

A Little History

The health advantages of saunas are not a contemporary discovery. Historical confirmation and reports show that the Finns constructed the first wooden saunas over 2000 years ago. The primitive or first saunas were dug into a hill or mound. As tools and methods progressed, they were constructed above ground utilizing wooden logs. Rocks were heated in a stone fireplace with a wood fire. The smoke from the fire encompassed the room as the air warmed. As soon as the temperature reached preferred intensity, the smoke was permitted to clear and the patrons entered. The wood smoke scent still remained and was part of the healing ritual. This particular form of traditional smoke sauna was referred to as a savu, which translates into, “smoke” in Finnish.

Sauna Evolution

In time, the sauna developed where it utilized a metal woodstove, or kiuas (ke-wus), with a chimney. The temperature within the sauna was around 180 degrees Fahrenheit, but frequently surpassed 200 degrees in a traditional Finnish sauna. Steam vapor, also referred to as loyly (lou-lu), was generated by splashing water on the heated rocks.

The steam and high heat triggered the users to perspire, therefore eliminating impurities and toxins from the body. In addition, the Finns also incorporated vihtas (veh-tas) or bunches of birch twigs to lightly smack the skin and generate further stimulation of the pores and cells.

The Finnish culture also employed the sauna as a location to cleanse the mind, rejuvenate and refresh the spirit, and get ready the dead for burial. The sauna was a key part of their daily lives and families used it to bath together within the home. Oddly enough, the sauna was frequently the cleanest building and possessed readily available water—so Finnish woman also gave birth there.

When the Finnish people journeyed to new areas of the world, they took along their sauna designs and customs with them. They familiarized other cultures to the pleasures and health benefits of saunas, which then lead to further evolution of the design. All of this brought about the invention of the electric sauna stove in 1950 and finally the Far Infrared saunas in the last several decades. The Far Infrared sauna has now become one of the most powerful tools in toxin and heavy metal elimination available.

The Different Types of Saunas:

- Wet Saunas
- Dry Saunas
- Steam Saunas
- Infrared Saunas

Hyperthermic Effects

Overheating treatments have been recognized throughout history. Quite simply it is hyperthermia utilized as a healing technique. Ancient healers were aware that a slight fever was a potent healing tool against various illnesses. Greek physicians elevated body temperatures in therapeutic gathering places as an immune defense against infection, and that concept still holds true even today.

Although Far Infrared saunas are substantially lower in temperature than traditional stove or rock saunas, hyperthermic procedures are therapeutically making a come back as health care professionals realize that a non-life-threatening artificially induced fever can have extraordinary healing activity. Slightly raising body temperature produces a natural biological defense and healing force by the immune system to rid itself of destructive pathogens...in effect, to literally burn out foreign or invading microorganisms.

Ancient herbalists incorporated additional heat producing botanicals as protective healing procedures against colds, simple infections, and even against severe degenerative disease. Nowadays, some holistic and alternative clinics use artificially generated fevers to treat infections such as acute bronchitis and pneumonia, arthritic conditions such as Fibromyalgia and Lupus, and even more severe diseases such as cancer and HIV.

So, What Is Far Infrared Anyway?

Inside the electro-magnetic spectrum, Far Infrared heat is manufactured by the sun. It is a portion of the sun’s invisible band. Even though the band of light is not detectable to your eye, you feel the heat sensation. This is the heat you feel infiltrate your skin when

you are out in the sunlight. You could compare it to sitting in a car on a chilly day and being able to feel the sunlight come through the window. In addition, infrared energy is also produced as body heat. You know that natural warmth you feel when you are sunbathing? Even your sunscreen can't stop that, as it only blocks UV light from penetrating your skin—not FIR (far infrared) light waves. In fact, you can experience Far Infrared heat for hours and it will never damage your skin.

Far Infrared energy heats things by direct, molecular excitation, without heating the air between the spaces. Far Infrared rays infiltrate your body's tissue much deeper than near infrared rays do. Your body absorbs Far Infrared heat waves that encourage the transfer of water across cellular membranes. Once this happens, and the cellular membranes are hydrated, your blood flow is enhanced and ultimately assists with an assortment of biologically beneficial healing functions.

The most notable characteristic of Far Infrared heat is its exceptional ability to penetrate far below superficial skin layers. When this occurs, it constructs a natural resonance, which has numerous advantageous properties. Infrared energy is measured in wavelengths as microns, and the human body can best absorb infrared energy in the 3- to 50-micron range—with the best absorption occurring at 9.4 microns (the same as the human body). These rays penetrate deep into the body where they gently elevate the body's surface temperature and assist in expanding capillaries which stimulates blood circulation. By elevating the sub-surface tissue temperature, a series of continual changes constructive to human health will be instigated.

Do you recall how we mentioned above that infrared energy is also produced as body heat? Have you heard the statistics on married couples living longer versus single people? We are certain that there are a number of emotional advantages to help them, but another reason may be that while they are sleeping together, they act as transmitters and receivers of FIR waves to each other.

