Carbonic Acid Therapy

What is Carbonic Acid Therapy

Carbonic Acid Therapy is a widely spreading treatment to help aid in rejuvenating the body for health, cosmetic and pharmaceutical reasons. Carbon Dioxide, CO₂, will convert to Carbonic Acid, H₂CO₃, when presented within a body of water or steam. Carbonic acid, H₂CO₃, is CO₂ dissolved in water.

Both are present naturally in the human body and carbonic acid plays an important role in the natural processes of the body. Carbonic acid therapy may be administered in baths or steam chambers. By introducing CO₂ into a steam chamber (sauna) to react with the highly excited H₂O steam molecules, a new compound, Carbonic Acid H₂CO₃, is formed. It has the ability to penetrate effortlessly into the skin and bloodstream due to its highly soluble state which increases the oxygen absorption ability of blood, muscles and skin. This is known as the Bohr Effect.

Carbonic Acid Therapy produces results that are highly sought after by top medical, pharmaceutical, and cosmetic scientists across the world. They are investing vast amounts of funds to try and find ways to try and replicate the results Carbonic Acid Therapy provides. The conclusion of the Bohr Effect is that it increases the energy production that is needed for the body to sustain, protect, and improve itself. The two major mechanisms of actions are CNS (Central Nervous System) sedation and vasodilatation of blood vessels.

Carbonic Acid Therapy assists in many health and wellness treatments as well as provides a natural treatment for cosmetic procedures. Instead of undergoing surgery to remove cellulite, Carbonic Acid Therapy can help to reduce the appearance of cellulite. It also helps with other cosmetic changes such as clarification of skin and the reduction in scarring. Although CO₂ therapy is mainly utilized in upscale cosmetic and medical spas for its powerful ability to treat cellulite, wrinkles, scar marks and other skin conditions, it is even more potent as a treatment of the cardiovascular system.

Many studies have concluded that Carbonic Acid Therapy has a proven effect on helping your cardiovascular system. The Carbonic Acid is very effective and responsive to the heart and blood vessels. It is acclaimed to improve blood circulation and helps decrease vascular diseases. Some diseases for which it can be an effective adjunct in treatment are hypertension, diabetes, coronary
complications and minor vascular insufficiency. It provides a natural anti-inflammatory effect and relief from pain.

**Carbonic Acid Therapy Helps:**

- dilates the arteries to increase blood flow throughout the entire body
- enhances oxygen delivery at cellular level in the muscles, organs, brain, skin and other parts of the body
- flushes the skin temporarily to a healthy pink color
- stimulates warmth receptors in the skin, inhibits cold receptors
- reconstructs functionally closed capillaries
- decreases blood pressure
- naturally sedates and calms the central nervous system
- reduces stress, relaxes the muscles and the mind
- is a natural anti-inflammatory compound
- is a fat dissolving compound

**Why is it important**

Carbonic Acid therapy serves for both medicinal healing and cosmetic healing. It is a natural therapy that is non-invasive with no side effects or immune suppression.

The medicinal accomplishments of Carbonic Acid Therapy are priceless. Improving an individual’s quality of life and possibly increasing their life span is something upon which one cannot put a value. From better brain function due to enhanced blood flow to improved athletic performance Carbonic Acid Therapy provides resolutions for greater quality of life. Other health quality of life benefits include stress relief, pain relief, increased mobility, reduced muscle spasms, relaxation, improved sense of well-being, increased energy and vitality, improved erectile function and anti-aging effects. Health and longevity factors included in the benefits of Carbonic Acid Therapy are reducing hypertension, improving immune function, preventing heart attacks and strokes.

Successfully reducing the negative impact of such cardiovascular threats as hypertension, arteriolar occlusion and other arteriolar and microcirculatory disorders and functional heart disorders is a life-extending reality with Carbonic Acid Therapy. That the potential to eliminate cardiovascular disease may be within reach through adjunct treatment with Carbonic Acid Therapy is exciting! Carbonic Acid Therapy provides a practical solution for quadriplegics and blood circulation problems due to inactivity. It is an excellent substitute for exercise in the sick, weak, elderly and quadriplegic. It can prevent limb amputation due to complications of diabetic foot. It promotes faster wound healing and speeds up recovery time.

