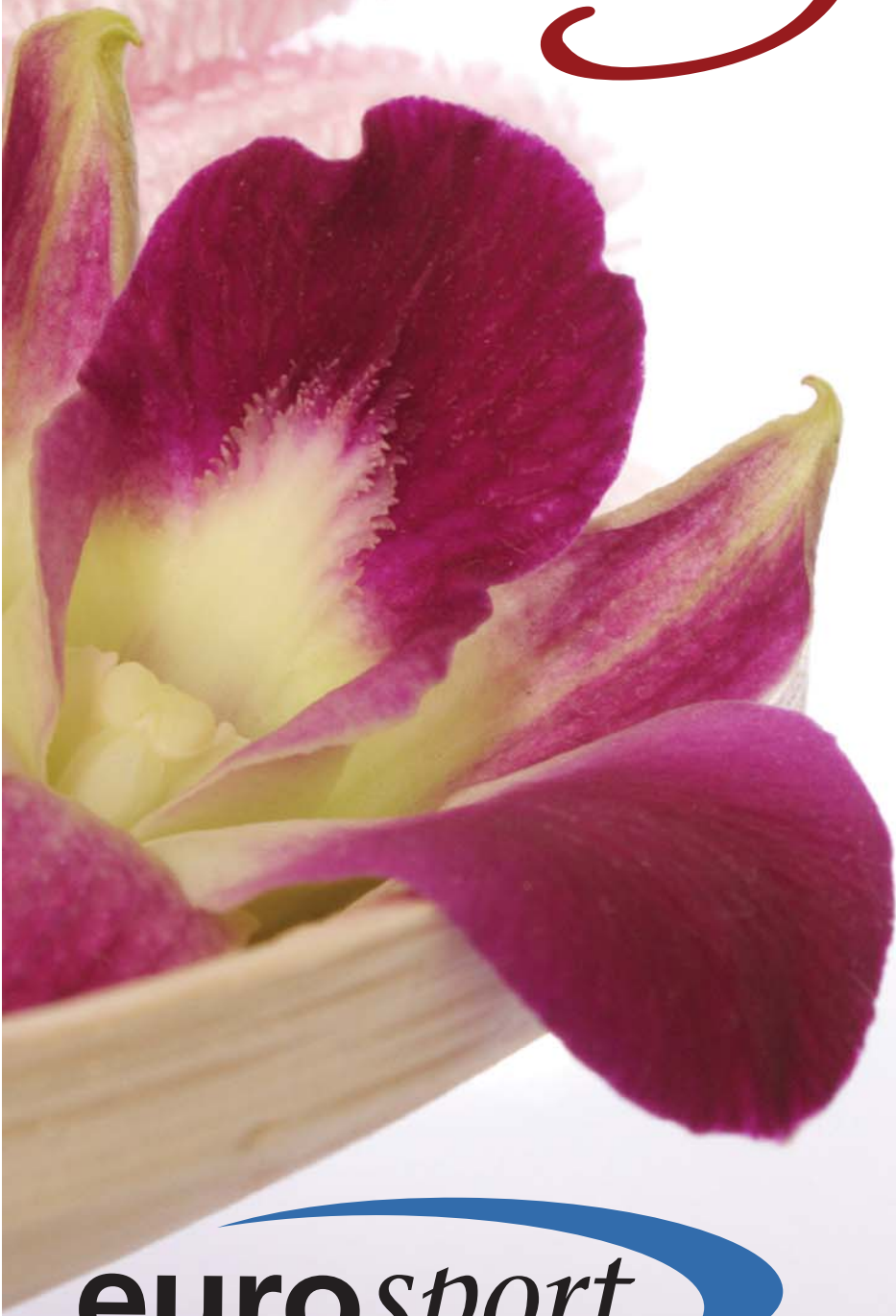


FAR INFRARED

Saunas



eurosport

Leisure Products

INTRODUCTION:

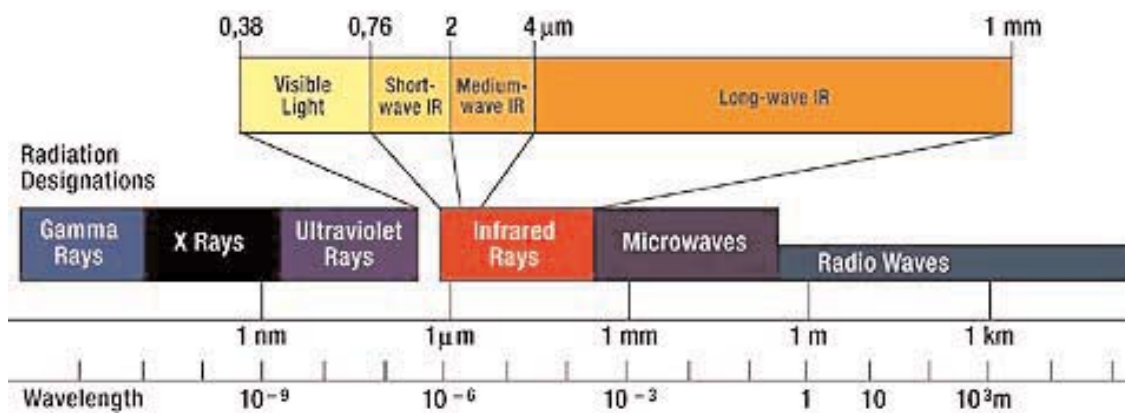
It is vital that you understand exactly what Far Infrared is and the benefits of this type of sauna therapy.