Think about that next time he or she makes you mad and you want to sleep on the couch!

Far Infrared Saunas: Healing Power Unlike Any Other

For the most part, the general public's knowledge with Far Infrared was limited to the use of infrared heat lamps which generates radiant heat. By the mid 1960's, The National Aeronautics and Space Administration ascertained that a quantity of mineral oxides were capable of producing FIR waves. Following the use of different types of FIR products in the space program, The National Aeronautics and Space Administration made no further advancements using this technology. To the distinct advantage of everyone else, the Japanese forged ahead and developed over 150 products that required patents involving Far Infrared technology. Some of these include: FIR ovens that would replace microwaves, FIR panels for incubators in maternity wards, FIR wave-generating ceramics, and of course, Far Infrared saunas. In the course of the last 25 years, both Chinese and Japanese researchers and clinicians have performed widespread research on infrared treatments and have testified to abundant benefits.

Dr. Tsu-Tsair Oliver Chi adds to the understanding of the healing power of Far Infrared with his discussion of Resonant Absorption:

"These rays are selectively absorbed by the tissues. The internal production of infrared energy that normally occurs within our tissues is associated with a variety of healing responses and may require a boost to a maximal level to insure the fullest healing response possible in a tissue under repair. After boosting a tissue's level to maximum, the remaining rays pass onward harmlessly. This phenomenon is called Resonant Absorption."

The reason Infrared saunas are so unique is that they use radiant energy to directly penetrate the body's tissues to a depth of over 1.5". Its energy output can be tuned to correspond so closely to the body's own radiant energy so that our bodies absorb close to 93% of the infrared waves that reach our skin. Less than 20% of the infrared energy heats the air, leaving over 80% available to be directly converted to heat within our bodies. Therefore, a Far Infrared based system can warm its user(s) to a much greater depth and much more effectively than a conventional sauna.

This important difference explains many of the unparalleled benefits reported to be available through an Infrared Thermal System that are not achievable through the use of a standard sauna. Far Infrared saunas produce up to 2-3 times the sweat volume of a hot-air sauna while working at a considerably cooler air temperature range of 110 degrees to 130 degrees versus 180 degrees to 235 degrees for hot-air saunas. The lower heat scale is ideal for those apprehensive about cardiovascular risk factors that might be adversely affected by the higher temperature encountered in traditional hot-air saunas.

A Broad Spectrum of Benefits

A healthy sweat permits your skin to eradicate body wastes through perspiration. It considerably increases the detoxification capabilities of your skin and takes advantage of the skin's ability to regulate its protective mantle and pH. However, the benefits of FIR sauna therapy extend far beyond a simple sweat.

Far Infrared light infiltrates beyond superficial skin layers and is absorbed by cells and tissues below, whereas visible light is mostly bounced off the skin surface. Near infrared is most absorbed at the skin level and raises the skin temperature, however, Far Infrared waves can penetrate up to two inches, exciting the vibrational energy of molecules and resonating with cellular frequencies. We can not exactly perceive the deep heating effects of FIR, as our body's capacity to sense heat is chiefly at the skin level. However, the

effects of FIR rays encourage bioprocesses such as increased metabolism, blood circulation, immune system response, and core body temperature elevation.

Infrared saunas encourage microcirculation, therefore supplying more oxygen to injured tissues in cartilage, joints and musculoskeletal tissues. Inflammation subsequently subsides. When the inflammation diminishes, not only does the occurrence of chronic degenerative diseases decrease, but overall health, energy, and well-being is elevated to a new plateau. There has even been outstanding improvement in cases of insomnia as well.

Often times, chronic diseases are associated with the accumulation of toxic metals and petrochemicals that are located in fat cells and neighboring connective tissue. These toxins may plainly impede the cell's aptitude to take delivery of oxygen and key nutrients that are contained in the bloodstream. In addition, toxins inhibit the pulsating quantum energy of these cells, as well as deter the purging of toxic metabolic waste. As the toxins slowly build up, the total toxic load in your body overpowers the immune system, as well as vital bioprocesses, generating various detrimental chemical changes that will virtually guarantee an array of chronic diseases that puzzle the majority of the medical profession.

FIR sauna therapy offers a broad spectrum of benefits aimed at increasing your overall wellness. It dilates blood vessels to generate flushing, which mobilizes your blood supply. It assists in the excretion of toxic heavy metals, such as lead, mercury, cadmium, arsenic, and aluminum. Far Infrared saunas fortify an overall youthfulness of skin from increased microcirculation, blood flow, and purging of trapped toxins. In accomplishing this, it is an effective tool in addressing various disorders such as acne rosacea, cellulite, eczema, and varicose veins. Yet most importantly, through the deep heating and efficient detoxification elements achieved with the use of a Far Infrared sauna, it is extremely effective in the treatment of debilitating and chronic diseases such as Chronic Fatigue Syndrome (CFS), Fibromyalgia, Osteoarthritis, Rheumatoid arthritis, heart disease, and many others that the mainstream medical profession has yet to provide a non-invasive solution for.