This therapy could potentially be lifesaving to many individuals who suffer from cardiovascular issues. To allow people to experience this type of natural therapy, without having to undergo surgery is not only safer, but less expensive to all parties involved.
Cosmetically, the benefits of Carbonic Acid Therapy are limitless. The therapy acts as a powerful cleanser by irrigating the skin and flushing away toxins; exfoliation occurs. The tone, texture and appearance of the skin are improved. Other skin improvements include scar reduction, cellulite removal, and reduction of stretch marks. The skin begins to glow and it becomes more vibrant.

Since Carbonic Acid Therapy helps to increase blood flow, and speed up the process of breaking down fat, it can eliminate the need for some plastic surgeries for cellulite reduction and liposuction. This therapy is a more viable option for many who have health issues that make surgery too great a risk. Carbonic Acid Therapy’s lower cost, non-invasive nature and comparable results would make it a much preferred and sought after solution.

**Ozone Therapy**

The use of ozone in the HOCATT™ provides the many benefits iterated in Dr. Mawsouf’s paper and works in concert with the other modalities to facilitate the best all the modalities have to offer for health and vitality. Ozone in the HOCATT™ has the advantage of administration that can be both topical and systemic and its uptake is enhanced by the action of the Carbonic Acid Therapy and Hyperthermia Therapy. Experts say the HOCATT™’s combination provides the greatest, fastest and easiest form of detoxification available!

**Ozone Article**

Ozone is triatomic oxygen, so in order to introduce ozone; we have to start with oxygen. Oxygen is a life-giving, life-sustaining element. We cannot survive more than few minutes without oxygen. As we know, the body’s cells depend on oxygen. Ninety percent of body energy is created by oxygen through aerobic metabolism. Proper Cellular Oxygenation is the only way to get the best of health.

**Oxygen Percentage**

It was postulated that during evolution and the presence of plants and green leaves on earth, the oxygen percent was 50 %. Professor Robert Berner of Yale University has researched oxygen levels in prehistoric times by chemically analyzing air bubbles trapped in fossilized tree amber. He suggests that humans breathed a much more oxygen-rich air 10,000 years ago.

Further back, the oxygen levels were even greater. Robert Sloan has listed the percentage of oxygen in samples of dinosaur-era amber as: 28% (130m years ago), 29% (115m years ago), 35% (95m years ago), 33% (88m years ago), 35% (75m years ago), 35% (70m years ago), 35% (68m years ago), 31% (65.2m years ago), and 29% (65m years ago). Professor Ian Plimer of Adelaide University and Professor Jon Harrison of the University of Arizona concur. Like Most other scientists, they accept that oxygen levels in the atmosphere in prehistoric times averaged around 30% to 35%, compared to only 21% today.

It has decreased in recent times due mainly to the burning of coal in the middle of the last century. Currently, the oxygen content of the Earth’s atmosphere dips to 19% over impacted areas, and it is down to 12 to 17% over the major cities. At these levels it is difficult for people to get sufficient
To maintain bodily health: it takes a proper intake of oxygen to keep body cells and organs, and the entire immune system, functioning at full efficiency.

**Decrease of Atmospheric Oxygen**

There are several factors responsible for the continuous decrease of atmospheric oxygen. The most important factors include: deforestation, industrial pollution, car exhaust pollution, devitalized soil (overuse of organophosphates), volcanic eruptions, and deterioration of the Ozone Layer. Proper Oxygenation of the blood via various modalities can restore health and slow-down the aging process.

**What is Ozone**

Ozone is oxygen with 3 atoms (O$_3$). It is created by the action of ultraviolet rays on atmospheric oxygen 20 to 30 kilometers from earth’s surface to form the ozone layer. It is also generated by the action of the high voltage of thunder (lightning) on atmospheric oxygen near earth. This explains the fresh air that we smell following rain. In addition, ozone is generated by the action of sea waves on oxygen at the sea-shore with the characteristic smell.