Near, Mid & Far Infrared Rays (FIR) are part of the Electromagnetic Spectrum with the Near Infrared Rays being closest to the visible light rays. The Far Infrared Rays- the longest rays with the average wave length at 8-14 microns, are very compatible and easily absorbed by human beings. Far Infrared light rays are abundant in morning and evening sun.

An excellent way to describe Far Infrared to your customer is to imagine you are standing outside on a cold winter day and the sun is shining. When you stand in the direct sunlight, you can feel the warmth on your face, if a cloud then goes across the sun, immediately you are cold again. That is because the warmth you felt is the "far infrared" ray of the sun. It is not warm enough to heat the air around you or even melt the snow. Far Infrared rays will only penetrate "living" objects. FIR technology is what hospitals use to keep newborn babies warm. It is safe and essential for our health and well-being.

Far Infrared Rays are Light Energy.

FIR is absorbed by the human body through "resonance absorption". When the FIR come in contact with bodies of a similar wave-length, such as the human body and other living things, there is resonance. The resonance of the cells of the body and the FIR rays are "vibrating" at the same frequency. FIR Energy is easily absorbed into the cells.



Far Infrared penetrates and heats the body up to 1.5 inches deep. This level of penetration is not achievable with a traditional steam sauna or hot water spa. This is a significant point, FIR saunas heat the body three times deeper and therefore produce three times as much sweat.



BENEFITS OF USING A FAR INFRARED SAUNA

Weight loss

Far Infrared therapy can burn up to 600 calories in a 30 minute session. While much of this will be excess water, Far Infrared has a cardiovascular effect by speeding the heart rate up, thus naturally increasing the metabolism as blood flows faster and oxygen is delivered to the extremities much quicker.

Stress Reduction

Stress is predominant in our society today as a leading cause of many illnesses and disorders. Often, the primary cause of stress and fatigue is toxins in the blood. Far Infrared saunas are proven as one of the most powerful ways to detoxify the body.

Cellulite

As a form of light energy, Far Infrared vibrates as it enters the body and breaks up molecules that should not be there. Combined with heavy sweating, the body will naturally eliminate unwanted cellulite.

Cardiovascular Benefits

Because of the deep heating effect in the muscle tissue and internal organs, the body naturally responds to this heat by increasing the heart volume and rate, leading to a beneficial heart stress and sought after cardiovascular training and conditioning effect. Medical research has confirmed that the use of a sauna provides cardiovascular conditioning as the body tries to cool itself. It has also been found that the far infrared sauna makes it possible for people in wheelchairs or those or are otherwise unable to exert themselves; to achieve a beneficial cardiovascular training effect.

Range of Motion/Joint Stiffness

Infrared heat increases the extensibility of collagen tissues. Stretching in the FIR sauna would be very effective on joints, ligaments, or tendons that are scarred or contracted. Connective tissues in the joints respond similarly reducing the stiffness in the affected joint.

Pain Relief

Pain is often related to tension or spasm in the tissues. Heat has been shown to reduce the pain sensation by acting directly on the nerve endings in tissues and on peripheral nerves. Localized infrared therapy is used by over 40 reputable Chinese medical institutes.

Other Medical Conditions:

Researchers report over 90% success in the effects of infrared heat on: Soft tissue injuries, Lumbar strain, Periarthritis of the shoulder, Sciatica, Menstrual pain, Neurodermatitis, Eczema, Post surgical infection, Facial paralysis, Pediatric pneumonia, Digestive disorders.

Reduce Signs of Aging/Beautiful Youthful Skin

The detoxifying effects of FIR Sauna treatments extend to the skin by unclogging pores, restored skin tone, clearing acne, clearing of eczema and psoriasis, smoothing stretch marks and varicose veins.

Detoxify

Many researchers now believe that many of the conditions mentioned above are environmentally related and they are likely to predominate as the health threats of the future. Detoxification is crucial to eliminate the environmental metals and pollutants from the body to safeguard against the ravages of toxicity. FIR saunas work by promoting detoxification through sweat and by stimulating cells to release toxins through the liver and bowel.



FAR INFRARED SAUNA STUDIES

Please Note:

This is a compilation of studies on the use of a far-infrared sauna. These studies were not performed by or for Eurosport Fitness Innovations Inc. or its subsidiaries. They are here for you to understand and decide for yourself what medical and therapeutic benefits may help you. The article was written about an older infrared sauna, although it does not name it. Eurosport has engineered and built a better sauna, using patented digital controls, special "ceramic" heating elements and better, healthier construction materials.

Infrared Thermal System for Whole-Body Regenerative Radiant Therapy
Dr. Aaron M. Flickstein

PORTABLE INFRARED THERMAL SYSTEM

The Whole-Body Radiant Thermal System: A Breakthrough in Regenerative Radiant Therapy Provided by a Unique Type of portable Infrared Thermal System

SAFETY OF INFRARED RADIANT ENERGY

Is The Infrared Thermal System Safe For Me?

What exactly is radiant heat? No need to worry -- it has nothing to do with either ultraviolet radiation (which gives you a sunburn and damages your skin) or atomic radiation (the kind from a nuclear bomb).