Say No to Cedar

You have almost certainly seen traditional saunas that entail a fire pot, or a bed of hot coals that release high levels of heat in a wood cabin. Steam is liberated when water is splashed on the coals to prevent the lungs and mucous membranes from becoming dry. Scores of these saunas were constructed outdoors as they presented a fire hazard. They were built of strong cedar or redwood since these woods had a volatile oil called cedrene, a member of the terpine family. Cedrene permitted the wood to repel insects and endure moisture. Unfortunately, cedrene also includes unsaturated, aliphatic cyclic hydrocarbons that are local irritants. They may impart a minor toxic liability to the user that you should be cognizant of when purchasing a sauna. Ideally, white woods, such as alpine or basswood, are beneficial alternatives to cedar and redwood as they lack the capability to off-gas oil based irritants.

Why Would A Physician Recommend Far Infrared Sauna Therapy?

A number of doctors recommend this type of sauna for improving the skin, while others will even use it in cancer management. Numerous alternative cancer centers are employing Far Infrared saunas as part of their detoxification protocols.

If you have cardiovascular health problems, you will be interested in knowing that an article in the Journal of the American College of Cardiology demonstrated that using a sauna on a regular basis improves vascular, endothelial, and cardiac function in patients with congestive heart failure.

Persistent use of Far Infrared sauna therapy additionally diminished systolic blood pressure in patients. A Japanese study of 20 men with at least one risk factor for heart disease assessed the effects of a short 15-minute stay in a 140 degree sauna every other day for two weeks. Another study done at the Department of Rehabilitation and Physical Medicine, Kagoshima University, Japan, demonstrated the hemodynamic benefits of a sauna in relation to Congestive Heart Failure.

Doctors have found that many heavy metals and chemicals are bound in subcutaneous fat, and sweating is a critical way to rid the body of toxins. Heat therapy in the form of Far Infrared has been cited in the medical literature, and employed by places such as the well known Mayo Clinic. In addition, some mental hospitals use infrared saunas in their rehabilitation programs to soothe patients.

According to the medical community, sweating is as essential to our health as eating and breathing. It achieves three critical things: rids the body of wastes, regulates the critical temperature of the body at 98.6 degrees, and assists with keeping the skin clean and pliant.

According to medical statistics, most people, in this sedentary age, simply don't sweat enough, making infrared saunas particularly desirable during these times. Antiperspirants, artificial environments, smog, synthetic clothing, and a physically idle lifestyle all plot to clog skin pores and hinder the healthy flow of sweat. These detrimental effects are reversed in an infrared sauna.

Detoxification: (List of Toxins)

- Pesticide & Insecticide Residues
- Prescription & Recreational Drugs

Skin Conditions

- Improved Skin Conditions
- Infrared Therapy is utilized routinely in burn units throughout

- Dioxins
- Alcohol
- Nicotine
- Formaldehydes
- Hair Dyes, Cosmetics & Deodorants
- Petrochemicals: Xenobiotics & Xenoestrogens
- Heavy Metals: Iron, Copper, Mercury, Lead, Aluminum, Cadmium
- Nitrites
- Radon
- Gasoline
- Chlorinated Water
- Perchlorate
- Industrial Chemicals
- Phthalates

Musculoskeletal Improvements:

- Muscle Spasms are reduced or eliminated
- Traumatic Arthritis
- Adhesions
- Tight Shoulders
- Bursitis
- Joint Stiffness
- Low Back Pain
- Compression Fractures
- Shoulder Pain
- Muscle Tension
- Arthritis, Gout, Rheumatoid Arthritis, DJD
- Post Exercise Muscle Pain
- Sciatica
- Facial Paralysis

Ear, Nose & Throat:

- Nettle Rash
- Chronic middle-ear inflammation of infection
- Sore Throats
- Tinnitus (ringing of the ears)
- Nose Bleeds

Asia

- Nettle Rash Improved
- Clogged Pores and Blackheads
- Poor Skin Tone
- Scars and pain from wounds and burns
- Lacerations healed quicker
- Acne improved
- Body Odor improved
- Eczema and Psoriasis respond well
- Sunburn Antidote
- Frostbite with inflammation
- Neurodermatitis
- Ketoids May Be Softened
- Dandruff
- Cellulite Removal

Other Ailments:

- Menopause
- Cold Hands and Feet
- High Blood Pressure
- Radiation Sickness
- Cancer Pain (greatly relieved)
- Benign Prostatic Hypertrophy (reduced)
- Duodenal Ulcers (eliminated)
- Hemorrhoids (reduced)
- Cystitis (eliminated)
- Cirrhosis of the Liver
- Gastritis (relieved)
- Asthma (cleared up)
- Crohn's Disease / Ulcerative Colitis
- Leg Ulcers (healed when previously static and resistant to other care)
- Weight Loss