**Benefits of Ozone in Nature**

In the upper atmosphere the ozone layer protects earth from the harmful effects of a certain ultraviolet wave length from reaching earth (20-30 kilometers from earth). In the lower atmosphere ozone protects man from pollution by hydrocarbons by reacting with them leading to the formation of non-toxic CO$_2$ & H$_2$O.

**What can Ozone do (generally speaking)?**

- Inactivates Viruses, Bacteria, Yeast, Fungi, Parasites and Protozoa
- Stimulates Immune System, Speeds Healing
- Cleans Arteries and Veins, Improving Circulation
- Oxidizes Toxins, Facilitating their Excretion
- Normalizes hormone and Enzyme Production
- Reduces Inflammation
- Reduces Pain, Calm nerves
- Improves Brain function and Memory
- Scavenges Free Radicals

**History of Medical Ozone**

- The German scientist C. Lender published an article in 1870 under the title “Ozone purifies the blood”.
- The first water treatment plant with ozone was in Holland in 1893. Now there are more than 3200 water treatment plants with ozone in the world. During the First World War (1914-1918) ozone was used to treat wounds, stops the spread of foot gangrene It was found that
infected wounds washed with rain water (containing ozone) heal faster than wounds washed with river water.

- The German scientist Dr. Otto Warburg was awarded the Noble Prize in Medicine in 1931 and in 1944 for his theory of the basic cause of cancer in damaged cell respiration and the importance of ozone as a preventive and treatment measure
- In 1972 the International Ozone Association was established.
- In 1983 first International Medical Ozone Association conference was held in Washington.

Approval of use of Ozone in Medicine

After 144 years of usage it is used and/or approved in more than 50 countries including Germany, France, Italy, Russia, Ukraine, Romania, Poland, Bulgaria, Hungary, Czech Republic, Japan, Singapore, Malaysia, India, Cuba, Mexico, Brazil, Argentina, Honduras, Britain, Egypt, Oman, Sudan, Lebanon, UAE and more than 25 U.S. states.

How Does Ozone Work

When a cell becomes stressed by physical or chemical shock or by viral, bacterial or fungal attack, its energy levels are reduced by the outflow of electrons and it becomes electropositive. Ozone possesses the third atom of oxygen which is electrophilic i.e. ozone has a free radical electrical charge in the third atom of oxygen which seeks to balance itself electrically with other material with a corresponding unbalanced charge. Diseased cells, viruses, harmful bacteria and other pathogens carry such a charge and so attract ozone and its by-products.

When ozone is introduced into the blood, it reacts with these oxidizable substrates killing viruses, bacteria, and fungi. In addition, the metabolic waste products of these organisms are oxidized and an oxygen rich environment is provided which healthy cells can thrive. Normal healthy cells can not react with ozone or its by-products as they possess a balanced electrical charge and strong enzyme system. Ozone targets only diseased cells and pathogens.

Mode of Action of Ozone

Inactivation of bacteria, viruses, fungi and protozoa:
Ozone disrupts the integrity of bacterial cell envelope through oxidation of the phospholipids and lipoproteins. It also damages viral capsid and upsets reproductive cycle by disrupting virus-to-cell contact with peroxidation.

Enhancement of Circulation

Ozone reduces clumping of red cells and restores its flexibility and oxygen carrying ability. The arterial oxygen partial pressure increases and viscosity decreases leading to better tissue oxygenation. In addition ozone oxidizes plaques in arteries allowing removal of the breakdown products.

Stimulation of oxygen metabolism
Ozone increases red blood cell glycolysis rate leading to stimulation of 2,3-diphosphoglycerate (2,3-DPG) and accordingly increased amounts of oxygen released to tissues. In addition ozone activates Krebs cycle by enhancing oxidative carboxylation of pyruvate leading to stimulation of production of adenosine tri-phosphate (ATP) and accordingly more energy on the cellular level.

Stimulation of the production of the enzymes which act as a free radical scavengers and cell wall protectors:
Glutathione Peroxidase, Catalase, and Superoxide Dismutase. Medical ozone is a free radical scavenger.