Radiant heat is simply a form of energy that heats objects directly through a process called convection, without having to heat the air in between. Radiant heat is also called infrared energy (IR). The infrared segment of the electromagnetic spectrum is divided into 3 segments by wavelength, measured in microns or micrometers (a micron = 1/1,000,000 of a meter): 0.076-1.5 microns = near or close; 1.5-5.6 = middle or intermediate; 5.6-1000 = far or long wave infrared. The infrared segment of the electromagnetic spectrum occurs just below or "infra" to red light as the next lowest energy band of light. This band of light is not visible to human eyes but can be seen by special cameras that translate infrared into colors visible to our eyes. We can, however, feel this type of light, which we perceive as heat. Our sun produces most of its energy output in the infrared segment of the spectrum. Our atmosphere has a "window" in it that allows IR rays in the 7-14 micron range to safely reach the earth's surface. When warmed, the earth radiates infrared rays in the 7-14 micron band with its peak output at 10 microns.

According to Dr. Tsu-Tsair Oliver Chi in his summation on the mechanism of action of infrared devices tuned to the human body, these rays are selectively absorbed by the tissues needing a boost in their output. 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 sun is the principal source of radiant energy that we experience daily. Have you ever been outside on a partly cloudy spring day of about 50° and felt quite comfortable when suddenly the sun was obscured by a cloud? Although the air temperature had not had time to drop, you felt chilled, as the cloud would not let the warming infrared rays through to reach you. The infrared heat in this health system is just like the heat from our sun or that which our own bodies produce as they burn fuel to keep us warm.

Our Bodies radiate infrared energy out through the skin at 3-50 microns, with most of their output at 9.4 microns. Our palms emit infrared energy at between 8-14 microns. Palm healing, which has a 3,000 year-old tradition in China, has been based on the healing properties of these natural infrared rays. The Yogis of India also use such palm healing and recommend it especially for relieving eyestrain. Sauna use has been popularized by the Finns whose old religion used it as a ceremony for mental, spiritual and physical cleansing. This religion came with the Finns when they migrated from an area northwest of present day Tibet, between 5,000-3,000 years B.C. to their present location in Finland.

Dr. Tadashi Ishikawa received the patent on the zirconia ceramic infrared heaters used in these thermal systems in 1965, after five years with Fuji Medicals R. & D. Department. The thermal systems based on these heaters were used exclusively by medical practitioners in Japan until 1979 when they were released for public use. The idea has now been further refined into the Infrared Thermal System that has been sold in the United States since 1981. Panels that produce similar infrared rays are used in hospitals to warm newborn babies.

The heaters in these IR Thermal Systems emit about one-third of their output in the middle infrared band, from 2-5.6 microns, for super-deep penetration and the other two-thirds in the long band, from 5.6-25 microns with that part of the output evenly spread around the 9.4 micron pivot point of peak human output. This distribution maximizes the higher penetration of the middle-band waves and combines them with the long waves that produce a resonant absorption amplification of healthy tissue output. The Chinese researchers consider the band from 2-25 microns as the most therapeutic.

The source of infrared heat in these Thermal Systems is actually sand, warmed by an electrical resistance coil embedded within it. This is the same luxurious radiant heat we all enjoy while vacationing at the beach. The sand and coil are contained in a long, thin ceramic tube also tuned to our bodies.

This zirconia ceramic emitting tube is shielded by a metallic grill that is covered by a soft coating of suede-tex, and is safe to touch while it is operating.

Recent books such as *Cross Currents*, by Robert O. Becker, M.D., have detailed the hazards of exposure to certain kinds of electromagnetic fields such as those encountered under high tension power lines or while working at computer display terminals. Japanese researchers have reported that infrared radiant heat antidotes the negative effects of such toxic electromagnetic sources. These Thermal Systems have been tested and found to be free of such so-called "toxic" electromagnetic fields. The Swedish National Institute of Radiation Protection has concluded that the heaters in the Thermal Systems are not dangerous.

ONLY ONE OF ITS KIND AVAILABLE

Why Is This Infrared Thermal System Unique?

It uses infrared radiant energy to directly penetrate the body's tissues to a depth of over 1 ½ ". Its energy output is tuned to correspond so closely to the body's own radiant energy that our bodies absorb close to 93% of the infrared waves that reach our skin.

A conventional sauna must rely only on indirect means of heat: First, on convection (air currents) and then, conduction (direct contact of hot air with the skin) to produce its healing effects on us. In an IR Thermal System, less than 20% of the infrared energy heats the air, leaving over 80% available to be directly converted to heat within our bodies. Thus an IR based system can warm its user(s) to a much greater depth and much more efficiently than a conventional sauna as its energy output is primarily used to convert energy directly to heat in us and not to create excessively hot air that then only heats the skin superficially. This crucial difference explains many of the unprecedented benefits reported to be available through an Infrared Thermal System that are not attainable through the use of a conventional sauna.

The infrared energy applied in these thermal systems may induce up to 2-3 times the sweat volume of a hot-air sauna while operating at a significantly cooler air temperature range of 110° to 130° F. vs. 180 to 235° F. for hot-air saunas. The lower heat range is safer for those concerned about cardiovascular risk factors that might be adversely affected by the higher temperatures encountered in old style hot-air saunas. German researchers report beneficial effects from hour long whole-body infrared exposure in two groups of hypertensive patients that they studied in 1989 including a 24-hour long increase in peripheral blood flow and decreases in high blood pressure. It is distinctly more pleasant to breath air that is from 50°-125° F. cooler while saunaing. Due to its "user-friendly" nature, people naturally prefer to use the Infrared Thermal Systems and will continue to do so on a regular basis due to the ease of breathing much cooler air while feeling as warm as they choose, and to a distinctive feeling of

well-being reported by users as an after effect. These Thermal Systems may even be used with the door fully open if the only effect desired is infrared penetration or if a very cool no-sweat experience is desired as in a pre-activity warm-up while fully clothed. This approach might be used in warming up prior to stretching, working out, running or exposure to cold weather.