Collagen Tissue:

- Increased pliability
- Ligaments, joint capsules, tendons, fasciae, and synovium that have become scarred or thickened
- Increased Blood Flow

How Saunas Tackle Congestive Heart Failure, Artherosclerosis and Hypertension

According to the American Heart Association (2005), clinical trials have demonstrated that maintaining healthy blood pressure can dramatically reduce the risk of strokes by 35% to 40%, heart attacks by 20% to 25% and heart failure by over 50%. However, these statistics are just the tip of the iceberg. Maintaining blood pressure levels within a normal range eases the workload on your heart and blood vessels.

As blood pressure reading rise, the risk of cardiovascular events becomes “continuous, consistent, and independent of other risk factors” (American Heart Association 2005). What can be done to empower ourselves in our efforts to maintain healthy blood pressure and a healthy heart?

Adopt a more vigilant lifestyle that includes daily exercise along with a balanced diet. In addition, take advantage of the incredible benefits of a Far Infrared sauna.

The Far Infrared sauna makes for a promising therapy for people who are otherwise not capable of exerting themselves or do not follow an exercise or conditioning program to attain a cardiovascular training effect. In an August 7th, 1981 issue of the Journal of the American Medical Association (JAMA), a report was released that is now everyday knowledge to most people: Numerous people who run do so to put a demand on their cardiovascular system as well as to build muscle. What is not well known is that it is also reported that the “regular use of sauna may impart a similar stress on the cardiovascular system, and its regular use may be an effective means of cardiovascular conditioning and burning of calories as regular exercise.” The body reacts to this deep-heating result by means of hypothalamic-induced increase in both heart volume and rate. This positive heart stress leads to a desired

cardiovascular training and conditioning effect.

As a substantiation of the legitimacy of this form of cardiovascular conditioning, extensive research by NASA in the early 1980's led to the deduction that infrared stimulation of cardiovascular function would be the perfect way to maintain cardiovascular conditioning in US astronauts for the duration of long space flights. Blood flow during whole-body hyperthermia is reported to rise from a normal 5-7 pints per minute to as much as 13 pints per minute.

In addition, an interesting study was done using hamsters in regard to infrared saunas. Following an infrared sauna treatment, a chemical analysis indicated larger amounts of a substance called nitric oxide, synthesized in the endothelial (lining) cells of the aorta, as well as the coronary, carotid, and femoral arteries. This information is significant, as increased levels of nitric oxide synthesis is extremely beneficial. Nitric oxide dilates coronary arteries, effectively improving heart function. That in itself is tremendous news—but it actually gets better! A more intensive analysis proved a 40-fold increase of nitric oxide synthesis in the endothelial cells of the aorta after just one week. After four weeks of using the sauna, the increase leveled off but steadied at 50%.

Taking the hamster-in-the-sauna results, it is extremely probable that the improved blood vessel dilation in men with cardiovascular risk factors resulted from higher levels of nitric oxide synthesis. While the studies have not measured it exclusively, Far Infrared sauna therapy will very possibly lower blood pressure for quite a few individuals too. The theory is intellectually sound, since the mechanism of action is the same as in congestive heart failure. A boost in nitric oxide dilates blood vessels and lowers blood pressure. If the research above is any gauge, it should not be very long to determine marked benefits, as the results in both hamsters and humans transpired in just two to four weeks.

Let's take a look at congestive heart failure, which is a dead-end disease that kills more people in each year than cancer. The average person only lives five years once the diagnosis of congestive heart failure is made. In addition, the person is usually on at least \$600 a month of prescription drugs, not to mention frequent doctor visits, x-rays, blood tests and hospitalization.

In contrast to that bleak picture, let us examine studies done by the Mayo Clinic where pulmonary wedge pressure, shortness of breath, capacity to discontinue medications and many other limitations of congestive heart failure are enhanced with use of Far Infrared sauna therapies. In other words, FIR achieves what no medication and no surgery can, for a disease that no one should have, to which the medical profession has no answers. In addition, there is documentation that states that excessive salt carried by sweat is generally believed to be beneficial for cases of mild hypertension.

In the Japanese study referred to earlier, we told you about 25 men with at least one risk factor for heart disease who were evaluated after using an infrared sauna for 15 minutes every other day for two weeks. They also rested in beds, covered with blankets for 30 minutes afterward, and had the thickness of their artery lining measure by ultrasound. In the American Journal of Cardiology, the investigators reported a 40% reduction of the inner lining of blood vessels. A wider blood vessel supports lower blood pressure.

