 100% saturation, the ideal level.

http://news.sciencemag.org/sciencenow/2012/06/a-breath-of-fresh-microparticles.html
Bio En’R-G’y C is an exciting new form of Ribose Nucleotide Activated (RNA) Vitamin C containing Riboperine metabolites that safely allows patients to take daily high doses without stomach upset, cramping, or diarrhea.

Each serving of Bio En’R-G’y C ‘s unique form of L-Ascorbate C crystals, has been further enhanced with 2000 mg of GMS-Ribose for increased bio-availability.

Preliminary double blind, human trials on one or more of the ingredients of GMS-Ribose taken with Vitamin C have been shown to enhance the uptake of Vitamin C plasma levels above 30% of subjects on placebo.

A BRIGHT SPOT on this urine stick test means you will have a brighter future!

COLOR CHART – mg/dL vitamin C (Ascorbic Acid)

- 0
- 10
- 20
- 50
- 100

Directions:
1. Dip reagent strip in freshly collected urine and remove immediately or alternatively, wet the reagent strip by passing through the urine stream.
2. While removing, run the edge of the strip against the rim of the urine collection cup to remove excess urine.
3. 30 seconds after removing from urine, compare reagent side of test area with corresponding color chart.
Improve Nitric Oxide Concentrations with Longevity Maca (Lepidium meyenii Walp)

Maca's reputation as a powerful enhancer of strength and stamina and as a libido-fertility herb goes back more than 500 years, and today it is gaining worldwide attention for its effectiveness.

Maca is a radish-like root that grows in the mountains of Peru. Peruvian Maca Root naturally contains significant amounts of amino acids, carbohydrates, vitamins, and minerals.

Maca is rich in L-arginine. Studies have even shown the ability of maca to stimulate nitric oxide production in human tissue.

Maca is both a hormone balancer and an adaptogen. It helps stimulate the pituitary gland, acting as a kind of tonic for the hormone system. When the pituitary gland functions optimally, the entire endocrine system becomes balanced, because the pituitary gland controls the hormone output of the other three glands.
FIGHT for Your Health with Dr. Gordon’s Power Drink

**Beyond Fiber** - 1 rounded tsp

**Bio En'R-G’y C** - 1 rounded tsp

**MACA Powder** - 1/2 tsp

**Dr. Gordon’s Organic Best of Greens** - 1 rounded tsp

**ZeoGold** - 1 capsule (twist open and dissolve in drink)
Beyond Chelation Improved (BC-I)

Each canister of Beyond Chelation Improved™ contains 30 packets. Each packet consists of:

- 3 Beyond Any Multiple™ caplets with Vitamin K2, Resveratrol, Tocotrienols, and Utah Sea Minerals
- 3 Essential Daily Defense™ capsules (which deliver a combined total of 400 mgs of EDTA)
- 1 Omega 3 marine lipid concentrate
- 1 Evening Primrose Oil capsule
- 1 Phosphatidyl Ginkgo Biloba capsule.
Detoxification is a LIFETIME challenge

LEAD in bones requires years of continuous oral chelation with EDTA and/or Zeolite.

Because bones take an average of 15 years to fully regenerate, IV EDTA chelation therapy over several months only removes lead and other toxic metals from the body’s blood and tissues, NOT from bones.

Harvard studies prove that bone lead leads to heart disease and cataracts, as Bones are the MAJOR storehouse of lead in the body.

For more information see the 507 References Supporting Oral EDTA

On the Gordon Research Institute Website at www.gordonresearch.com
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Arrangements may be made with Katie Isham, by calling her at the Gordon Research Institute at 928-472-4263, ext. 134, Fax to 928-474-3819, or by emailing Katie at kisham@longevityplus.com, to learn more.

Appointments may include a review of all prior medical records and/or any new tests that can be ordered in preparation for your personalized consultation. Test panels can be more focused on ANTI-AGING, or cancer, depending on your concerns.

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Register Now! www.acimconnect.com
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Tuesday, March 19th - 3:00 PM (MST)

Hydrogen plays a critical role in achieving and maintaining positive health. We need this element, which makes up 90 percent of matter in our universe, as much as we need oxygen.

Albert Szent-Gyorgyi, the Nobel Prize-winning scientist who discovered vitamin C, believes that hydrogen, not oxygen, is the “fuel of life.” Oxygen burns hydrogen, which releases the energy that runs our bodies.

Hydrogen, specifically the negative hydrogen ion (H-) is considered the most powerful antioxidant. By replenishing our hydrogen stores, we increase cellular energy and detoxification, relieving and even reversing common degenerative diseases like Alzheimer’s and Parkinson’s, heart disease, chronic fatigue, fibromyalgia, depression, thyroid and hormone imbalances, Type 2 diabetes, acid reflux and indigestion.
THANK YOU

Garry F. Gordon MD, DO, MD(H)