These IR systems are easier as well as more comfortable to use than old-fashioned hot-air saunas. Hot-air saunas require extensive warm-up periods of 30-90 minutes, making them much less practical than the modern Infrared Thermal Systems, which warm up in only 5-10 minutes from room temperature. Consistent and convenient at-home use is thus, again, much more likely with an IR Thermal System.

Significantly lower operating costs make the Infrared Thermal System more desirable than a regular sauna. A 20-minute session, including a 10-minute warm-up in the Infrared Sauna, costs about 5 cents of electricity. A comparable session with a full warm-up in a conventional sauna costs about \$.75 - \$1.00. Daily usage of the Infrared Thermal System will raise your electrical bill by only \$1.50 a month compared to \$22.50 to \$30.00 a month in a conventional sauna, if each is used for 20 minutes after warm-up.

These Infrared Thermal Systems bring you the same infrared rays experienced in the traditional American Indian sweat lodge, but in a much more convenient and easily used form, in the privacy of your own home, or office. The cleansing and purifying benefits attributed to the traditional sweat lodges are now available for daily purification without the time-consuming and extremely labor-intensive set-up process that a sweat lodge requires.

HEALTH BENEFITS ATTRIBUTED TO INFRARED RAYS IN REPORTS FROM AROUND THE WORLD

Over the last 25 years, Japanese and Chinese researchers and clinicians have done extensive research on infrared treatments and report many provocative findings. In Japan there is an "Infrared Society", composed of medical doctors and physical therapists, to further research and support the health benefits of infrared as a method of healing. There have been over 700,000 Infrared Thermal Systems sold in the Orient for whole-body treatments, and an additional 30 million people have received localized infrared treatment in the Orient, Europe and Australia with lamps tuned to the same 2-25 micron wave band as employed in these whole-body Thermal Systems. Whole-body infrared therapy has been used for over 80 years by German physicians in an independently developed form.

PASSIVE CARDIOVASCULAR CONDITIONING EFFECT

The Infrared Thermal System makes it possible for people in wheelchairs, or those who are otherwise unable to exert themselves or who won't follow through on an exercise and conditioning program to achieve a cardiovascular training effect. This also allows for more variety in any ongoing training program.

"Many of us who run do so to place a demand on our cardiovascular system, not to build big leg muscles. Regular use of a sauna may impart a similar stress on the cardiovascular system, and its regular use may be as effective, as a means of cardiovascular conditioning and burning of calories, as regular exercise."

- As reported in the Journal of the American Medical Association - August 7, 1981

Due to the deep penetration, over 1 ½ " into the skin, of the infrared generated by these IR Thermal Systems, there is a heating effect deep in the muscular tissues and the internal organs. The body responds to this deep-heating effect via a hypothalamic-induced increase in both heart volume and rate. This beneficial heart stress leads to a sought after cardiovascular training and conditioning effect. Medical research confirms the use of a sauna provides cardiovascular conditioning as the body works to cool itself and involves substantial increases in heart rate, cardiac output and metabolic rate. As a confirmation of the validity of this form of cardiovascular conditioning, extensive research by NASA in the early 1980's led to the conclusion that infrared stimulation of cardiovascular function would be the ideal way to maintain cardiovascular conditioning in American astronauts during long space flights. Blood flow during whole-body hyperthermia is reported to rise from a normal 5-7 quarts per minute to as much as 13 quarts per minute.

"The 1980's were the decade of high-impact aerobics classes and high mileage training. Yet there was something elitist about the way exercise was prescribed: only strenuous workouts would do, you had to raise your heart rate to between X and Y, the only way to go was to 'go for the burn.' And such strictures insured that most 'real' exercisers were relatively young and in good shape to begin with. Many, many Americans got caught up in the fitness boom, but probably just as many fell by the wayside. As we've reported, recent research shows that you don't have to run marathons to become fit, that burning just 1,000 calories a week is enough. Anything goes, as long as it burns these calories."

- As reported in the Wellness Letter, October 1990, from the University of California Berkely.

OUTSTANDING CALORIC CONSUMPTION AND WEIGHT CONTROL

In Guyton's Textbook of Medical Physiology, we find that producing one gram of sweat requires 0.586 kcal. The JAMA citation referred to above goes on to state that, "A moderately conditioned person can easily sweat off 500 Gms. In a sauna, consuming nearly 300 kcal - the equivalent of running 2-3 miles. A heat-conditioned person can easily sweat off 600-800 kcal with no adverse effects. While the weight of the water loss can be regained by rehydration with water, the calories consumed will not be." Since an IR Thermal System helps generate two to three times the sweat produced in a hot air sauna, the implications for increased caloric consumption are quite impressive. Assuming "a sauna" as mentioned in JAMA, to last for 30 minutes, some interesting comparisons may be drawn. Two of the highest calorie output forms of exercise are rowing and marathon running. Peak output on a rowing machine or during a marathon run burns about 600 calories in 30 minutes. An Infrared Thermal System may better this effect from "just slightly" to up to 250 %, by burning some 900-2400 calories in a 30-minute session. The Infrared Thermal System might then simulate the consumption of energy equal to that expended in a 6-9 mile run during only a single session.