In addition, thinner blood vessel walls are associated with a reduced chance of heart attacks and strokes. In fact, when a patient has elevated scores of intra-medial thickness (IMT) of the carotid arteries, many doctors recommend regular use of a Far Infrared sauna to lower their risk of having a stroke.

Remember that not just any sauna will do. Far infrared saunas offer all the benefits that traditional saunas do not, and at much lower temperatures. High heat is stated to be inadvisable and poorly tolerated by heart failure patients and, in reality can be a cause of early death.

Can You Lose Weight With A Far Infrared Sauna?

Saunas provide an inexpensive, relaxing, and healing, weight loss alternative. It is obvious that more people today are taking health seriously. It is also obvious that people in the United States are at their heaviest weight, leading to key health problems such as heart attacks, diabetes, strokes, and much more. Look around—the market is inundated with gimmicks for losing unwanted weight, including “sensational” diet pills, machines that can take it off before you know it, and one diet craze after another.

In actuality, losing weight and regaining your health takes a real common sense approach. This includes eating a well-balanced diet, daily exercise, drinking plenty of clean water (1-1.5 liters a day), and detoxifying the body of toxins and unhealthy chemicals.

One of the paramount ways you can improve your overall health and lose weight at the same time is by making an “infrared sauna” part of your daily life. It is not just another gimmick—it is a way to transform your life forever.

In contrast to your standard steam or hot rock sauna, the infrared sauna is able to penetrate the body anywhere from one and one-half to two inches, which is far deeper than a traditional. In addition, the body will sweat up to three times more than with a steam sauna. You will lose water weight right away—but you will not regain the calories lost. During a 30-40 minute session in an infrared sauna, you can burn up to 300+ calories.

We know you want to lose weight right away, but if you want to lose fat and keep it off permanently, you will have to be patient. It would be safe to say that losing two pounds of fat (it does not need to be weight) each week is a noteworthy achievement. Losing weight is not that difficult. Sit in a sauna for two hours, and believe us, you'll find out what we mean. Some weight loss experts think that our bodies use fat to dilute toxins. An infrared sauna is an unsurpassed expeller of toxins so it is an excellent way to get rid of

any fat our bodies are utilizing to dilute toxins that we are storing.

Far Infrared Saunas & Troublesome Cellulite

That ugly stuff that is made up of fat, water and waste and is trapped in pockets underneath the skin is called cellulite, and oddly enough only women seem to be afflicted with it. An infrared sauna may help with this condition by generating profuse sweating, which helps clear the area of unwanted toxins. Some authorities in the field of weight loss and body fat feel that the less body fat we have, the smaller our fat cells and the less pressure is exerted on the connective tissue. What does that mean to you and your cellulite? It means that the cellulite is less visible. This may or may not be true, however; exercise definitely improves blood circulation in the skin and using the infrared sauna after your exercise program will just speed up the elimination of toxins, burn calories and reach twice the depth of heat penetration into cellulite. In addition to using the infrared sauna, here are a few more things that will help in the eradication of those ugly dimpling, orange peel or cottage cheese looking afflictions.

- Vigorous exercise, in particular of the muscles in the area of the butt and thighs, such as the gluteus maximus, quadriceps, ect.
- Eating properly balanced diet is extremely successful in clearing toxins and fatty tissue from your body that can cause cellulite.
- Massages at least once a week in conjunction with your infrared sauna has been proven to help since they both aid in the elimination process, which clears fatty build up, and in turn clears cellulite.
- Drinking clean, pure water also assists with the eradication and cleansing of your system from cellulite. Be sure and drink 8-10 glasses a day and be sure you are using either glass or stainless steel to drink out of. Be especially sure not to bring plastic drinking bottles into the sauna, as that will only expedite the leaching of phalates into your water.

Far Infrared Saunas: Heavy Metal and Chemical Detoxification

Over the course of the last century our environment has become unimaginably toxic. Unfortunately, in turn, we are all slowly being poisoned. We continue to have major problems with well documented hazardous pesticides and insecticides, even after they have been banned from further use. DDT and chlordane residues persist in the soil and continue to add to the increased cancer rates in our modern, industrialized world. In spite of everything, we have to face the daily attack of the thousands of toxins that penetrate our soils, water supplies, and air. These chemicals have a destructive impact on our normal bioprocesses, causing enzyme dysfunction, hormonal imbalances, and weakening of our immune system. They are also producing health maladies that most don't realize can be related:

- Allergies
- Skin Problems
- Insomnia
- Brain Fog
- Chronic Fatigue
- Fibromyalgia
- Depression
- Anxiety
- Memory Loss
- Poor Concentration
- Joint & Muscle Pain
- Mouth Sores
- Frequent Colds & Flu

The list goes on and on. Without a doubt, detoxifying ourselves is one of the prime personal trials of the 21st century. For this reason, Jash Botanicals foresees that environmental medicine will be a key sub-specialty in the future.