**Dissolution of malignant tumors**

Ozone inhibits tumor metabolism, oxidizes the outer lipid layer of malignant cells and destroys them through cell lysis. Also ozone increases the ability of phagocytes to kill tumor cells (by stimulation of conversion of arginine to citrulline, nitrite and nitrate by phagocytes)

**Activation of the immune system**

Ozone stimulates the production of interferon 4-9 times the normal level. It also stimulates the production of interleukins mainly Interleukin-2. In addition ozone stimulates the production of Tumor necrosis factor (TNF).

**Conditions treated by Ozone**

As ozone works on the cellular level, it can be used in many conditions and in different specialties. The conditions that can be treated by ozone can be divided under the following groups:

- Some viral diseases e.g. Hepatitis, AIDS and Herpes Zoster.
- Some degenerative diseases and Disturbances of the immune system e.g. Rheumatic diseases and rheumatoid disorders.
- Some bacterial diseases e.g. infected wounds, diabetic foot, infected burns, and chronic sinusitis.
- Some vascular diseases e.g. atherosclerosis, Burger’s disease, Raynaud’s disease and peripheral vascular insufficiency.
- Some allergic conditions e.g. bronchial asthma and eczema.
- Malignancy in combination with chemotherapy and/or radiotherapy
- Obesity and hyper-cholesterolaemia.
- It is highly efficient in managing exhaustion, nervous tension and pain in general.

However it should be known that Ozone is an Adjuvant Therapy and that Ozone does Not Rule out Classic Medicine. But Ozone has Remarkable Results in Combination with Classic Medicine or alone if Classic Medicine Cannot be used due to ineffectiveness or side-effects.

**Ozone contraindications**

Ozone should never be used in Thyrotoxicosis and Fafism.
Ozone contra-applications

Ozone should never be given by inhalation or direct intravenous root.

Ozone side effects

Ozone is the safest line of treatment known in history provided that it is used properly by experienced doctors.

Methods of Application

- Injection: autohaemotherapy: By withdrawal of 100-150 ml of blood, adding a calculated amount and concentration of ozone in oxygen to the blood, then re-infusing the blood.
- Direct injection into a muscle, joint or direct into a tumor.
- Insufflation: in the ear, vagina, rectum, and urethra
- Ingestion: ozonated water
- Transdermal: bagging, body suit, ozonated olive oil, cupping with a funnel.
- Steam Sauna

Non-Medical uses of Ozone

- Water purification: kills bacteria and viruses much more potent than chlorine and with no side effects.
- Disinfection of air and removal of odor.
- Disinfection in the field of plants, vegetables, poultry.
- Disinfecting swimming pools.

Electrotherapy

What is Electrotherapy and how does it work?

Electrotherapy is an FDA approved therapy that can be applied in a variety of treatment modalities and includes the use of electrical machines such as the deep mind stimulators that are used for the neurological diseases. This term also has been applied to the use of electric currents to speed up wound healing. In addition, the term called “electrotherapy” and also “electromagnetic therapy” can also be applied to ranges of alternative devices used in the medical field and treatments. The two most common modalities used for electrotherapy are Transcutaneous Electrical Nerve Stimulation (TENS) and iontophoresis.

The TENS units are usually used to reduce pain by stimulating proprioception nerve threads to block or slow the broadcast of pain indicators. Iontophoresis is defined as the movement of ions through biological material under the influence of an electric current. It is transdermal electrotherapy which uses a drug-carrying electrode that delivers direct waves to the affected area to deliver the medication deeper into the tissue. The drug’s ionic charge allows stimulation healing. The application of Electrotherapy (E-Stim) with the HOCATT™ is both an electro-therapeutic device and is also Rife Resonation device, based upon Rife Therapies.
Electro Frequency therapy is one of the most widely researched and published therapies in the world. This therapy has delivered a drug-free, non-invasive and non-addictive solution to a sizeable number of health issues. It can even be used to simulate exercise thus providing passive exercise to those unable to perform the activities needed to provide the benefits of exercise (the elderly, weak, ill, quadriplegic). The calorie burning effect of the passive exercise is an added benefit even to the healthy!