An Infrared Thermal System can, thus, play a pivotal role in both weight control and cardiovascular conditioning. This would be easily valuable for those who don't exercise and those who can't exercise yet want an effective weight control and fitness maintenance program and the benefits that regular exercise can contribute to such a program.

MUSCULOSKELETAL CASES

Success reported with Infrared treatments by Japanese researchers:

- TMJ Arthritis
- Muscle Spasms - reduced or eliminated
- Traumatic Arthritis
- Low Back Pain - relieved
- Accl-Decel Injury Sequelae
- Adhesions - lengthened or more easily broken; they are common in competitive athletes, trauma and repetitive stress syndromes.
- Disc-protrusion Related Neuralgia
- Brain Contusion - accelerated healing
- Tight Shoulders - relaxed
- Compression Fracture - Example: pain stopped for 3 days with only a single treatment
- Post-Exercise Muscle Pain - vital to competitive athletes
- Arthritis: Gouty, Rheumatoid, DJD - each substantially relieved or improved
- Spinal Cord Shock - post traumatic shock reversed
- Shoulder Pain - relieved or eliminated
- Muscle Tension - relaxed
- Bursitis - eliminated

"Medical practitioners make use of Infrared Radiant Heat to treat sprains, strains, bursitis, peripheral vascular diseases, arthritis, and muscle pain..." according to the McGraw/Hill Encyclopedia of Science and Technology.

Dr. Masao Nakamura of the O&P Medical Clinic in Japan has reported success with the use of infrared treatment for:

- Whiplash
- Rheumatism
- Insomnia
- Menopause
- Gastroenteric Problems
- Acne
- Shoulder Stiffness
- Sciatica
- Ear Diseases
- Arthritis
- Rheumatoid Arthritis

A case study was reported in Sweden of a 70-year-old man with Rheumatoid Arthritis secondary to acute rheumatic fever. He had reached his toxic limit on gold injections and his Erythrocyte Sedimentation Rate was still 125. Within 5 months of use of an Infrared Thermal System, his ESR was down to only 11.

In a case of Rheumatic Arthritis in a 14-year-old Swedish girl, who couldn't walk comfortably downstairs due to knee pain since she had been 8 years old, her Rheumatologists told her mother that her child would be in a wheelchair within 2 years if she refused gold corticosteroid therapy. However, after 3 infrared sauna treatments she began to become more agile and subsequently took up folk dancing, without the aid of the conventional approach in her recovery.

A clinical trial in Japan reported the successful solution of seven out of seven cases of Rheumatoid Arthritis treated with whole-body infrared therapy.

These case studies and the clinical trial indicate that further study is warranted on the use of whole-body infrared therapy in the care of patients with Rheumatoid Arthritis.

THERAPUTIC HEAT AND COLD

The following is summarized from Therapeutic Heat and Cold, 4th Edition, ED. Justus F. Lehmann M.D., Williams and Wilkins, Chapter 9 or concluded from the data therein.

Generally it is accepted that heat produces the following desirable effects:

1. It increases the extensibility of collagen tissues.
 - Tissues heated to 40° C and then stretched exhibit a non-elastic residual elongation of about 0.5-0.9% that persists after the stretch is removed which does not occur in these same tissues when stretched at normal tissue temperatures. Thus 20 stretching sessions can produce a 10-18% increase in length in tissues so heated and stretched.
 - This effect would be especially valuable in working with ligaments, joint capsules, tendons, fasciae, and synovium that have become scarred, thickened or contracted.
 - Such stretching at 45° C caused much less weakening in stretched tissues for a given elongation than a similar elongation produced at normal tissue temperatures.
 - The experiments cited clearly showed that low-force stretching can produce significant residual elongation when heat is applied together with stretching or range-of-motion exercises, which is also safer than stretching tissues at normal tissue temperatures.
 - This safer stretching effect is crucial in properly training competitive athletes so as to minimize their "down" time from injuries.
2. It decreases joint stiffness directly.
 - There was a 20% decrease in stiffness at 45° C as compared with 33° C in rheumatoid finger joints, which correlated perfectly to both subjective and objective observation of stiffness.
 - Any stiffened joint and thickened connective tissues should respond in a similar fashion.
3. It relieves muscle spasms.
 - Muscle spasms have long been observed to be reduced through the use of heat, be they secondary to underlying skeletal, joint, or neuropathological conditions.
 - This result is possibly produced by the combined effect of heat on both primary and secondary afferents from spindle cells and from its effects on Golgi tendon organs. The effects produced by each of these mechanisms demonstrated their peak effect within the therapeutic temperature range obtainable with radiant heat.
4. It produces pain relief.
 - Pain may be relieved via the reduction of attendant or secondary muscle spasms.
 - Pain is also at times related to ischemia due to tension or spasm which can be improved by the hyperemia that heat-induced vasodilation produces, thus breaking the feedback loop, in which the ischemia leads to further spasm and then more pain.
 - Heat has been shown to reduce pain sensation by direct action on both free-nerve endings in tissues and on peripheral nerves. In one dental study, repeated heat applications led finally to abolishment of the whole nerve response responsible for pain arising from dental pulp.
 - Heat may both lead to increased endorphin production and a shutting down of the so-called "spinal gate" of Melzack and Wall, each of which can reduce pain.
5. It increases blood flow.
 - Heating of one area of the body produces reflex-modulated vasodilations in distant-body areas, even in the absence of a change in core body temperature; i.e., heat one extremity and the contralateral extremity also dilates; heat a forearm and both lower extremities dilate; heat the front of the trunk and the hand dilates.
 - Heating of muscles produces an increased blood flow level similar to that seen during exercise.
 - Temperature elevation produces an increase in blood flow and dilation directly in capillaries, arterioles and venuies, probably through direct action on their smooth muscles. The increase of bradykinin, released as a consequence of sweat-gland activity, also produces increased blood flow and vasodilation.
 - Whole-body hyperthermia, with a consequent core temperature elevation, further induces vasodilation via a hypothalamic-induced decrease in sympathetic tone on the arteriovenous anastomoses. Vasodilation is also produced by axonal reflexes and by reflexes that change vasomotor balance.