Your lungs, skin, colon, liver, and kidneys are key organs that assist in ridding your body of toxic waste. An infrared sauna is the ideal instrument for opening our sweat pores for toxic metabolites to flee from our bodies. When your temperature goes up, and you begin to perspire, the toxins, pesticides, and petrochemicals that have been kept in your subcutaneous fat for years rise to the surface, and are excreted through pores via sweat.

Injury to the heart and circulatory system is not the only danger that heavy metal toxicity, especially that of mercury, can perpetrate on the body. Mercury and aluminum have been acknowledged to contribute to Alzheimer's disease, Parkinson's, ALS, and Autistic Spectrum Disorders. The good news is—infrared sauna detoxification can be an invaluable tool in assisting the removal of toxic heavy metals imposed upon your system. Infrared sauna detoxification provides a myriad of health benefits. While the infrared makes you sweat, the composition of chemicals discovered in the sweat is quite different from that generated by a steam bath, dry sauna, or exercise.

The sweat of people treated in an infrared sauna will not only include water, but will also contain cholesterol, fat-soluble toxins, heavy

metals (such as mercury, lead, cadmium, aluminum, and arsenic), nicotine, sulfuric acid, ammonia, and other dangerous environmental poisons. Normal sweat manufactured by other processes, including exercise, is composed of mostly water and sodium chloride. According to laboratory testing, traditional saunas, while they do induce sweating, produce approximately 97% water and 3% toxins, whereas FIR sauna therapy generated sweat was approximately 80% water and 20% toxins. These results are even more intriguing, considering the fact that traditional saunas operate at an average of 60-80 degrees higher than far infrared saunas. It is for these reasons that FIR therapy is such an effective tool in the treatment of individuals with weak, ill, or otherwise frail conditions.

Additionally, sweat has the task of being a prudent garbage collector. During a 15-minute infrared sauna, sweating can execute the same heavy metal excretion that would take the kidneys 24 working hours.

Nowadays, holistic and alternative physicians and clinics utilize saunas as a painless way to assist in releasing toxins such as synthetic pollutants and heavy metals. Just a 30 minute infrared sauna session elevates body temperatures to induce a mild, cleansing fever, and a healing sweat.

Far Infrared Saunas: Substance Abuse, Addiction, and Chemical Dependency

It is becoming more and more apparent that the accumulation of drug residues and their lipophilic metabolites in the body plays a key role in drug addiction. These residues are linked with persistent symptoms, and their mobilization from body stores into the bloodstream connects with drug cravings experienced by most substance abusers.

One researcher developed a detoxification method that was exclusively aimed at reducing levels of fat-stored chemical residues in the body and to thereby lessen the long term effects of such compounds. The strength of drug metabolites in both sweat and urine was calculated in 8 subjects who had been aggressively using drugs prior to treatment with this program. The treatment took place at the Narconon drug rehabilitation center in Los Angeles. Cocaine, amphetamine, and benzodiazepine (valium) metabolites were identified by fluorescent immunoassay in both the sweat and urine of the subjects. How was this accomplished? The program utilized Far Infrared Sauna therapy. Following treatment, both past and current drug users tested for marked improvements in symptoms with many returning to normal range. This detoxification program symbolizes an essential innovation in drug rehabilitation; an approach directed at a long term decrease of the predisposition for drug abuse.

Addiction results from several different factors or elements; the treatment approach must not only address the mental and emotional, but the physical as well. That is where the infrared sauna comes into play. The more you use it, the faster the drugs and chemicals are excreted. But quitting in itself is not very difficult; the trick is staying quit. Many addicts have sustained so many physical and mental changes that they need to acquire their fix merely to sustain equilibrium. In other words, withdrawal may be hard, and the better prepared you are for withdrawal, the more adept you will be to conquer it. Infrared sauna therapy does just that.

The fundamental factors for recovery are the same as for any rehabilitation:

- Drink plenty of clean fresh water (especially while in the sauna)
- Eat plenty of good high fiber
- Get plenty of adequate sleep
- Participate in daily exercise
- Participate in group activities
- Don't isolate yourself (the more people know you are trying to quit—the more they will help you.)

There is also a list of natural support instruments to use in conjunction with FIR sauna therapy that will help:

• **Essential fatty acids** (If possible, please use cold-pressed & raw Flaxseed, Evening Primrose and Borage oils/1 tablespoon a day) in conjunction with the sulfur proteins (foods with cysteine or methionine, such as eggs, garlic, onions) will make fat soluble toxins water soluble, allowing all the toxic wastes, which are preferentially stored in the body's fat cells, to be flushed out through the kidneys and sweat glands.

• **FIR sauna therapy enhances perspiration and excretion of toxins.** Be sure you scrub down after your session in the sauna (use a high-fat soap such as coconut oil soap or Dr. Bronner's soap) after sweating as this will soften the fatty secretions and prevent their re-absorption.