Radio frequencies transformed into electrical impulses can be tuned to reverberate at the frequency that matches resonance that will produce the desired results. This includes frequencies in-tune with precise pathogens, viral agents, fungi, and bacteria to find and eliminate them. The therapy addresses issues from pain and nervous system therapy to mental and physical performance enhancement treatments. The possibilities and benefits are endless and the results are often immediate. Every day new systems are developed to improve the delivery of thousands of different frequencies, each frequency having its own special and unique benefit to a certain part of the human body. All therapeutic effects that can be produced in the tissue by electric current can be divided into two main groups, stimulating effects and healing effects.

Stimulating effects are induced by repeated depolarization and repolarization of excitable cells (nerve or muscle action impulses) for example, nerves and receptors as well as muscle cells. All currents that are able to depolarize and repolarize excitable cells can therefore produce stimulating effects. These are low-frequency currents, such as faradic, neo faradic, didynamic, high voltage, triangular, and ultra-stimulating currents, as well as amplitude-modulated middle frequency currents such as interferential currents or amplitude-modulated middle-frequency currents applied via two electrodes. Such repetitive depolarization and repolarization do not produce healing effects.

The following effects are stimulating effects:

- Analgesia
- Muscle stimulation-skeletal muscles and smooth muscles
- Acceleration of reinnervation
- Edema reduction
- Challenge of metabolism
- Activation of lipolysis
- Influence on blood flow and lymph transport
- Activation of metabolism

Healing effects are produced in excitable and non excitable cells by: the shaking effect (using middle frequency current); sustained depolarization (using middle frequency current); transport of electric charge carriers (using direct effect); heat generation (using high frequency current).

The following are healing effects:

- Analgesia
- Anti-inflammatory Influence on blood flow and lymph transport
- Edema reduction
- Acceleration of regeneration
- Activation of Metabolism through temporary cAMP formation
The use of the electrotherapy stimulating effects and the healing effects in the Gastro-intestinal tract and the Urogenital system provides for stimulation or inhibition depending on the frequency.

**Gastro-intestinal tract Stimulating effects:**

- Activation of the muscle pump
- Vasoconstriction of blood and lymph vessels (sympathetic stimulation)
- Vasodilatation of blood and lymph vessels (sympathetic fatigue)
- Activation of lipolysis.

**Gastro-intestinal tract healing effects:**

- Vasoconstriction of blood and lymph vessels (sustained depolarization)
- Facilitation of metabolism
- Facilitation of diffusion process
- Activation of metabolism (due to increase of cAMP formation)

**Anti-inflammatory action:**

- Dilution of pain mediators.
- Stimulation of tissue metabolism.
- Stimulation of local blood flow
- Improvement of the exchange between the intra-capillary and extra- capillary fluids
- Improvement of absorption in the tissue.
- Ultraviolet Irradiation

   Activation of metabolism:
   Release of noradrenaline from sympathetic nerve-endings resulting in a reaction of noradrenaline with receptors on the cell membrane. This triggers cAMP formation from ATP.

Electrotherapy is known for the treatment of pain associated with fractures, post-operative incisions, tendinitis or arthritic inflammation, muscle weakness or loss and depression. Pain sensation could be reduced in many cases by stimulation of primary afferent nerve fibers. Afferent fibers can be activated by electrical stimulation or by natural stimuli such as vibration. In pain management treatment through electrotherapy, four effects are known. Two are produced through depolarization and repolarization (stimulating effects). One is produced through the shaking effect and one through sustained depolarization (healing effects).

**Stimulating effects include:**

- Counter-irritation
- Release of endorphins in the CNS

**Healing Effect include:**

- Pain fiber block
- Disruption of pain mediators
Pain relieving effects during and immediately after the treatment:
Counter irritation and pain fiber block are pain-relieving effects produced during the treatment.

Longer lasting pain relieving effects:
Endorphin release in the central nervous system and the disruption of pain mediators make sure that the pain relief lasts for a longer period.

In addition there are frequencies that can eliminate or correct other conditions that may be responsible for producing pain. These mechanisms include edema reduction, stimulation of metabolism and blood flow, as well as accelerating regeneration.