6. It assists in resolution of inflammatory infiltrates, edema and exudates.
 - The increased peripheral circulation provides the transport needed to help evacuate the edema, which can help end inflammation, decrease pain and help speed healing.
7. More recently, it has been used in cancer therapy.
 - This is a new and experimental procedure.
 - It shows great promise in some cases when used properly.
 - American researchers favor careful monitoring of the tumor temperature; whereas, the successes reported in Japan make no mention of such precaution.

There have been over 7,000 IR Thermal Systems sold in America, and infrared healing is now becoming the leading edge in the care of soft tissue injuries to promote both relief in chronic or intractable "permanent" cases, and accelerated healing in newer injuries.

Localized infrared therapy using lamps tuned to the 2-25 micron waveband is used for the treatment and relief of pain by over 40 reputable Chinese Medical Institutes.

Researchers reported over 90% success in a summary of Chinese studies that assessed the effect of infrared therapy on:

- Soft tissue injury
- Periarthritis of the shoulder
- Lumbar strain
- Sciatica
- Pain during Menstruation
- Neurodermatitis
- Eczema with infection
- Post-surgical infections
- Facial paralysis (Bell's Palsy)
- Diarrhea
- Cholecystitis
- Neurasthenia
- Pelvic infection
- Pediatric Pneumonia
- Tineas
- Frostbite with inflammation

Japanese researchers, as reported in the book Infrared Therapy by Dr. Yamajaki, have produced the following provocative results with whole-body infrared thermal systems:

- Burns - relieves pain, and decreases healing time, with less scarring
- High Blood Pressure - safe in 40°-50° C range and regular use helps to lower it
- Low Blood Pressure - sauna trains body to raise it
- Brain Damage - accelerated repair in brain contusions
- Short-Term Memory - improved
- Cancer Of The Tongue - reversed
- Toxic Electromagnetic Fields - effects neutralized
- Cerebral Hemorrhages - recovery is both sped up and significantly enhanced
- Auto Accident-Related Soft Tissue Injury - daily sessions were used until best healing was attained; then the Thermal Systems were used to deal with permanent residuals. The pain control effect on the chronic residuals from such injuries lasted three days before another treatment was necessary.
- Arthritis, Acute and Chronic - was greatly relieved
- Gouty Arthritis - relieved
- Rheumatoid Arthritis - relieved
- Menopause Symptoms - relieved chills, nervousness, depression, dizziness, head and stomachaches
- Weight Loss - first, through sweating and the energy use needed to produce the sweat, and second, through direct excretion of fat.

BLOOD CIRCULATION

All of the following ailments may be associated to some degree with poor circulation and, thus, may respond well to the increased peripheral dilation associated with IR application:

- Arthritis
- Neuritis
- Sciatica
- Bursitis
- Backaches
- Rheumatism
- Hemorrhoids
- Strained Muscles
- Nervous Tension
- Fatigue
- Diabetes
- Stretch Marks
- Children's Over-Tired Muscles
- Menstrual Cramps
- Varicose Veins
- Leg and Decubitus Ulcers (that fail to heal using conventional approaches) Post-Operative Edema (treatment with infrared has been so successful that hospital stays were reported to have been reduced by 25%)
- Peripheral Occlusive Disease "The goal is to maintain an optimal blood flow rate to the affected part ... in general the temperature should be maintained at the highest level which does not increase the circulatory discrepancy as shown by cyanosis and pain." - Therapeutic Heat and Cold pgs. 456-7
- Coronary Artery Disease, Arteriosclerosis and Hypertension

Finnish researchers, talking about the regular use of conventional saunas state that "there is abundant evidence to suggest that blood vessels of regular sauna-goers remain elastic and pliable longer due to the regular dilation and contraction" of blood vessels induced by sauna use. German medical researchers reported in *Dermatol Monatsschr* in 1989 that a single whole-body session of infrared-induced hyperthermia lasting over one hour had only beneficial effects on subjects with stage I-II essential hypertension. Each subject experienced a rise in core body temperature to a maximum level of 38.5° C. All of the subjects in one experiment had significant decreases in arterial, venous and mean blood pressure that lasted for at least 24 hours and was linked, according to the researchers, to a persistent peripheral dilation effect.