• **Large doses of vitamin C** (powdered form preferable). You may use up to 12 grams a day with ¼ teaspoon being equal to 1 gram. Vitamin C is the ultimate free radical scavenger and will assist you in cleansing and oxygenating the tissues. It will also facilitate keeping your bowels moving which is a very important factor in successfully becoming clean and sober. The combination of vitamin C and the infrared sauna are extremely helpful in speeding the toxins and healing the body.

• **Glutamine which is very valuable in detoxification as well as performing as an excitatory neurotransmitter.** Taking 1 gram, 4-6 times a day on an empty stomach will encourage the body's natural opiates, the endorphins and enkephalins, to assist you through the cravings.

- **FIR sauna therapy will also help you with sleep and depression.** If you need further assistance, there are herbal supplements that can work in conjunction with your detoxification. Dream on and Mood Mender are two excellent herbal additions to your anti-addiction arsenal.

- **There are numerous people who have been helped with acupuncture,** in particular for ridding your body of nicotine and street drugs. It has been so successful that some state government agencies have taken notice. Seattle King County medical insurance will now reimburse acupuncture treatments for addicts, and in Oregon, heroin addicts MUST try acupuncture before receiving methadone.

Use of FIR sauna therapy allows toxins, synthetic chemicals, and drugs, a comparatively safe passage out of your body without jeopardizing vital organs or passing the blood/brain barrier. When combined with other natural aids and proper diet, it is the most effective approach to combat addiction.

Far Infrared Saunas: Fibromyalgia & Chronic Fatigue Syndrome

Fibromyalgia syndrome or FMS is a prevalent musculoskeletal ache, pain and fatigue disorder for which the medical community does not have the answer to. The word Fibromyalgia actually means pain in the muscles, ligaments, and tendons (the fibrous tissues in the body).

The majority of people who suffer from Fibromyalgia complain that they hurt all over. They compare it to having their muscles pulled or overworked. On occasion, the muscles twitch and other times they burn. Statistics on Fibromyalgia state that there are more women than men troubled with the ailment, but it shows up in people of all ages.

To give you an idea of what someone with Fibromyalgia would feel like, it would have all the earmarks of a bad virus. All the muscles in the body scream pain and the person has little or no energy. You could virtually explain it as unplugging someone's battery. Whereas the acuteness of symptoms varies from person to person, FMS may remind you of a post-viral condition; this is the reason many experts in the field of FMS and CFS think that these two disorders are one in the same.

Medical records indicate that there are over 3 million people incapacitated with muscle pain, stiffness, and other ailments associated with Fibromyalgia and Chronic Fatigue Syndrome. How does an infrared sauna help?

An infrared sauna has been proven to be valuable in the treatment of Fibromyalgia by restoring normal autonomic nervous system functions. This is an element of the nervous system, and presides over the unconscious functions such as muscle tension, sweating, blood pressure, digestion and equilibrium. While the precise cause of Fibromyalgia is not known, numerous doctors presently think that the "net toxic load" of these FMS sufferers is very high, and that their detoxification pathways are habitually exposed to danger. Numerous people with FMS are unaware that they are suffering from heavy metal poisoning (ie. mercury, lead, arsenic, cadmium). If a person with Fibromyalgia and chronic fatigue syndrome is able to decrease their overall toxicity level, their symptoms often improve.

For the FMS or chronic fatigue sufferer, a constant program of infrared sauna therapy will help the problem of autonomic dysregulation, which is customary to these conditions. Symptoms of autonomic dysregulation are muscle pain, digestive problems, visual disturbances and dizziness. These indicators can be reduced, as frequent far infrared sauna therapy produces normal autonomic functioning.

If you are afflicted with Fibromyalgia or Chronic Fatigue Syndrome, far infrared sauna therapy offers promising benefits through a reduction of the net toxic load placed upon your body.

Far Infrared Saunas: Acne, Eczema, Psoriasis, and a Healthy Complexion

Since the skin is one of your primary methods of detoxification, the skin is sometimes referred to as the "third kidney". However, your skin is considerably more complex than the kidney, or any other organ with the exception of the brain. It is made up of blood vessels, nerve endings, pigments, oil glands, hair follicles, cells that inhibit entry to bacteria, and coiled sweat glands. It is crucial to note that death from accumulated poisons occurs in a matter of hours if the skin and its passages are smothered.

A doctor from Finland once wrote, "The best-dressed of foreigners can come into a doctor's office, and when his/her skin examined, it is found to be rough as bark. On the other hand, as a result of the sauna, the skin of any Finnish worker is supple and healthy."

Caring for your skin appropriately is paramount in your resistance to various skin maladies such as eczema, athlete's foot, acne, and other skin disorders. The prolific sweating attained in an infrared sauna carries off deeply imbedded impurities and dead skin cells, leaving the skin glowing and flawlessly clean. Skin tone and elasticity are enhanced, and maladies such as acne, eczema, psoriasis, burns and roughness are relieved. Also, keloids develop at a reduced rate in those susceptible to their formation, and can be softened if they have already formed.