Effects on Skeletal muscles include:
- Muscle stimulation
- Muscle strengthening
- Muscle relaxation

Effects on Smooth (vascular) muscles:
- Vasoconstriction via stimulation of sympathetic nerve fibers
- Vasodilatation via block of fibers of sympathetic nervous system
- Vasodilatation via sustained depolarization of the vascular muscles

Benefits for Patients and Health Professionals
The ability of a clinician to reduce pain in a patient by using the patient’s own built-in neurobiological control mechanisms should be considered one of the great achievements of clinical medicine. It’s one of the best-proven ways for Healthcare Professionals to provide their patients effective and easy treatment for many problems and symptoms at one time.

The American Physical Therapy Association recognizes the using of Electrotherapy in these ways:
- Treating neuromuscular dysfunction
- Improves local blood flowing
- Improves the motor control
- Improves the strength
- Retards muscle atrophy
- Improvement range of joint movement
- Repair tissue
- Restorations of integrity of your dermal and connective tissues
- Enhances the microcirculation & protein synthesis which heals wounds
- Improvement joint mobility range
- Induction repeated stretching the shortened, contracted soft tissues
- Peripheral flowing of blood
- Induces lymphatic, venous, and arterial flow
- Chronic and acute edema
Affecting the blood vessels absorptivity

- Increases the mobility of blood cells, lymphatic flow and proteins
- Accelerates the absorption rate

Contraindications:

- Implanted cardiac pacemaker
- Acute local bacterial inflammatory process Tetany.
- Post-traumatic inflammation
- Sever types of arterial occlusive disease
- Thrombosis, thrombophlebitis
- Injuries of muscles, bones, tendons, joints
- Fresh wound and hematoma
- Abdominal area in pregnancy
- Carotid sinus area

Far Infrared

What is FAR INFRARED (FIR) THERAPY and what does it do?

The majority of the Sun’s total energy arrives on Earth in the form of infrared. In 1800, astronomer William Herschel discovered a type of invisible radiation in the light spectrum beyond red light—a ray that would come to be known as Infrared. Thermal radiations emitted by objects near room temperature are most often infrared. Far Infrared Therapy is a low energy therapy where waves of light penetrate the human body, transforming into heat energy to gently elevate temperature and even activate major bodily functions. More significantly, if applied in the correct wavelength, FIR therapy can energize our water molecules, a feat that can promote growth and cell regeneration at a rapid pace. As approximately half of the energy generated by the human body is naturally infrared, Far Infrared Therapy is considered completely safe.

Why is it Important?

“Photobiotherapy (FIR) will become one of the premier healing tools of our future. It will eliminate the need for many of today’s common surgical procedures. I can see the day when every household in the country will have a (FIR) unit on hand. When used properly, it is a safe, effective, natural tool that can enhance, rather than oppose, the body’s own innate healing powers.

”-G.E. Poesnecker, N.D., D.C.
What ARE the benefits of Far Infrared Therapy?

• It increases blood circulation and oxygen supply to damaged tissues, reducing chronic joint and muscle pain. As a result, it can treat sprains, strains, spasms, bursitis, peripheral vascular diseases, and arthritis. A clinical trial in Japan reported complete success in all cases of rheumatoid arthritis treated with whole-body Far Infrared therapy.

• Carpal Tunnel Syndrome (CTS), one of the fastest growing complaints in the country today, is caused by motion and trauma to the median nerve passing through the wrist. Surgery, still the most standard medical treatment for CTS, has a dismal success rate of less than 10%. However, close to 600 patients have been treated with FIR by Dr. Wayne Good, the plant physician at General Motors Flint Assembly, and over 70% have seen positive results.

• Thanks to persistent peripheral vessels dilation, a single hour of far infrared radiance can show a significant decrease in blood pressure—and a significant increase in heart rate. Blood viscosity is also greatly improved.

• When deposits of fat, fibrin, calcium and cellular debris roughen the lining of arteries, which are typically smooth and firm, the arteries ability to expand and contract is lessened, slowing the blood movement through narrowed channels, thus increasing the risk of blood clots, which will block the arteries and stop blood flow completely. With far infrared heat, the blood toxicity can be neutralized and the walls of arteries, capillaries and veins smoothed.