An improvement in plasma viscosity was also noted. Another group of similar hypertensive patients was also studied under the same conditions of infrared-induced hyperthermia, with an eye toward more carefully evaluating the circulatory system effects induced by this type of whole-body heating. During each infrared session there was a significant decrease of blood pressure, cardiac ejection resistance, and total peripheral resistance in every subject. There was also a significant increase during each session of the subjects' heart rates, stroke volumes, cardiac outputs and ejection fractions. The researchers site these last three effects as evidence that the stimulation of the heart during infrared-induced hyperthermia is well compensated, while the prior list of effects show in clear detail the microcirculatory changes that lead to the desired result of a lowering of blood pressure.

Problems often accompanying ageing that have been reported to have been alleviated or reduced by Infrared Therapy in Japan:

- Menopause
- Cold Hands And Feet - A Physical Therapist found 20-50% improvement was maintained.
- High Blood Pressure - Example: Case of a diabetic with a systolic decrease from 180 to 125 and a concurrent 10 lbs. weight loss after Infrared use.
- Rheumatoid Arthritis - 7 out of 7 cases successfully resolved in one clinical trial.
- Radiation Sickness - Relieves signs and symptoms.
- Cancer Pain - Relieved pain in later stages of cancer extremely well.
- Sequelae Of Strokes - Example: Hemiparesis relieved over time.
- Benign Prostatic Hypertrophy - Reduced.
- Duodenal Ulcers - Eliminated.
- Pain - which prevented sleep, or limited useable sleeping positions, was relieved
- Compression Fracture Pain - Example: pain gone for 3 days after each treatment in osteoporotic compression fractures.
- Hemorrhoids - Reduced.
- Cystitis - Gone.
- Cirrhosis Of Liver - Reversed.
- Gastritis - Relieved.
- Hepatitis - Gone.
- Asthma, Bronchitis - Cleared up (like moving to Arizona's dry air).
- Chron's Disease - Gone.
- Post-Surgical Adhesions - Reduced.
- Leg Ulcers - Healed when previously static and resistant to other care.
- Keloids - Significantly softened and, in some cases, completely gone.

EAR, NOSE AND THROAT

Conditions relieved with infrared treatments in Japan:

- Chronic middle ear inflammation or infection - In one clinical study of Chronic Serous Otitis Media pathogenic bacteria were isolated on 70% of the subjects studied.
- Sore throats
- Tinnitus - Chronic severe case cleared with ten infrared treatments.
- Nose bleeding

SKIN

Conditions benefited by Infrared treatments in Japan and China:

- Nettle rash
- Clogged pores are unplugged of cosmetics creating a skin texture and tone of unexcelled quality. Mikkel Aalands book Sweat (Capra Press, 1978) quotes a Finnish doctor to the effect: "The best dressed foreigner can come into a doctor's office, and when his skin is 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."
- Poor skin tone - Restored to a more youthful level.
- Scars and pain from burns or wounds - Decreased in severity and extent.
- Infrared Therapy is used routinely in burn units throughout Asia.
- Lacerations - Healed quicker and with less pain and scarring
- Acne - Three or four Infrared treatments may open pores that have not been functioning in years, forcing out clogging cosmetics and loosening dead outer skin. The sauna is thus a boon to teenage skin, clearing acne and blackheads.
- Body odor - By improving the function of the skin, the Thermal System sauna may eliminate the cause of offensive body odor. It defiantly reduces body odor induced by occupational exposure to odorous chemicals.
- Eczema and Psoriasis - Have reportedly responded extremely well to Infrared treatments.
- Sunburn - According to the Ninth Edition of Clayton's Electrotherapy, "infrared radiations are the only antidote to excessive ultraviolet radiations."
- Keloids - Form at a reduced rate in those prone to their formation with IR Thermal System use and may be softened by use of IR Thermal Systems if they have formed.
- Dandruff - Due to increased blood flow through the scalp.

CONTRAINDICATIONS

As you can see, the segment of the infrared spectrum emitted by the Infrared Thermal System is reputed to offer an astounding range of possible therapeutic benefits and effects in research conducted around the world.

The data presented herein is offered for reference purposes only and to stimulate further observation. No implication of Infrared Thermal Systems creating a cure for or treating any disease is implied nor should it be inferred.

If you have a disease, be certain to consult with a primary-care physician concerning it.

If you are using any prescription drugs, check with your physician or pharmacist for any possible change in the drug's effect due to any interaction with infrared energy.

It is considered inadvisable to raise the core temperature in someone with Adrenal Suppression, Systematic Lupus Erythematosus or Multiple Sclerosis, by some authorities.

If you have a recent (acute) joint injury it should not be heated for the first 48 hours after an injury or until the hot and swollen symptoms subside. If you have a joint or joints that are chronically hot and swollen, these joints may respond poorly to vigorous heating of any kind. Vigorous heating is strictly contraindicated in cases of enclosed infections be they dental, in joints or in any other tissues.

If you are pregnant or suspect you may be, discontinue your sauna use. Finnish women use their saunas, which don't throw heat as deeply into the body, for only 6-12 minutes and reportedly leave at that time, due to perceived discomfort. Their usage at this low level of intensity is not linked to birth defects. IR Thermal System use may be 2-3 times more intense, and comparatively shorter 2-6 minute sessions hardly seem worth any minimal risk they may present.

Metal pins, rods, artificial joints or any other surgical implants generally reflect infrared rays and thus are not heated by this system, nevertheless you should consult your surgeon prior to using an IR Thermal System. Certainly, IR Thermal System use must be discontinued if you experience pain near such implants.