Far Infrared Saunas: Chronic Pain, Muscle Spasms, and Arthritic Conditions

Sauna therapy is an ancient treatment for relieving arthritic pain. It has a long history and has been an integral healing process in many cultures. In Europe, infrared therapy is extensively used to treat patients afflicted with numerous forms of arthritis. Far infrared therapy in Japan has been used successfully in bestowing pain relief to those suffering from bursitis, Fibromyalgia, rheumatoid arthritis, back pain, headaches, sprains, and assorted other muscular-skeletal ailments.

- Infrared heat intensifies the capability of your collagen tissues to be extended or stretched. These tissues, which are heated to 112 degrees Fahrenheit, and then stretched, actually show an improvement from 50 to 90 percent after you stop stretching. This does not happen in these same tissues when stretched at normal tissue temperatures. Bottom line is that 20 of these stretching sessions in an infrared sauna can benefit you from 10 to 18 percent when it comes to your ligaments, joints, tendons, fasciae, and the scarring that you may have. In addition, stretching your tissues in an infrared sauna at 112 degrees Fahrenheit caused much less weakening in the stretched tissues. You know how you are always told to stretch before and after you exercise? Well, stretching in an infrared sauna is much safer and more beneficial than performing them under normal circumstances.
- Infrared heat also decreases joint stiffness. In one particular study, there was a 20% decrease in rheumatoid finger joint stiffness at 112 degrees Fahrenheit as compared with 92 degrees Fahrenheit. It is also speculated that any stiffened joint and thickened connective tissues may respond in a similar fashion.
- Infrared heat has long been known to reduce muscle spasms—whether they are secondary to underlying skeletal, joint, or neuropathological conditions. This effect is possibly manufactured by the combined effect of heat on both primary and secondary nerves that carry impulses from the outer body toward the brain or spinal cord and blood vessels that carry blood to an organ from spindle cells and from its effects on Golgi tendon organs (which are located in the muscles and detect tension or force).
- Infrared heat treatment has also been studied in regard to relieving pain by the reduction of spasms. Pain is also sometimes linked to ischemia (lack of blood supply) due to tension or spasm that may be improved by an abnormally high level of blood in that part of the body, which an infrared sauna would generate. It does this by widening the blood vessels, especially the arteries—leading to increased blood flow or reduced blood pressure. Infrared heat has been known to lessen pain sensation by direct action on both free-nerve endings in tissues and on peripheral nerves. In one dental study, repeated infrared heat applications ended in the elimination of the whole nerve response responsible for pain arising from dental pulp.
- Lastly, infrared heat is now becoming a leading edge treatment for soft tissue injuries. It has been used to promote both relief in chronic or intractable “permanent” cases, and accelerated healing in newer injuries.

Far Infrared Saunas: Tips and Precautions for a Healthy Regimen

Here are some sound tips for launching yourself on healthy sauna regimen:

1. Drink at least 16 fluid ounces of water or maybe even freshly made organic juices during and/or after your sauna.
2. Imagine your sauna as a place to take personal time to read, meditate, pray, heal or just rest.
3. Wearing a pure cotton terrycloth robe to promote sweating is an option, and don't forget to bring small towel to wipe your face when needed.
4. Use your imagination to conjure up visions of toxins being released from your cells into the bloodstream—the blood being transported to the surface of your skin. Envision your bones and joints warming, relaxing, and strengthening. Lastly, rest for about 5-10 minutes in a horizontal position.
5. An excellent starting point would be 15 minutes a day at 90 degrees. Then you may increase your sauna time up to 30 minutes a day (in 5 minute intervals).

Caution:

- People with advanced symptomatic heart disease or unstable angina should not use an infrared sauna unless supervised by a doctor.
- Hemophiliacs and persons that are inclined to hemorrhage should avoid infrared sauna usage or any type of heating that would generate vasodilatation that may lead to the propensity to bleed.
- Silicone does soak up infrared energy. So, implanted silicone or silicone prostheses for breasts, nose or ear replacement may be warmed by the rays. It may be diligent to check with your surgeon and product manufacturer prior to using an infrared sauna.
- Menstruation is temporarily increased when using an infrared sauna. When a woman is fully aware of this, she may choose to experience this short-term effect without concerning herself or she may choose to wait until her cycle is finished.
- Some medical practitioners consider it inadvisable to raise the core temperature of people who suffer from adrenal suppression, systemic lupus erythematosus or multiple sclerosis.
- If you are pregnant or think you might be pregnant, please check with your physician before using the infrared sauna.
- If a person has suffered a recent joint injury that is considered acute, it should not be heated for at least 48 hours or until the hot

and swollen symptoms diminish. Enthusiastic heating is strictly contraindicated in cases of enclosed infections in any of your tissue including dental.

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