• Hypertension, osteoporosis, headaches and digestive issues are all common problems associated with lifestyle and aging and are attributed to be the outcome of excess acidity in our system. With the use of Far Infrared products, along with consuming certain alkaline minerals and foods, these excess acids can be eliminated. By heating up the internal temperature of the body and increasing circulation, Far Infrared resonance can enable the blood to clear out the acidic toxins that have been deposited in one’s arteries for years.

• Illness is triggered by bio-toxins that cannot be expelled immediately being stored in the body. When toxic gases—or possibly deadly heavy metal toxins—run into large water molecules, they are enveloped and trapped. Where these molecules build up, circulation is
blocked and cellular energy is repaired. With approximately 70% of the human body composed of water, the risk is high. Far Infrared is believed to be 7 times more effective at detoxifying heavy metals, and even environmental toxins, as opposed to conventional heat or steam saunas. By applying a 7 to 11 micron FIR wave, large water molecules begin to vibrate, reducing the ion bonds holding it together, causing it to evaporate and release the dangerous gas and toxins.

- Toxic overload has been implicated in many health conditions, such as fibrocystic breast disease, attention deficit hyperactivity disorder, fibromyalgia, chronic fatigue syndrome, and much more. Leading researchers have stated their patients are carrying high toxic loads—and once these loads were reduced, their symptoms often improved dramatically.

- Raynaud’s phenomenon is significantly reduced blood flow as a result of cold or emotional stress, creating discoloration in the hands, toes, or occasionally other body parts. There’s primary Reynaud’s phenomenon, known as Reynaud’s disease, where the cause is unknown—and then there’s secondary Reynaud’s phenomenon, known as Reynaud’s syndrome, where the cause is a known primary disease, usually a connective tissue disorder such as systemic lupus erythematosus. A clinical study performed by Dr. Gordon Ko and Dr. David Berbrayer at Sunnybrook and Women’s College Health Science Centers at the University of Toronto showed exponential improvement in both pain and discomfort in sufferers of Reynaud’s syndrome.

### Hyperthermia Therapy

**What is Pyrexia (fever)**

Before we explain what Hyperthermia Therapy is, we need to better understand what pyrexia (fever) is. Typically a fever, known as pyrexia, is thought of as a sign or symptom that there is an infection in the body. It is more scientifically correct to say that is a natural immune response to an infection or toxic agent in order to make the body a less favorable host in which to reside and grow. A fever is actually the body’s natural self-preserving mechanism of healing itself. A fever is the body’s highly evolved attempt to destroy invading organisms and to sweat impurities out through the skin. A fever has been called the great foundation of true health.
When the body is in a feverish state it stimulates a complete regenerative response. Raised body temperature stimulates the immune system, helps increase the body’s white blood cell volume and activity, aids the body in detoxifying itself and produces a state of overall relaxation that is essential to the healing process. Fever makes the vital processes and organs in the body work faster. As a result, the body produces more hormones and enzymes. The natural response to heat is vasodilatation which supports higher blood flow and results in increased oxygenation and the ability of the blood to carry nutrients, hormone and enzyme supplies throughout the body. The associated elevation in pulse rate is useful in transporting all the nutrients, oxygen, enzymes and hormones in the blood that are necessary to restore balance. In an attempt to cool down and regulate the body temperature, the body begins to perspire and it excretes toxins in sweat (detoxification).

Perhaps the most important yet most overlooked mechanism of a fever is the fact that it increases mitochondrial function. It is important to note that without exception, degenerative disease is not possible in an individual where the mitochondria are functioning at optimum level. In short, optimal mitochondrial function means optimal cell regeneration, metabolism and immune function.

What is Hyperthermia Therapy and what does it do

Hyperthermia therapy artificially induces fever and provides the body with all the same healing effects as the natural fever. It is used locally or over the entire body. One form of hyperthermia therapy is provided by the steam sauna which mimics a fever state resulting in an effective natural process of detoxifying and stimulating healing processes. FIR, Far Infrared Rays, raise the body temperature at a deeper level. The HOCATT System utilizes both Far Infrared Rays and steam sauna to increase the body’s temperature safely and effectively. Artificially induced hyperthermia results in the destruction of bacteria and viruses combined with heavy sweating and a cleansing effect initiated by ozone will result in elimination of toxins accumulated mainly in the lymphatic system relieving the liver from the difficult task of dealing with them. Only a relatively small rise in body temperature can make a huge difference says Dr. R. Atkins who includes heat therapy in his cancer protocols. In the steam sauna, the nuclear body temperature is increased by 2 °C on an average due to cessation of heat output (hyperthermia). In a 1959 review of studies on the effects of heat treatments, Mayo Clinic researcher Dr. Wakim and colleagues cite findings indicating that the number of white blood cells in the blood increased by an average of 58% during artificially induced fever. The generation of antibodies speeds up, as does the production of interferon, an anti viral
protein that also has powerful cancer-fighting properties. Documented studies show that Hyperthermia Therapy eliminates anaerobic viruses and bacteria; cleans and detoxifies; aids mental clarity; cleans veins and arteries improving circulation and speeds up metabolic processes resulting in a 200-450 calorie loss per session. Research has indicated that in most cases, there can be a reversal of many degenerative type diseases and ameliorating aging process.

Unlike normal tissue, tumors have poor blood flow relative to their metabolic needs and cannot dissipate the heat, so they tend to get hotter than the surrounding area. Rapidly dividing cells (i.e., cancer cells) are more vulnerable to the effects of heat. Normally, part of the damage caused by radiation is repaired by the cancer cells, enabling some to survive; however, heat foils this self-repair ability. Taken together, these facts tend to make tumors more vulnerable to heat treatment than normal cells. Hyperthermia increases the Tumor Necrosis Factor (a substance produced by the immune systems to eliminate tumors) by 500 times. Hyperthermia is now approved in the US for treatment of breast cancer recurrence.

What are the benefits of Hyperthermia in the Ozone Oxygen Sauna System

- Increasing the body temperature makes the body a less favorable place for bacteria and viruses to multiply. It also inhibits tumor growth.
- Dilated blood vessels support higher blood flow that increase the oxygen, nutrient, hormone and enzyme supply to the affected areas
- White blood cells increase in volume and activity, increasing the body’s immune efficiency
- The excretion of toxins in sweat helps to detoxify the body. The excretion of toxins in sweat is important to health. In a PubMed article it demonstrates the use of sweat samples for detection of drugs in the human body. It is one of the only known ways to reduce chemical poisoning with fatty acid based chemicals like fertilizers.
- Everything in the body works faster when the body has a high body temperature, including producing more hormones and enzymes
- Elevated Pulse is an advantage because it helps to transport all the extra nutrients, oxygen, enzymes and hormones through the blood, so that the body can restore balance. It also simulates exercise and can burn up to 600 calories per 30-minute session.
- Elevated Mitochondrial Function- Mitochondrion (a small part in a cell that helps your body to turn food into energy) is the powerhouse of the body. Mitochondria are responsible in producing ATP (adenosine triphosphate), the energy of the body. Having mitochondria functioning at optimum levels ensures the body has the energy it needs to perform its best and to support a strong immune system to help fight disease.
- Hyperthermia decreases muscular contracture and relieves tension and pain. Remarkably, spastic and stiff limbs can be moved after treatment, often without pain.
- Hyperthermia increases metabolism
- Hyperthermia speeds the disposal of lactic acid and facilitates faster recovery after exercise
- Improves mental clarity.
- cleans veins and arteries (dissipates plaque) and improves circulation
- It’s safe and there are no toxic side effects!
- Keeping the body in a constant complete regenerative state helps to heal any disease and/or to keep the body healthy and full of energy which is what everyone wants to have!

- Photon Light Therapy
• **Photon Light and Spectrum Chromotherapy (Color) Therapy**

• This is a state of the art digital lighting technology (LEDs) that generate a variety of colored lights to which the body reacts in quantifiable, physiological ways.

• In the HOCATT™, two color stars change randomly to display multi color cross fades made up from all the colors of the spectrum from soothing and relaxing to balancing and energizing. The full spectrum light rays fill the chamber and are absorbed by the skin as they reflect from the steam and the ultra-reflective chamber walls.

• **Colors and their healing uses/effects:**

• Violet calms fears and anxiety; helps relieve insomnia; it has a sedation effect on the nervous system.