Silicone does absorb infrared energy. Silicone implants or silicone prostheses for nose or ear replacement may be warmed by the infrared rays. Since silicone melts at over 200° C it should not be adversely affected by IR Thermal System use. It is still advised that you check with your surgeon and possibly a representative from the product manufacturer to be certain.

Heating of the low back area of women during the menstrual period may temporarily increase their menstrual flow. Once a woman is aware that this may occur, she can choose to allow herself to possibly experience this short term effect without worry or to simply avoid IR Thermal System use at that time of her cycle.

Hemophiliacs and anyone predisposed to hemorrhage should avoid IR usage or any type of heating that would induce vasodilation which can potentiate the tendency to bleed.

Obviously, should any condition worsen with use of an IR Thermal System, the use of the system should be discontinued.

People do not experience pain using these IR Thermal Systems unless such is contraindicated. If you do, the use of radiant heat is clearly inappropriate for you at that time.

Do not attempt to self-treat any disease with this Infrared Thermal System without direct supervision of a physician.

QUICK HIGHLIGHTS OF SELECTED TOPICS OF INTEREST - BENEFITS REPORTED

Weight Loss: Burns 900-2,400 calories in just one 30-minute session! Here's how many calories a 150 lb. person normally burns up in 30 minutes of exercise:

SPORT CALORIES

- Rowing (peak effort) 600
- Swimming (crawl stroke) 300
- Jogging 300
- Tennis (fast game) 265
- Chopping Wood 265
- Cycling (10 mph) 225
- Golfing (without a cart) 150
- Walking (3.5 mph) 150
- Bowling 120
- Vigorous Racquet Ball 510
- Marathon Running 593

Some weight loss authorities believe that our bodies use fat to dilute toxins. As an IR Thermal System is an unsurpassed expeller of toxins, it is also a great way to get rid of any fat our bodies are using to dilute toxins we are storing.

Beauty: Excellent for increasing blood circulation to the skin which is essential for beautiful, youthful, glowing skin!

A new "inner glow" as the skin is free of accumulated dirt and dry skin cells, due to deep cleansing of impurities!

- Help for acne, eczema, psoriasis, burns and any skin lesions or cuts.
- Open wounds heal quicker with reduced scarring.
- Removes roughness, leaving skin baby smooth and soft again.
- Firms and improves skin tone and elasticity.
- Scars on skin: Scars fully formed, even Keloids, may be gradually softened. Burns and other wounds or incisions may heal with significantly reduced scarring.

Cellulite: Cellulite is a gel-like substance made up of fat, water and wastes which are trapped in pockets below the skin. An Infrared Thermal System can assist this condition, as profuse sweating helps clear this form of unwanted debris from the body. European beauty specialists confirm: a sauna will greatly speed any anti-cellulite program! Due to at least twice the depth of heat penetration into cellulite combined with up to 10 times the level of heating in these tissues an Infrared Thermal System can be significantly more effective than any conventional sauna.

Relieves pain: Effective for arthritis, back pain, muscle spasms, headache, etc.

Injuries: Radiant heat helps with sprains, strains, arthritis, muscle spasms and pain. If you are an athlete, this IR Thermal System is all good news. It allows oxygen debt to be repaid more quickly. That's likely to lead to improved and quicker healing of sprains and muscle pain for you!

Runners: The Infrared Thermal System is the perfect solution for keeping up with your cardiovascular fitness while avoiding a run on a difficult weather day, days you may want to just skip a workout, or when you need to rest to allow an injury to heal. Also the Infrared Thermal Systems are great for warming up before stretching or starting any vigorous activity. You simply get into the IR Thermal System with your clothes on and allow the infrared rays to pour right through your clothing until you just begin to break a sweat. Now you are pre-warmed for stretching, skiing, running in cold conditions, etc. For the maximal stretching benefit from this system you will need a 40-minute sauna session before your stretching. Research indicates that stretching after a 40-minute IR Thermal System session should produce a ½% permanent increase in your flexibility. Even one 20-minute session

may create a temporary increase in your flexibility of up to 10%. As a warm-up, an Infrared Thermal System should help to prevent injuries and enhance your ability to stay with your training program or enjoy any outdoor activity. An Infrared Thermal System is also a great cold weather post-activity warm-up, especially for any frostbitten areas.

Relaxation & enjoyment: Remove stress in the comfortable warm temperature with fresh air vents for easy breathing.

TIPS FOR USE

Please note: #1 below applies to every other infrared sauna on the market. BUT it does not apply to a TheraSauna™! TheraSauna™ uses the only patented control that regulates the far-infrared heat up and down automatically so you get a constant radiant heat "flow" without overheating the sauna.

1. When you first set up your IR Thermal System, we recommend that you turn the thermostat to the maximum level and leave it there. Prior to using your Infrared Thermal System, please run it with the door open for an hour. To regulate the temperature in your system during use, use the roof vent or the door window (by setting it at an angle). If you feel the need for more cooling, simply open the door until you feel comfortable. By leaving the thermostat at the highest setting you will get continuous output from the Infrared heaters in your unit.

2. Drink liquids prior to and after your session. Water works just fine. Use the best quality water available to you. Eating a piece of fruit is helpful to replace potassium. The typical American diet can replace phosphorous which is lost through perspiration. Magnesium is replaceable through green leafy vegetables or supplementation. Some facts about Gatorade: the "energy" Gatorade supplies to muscles is SUGAR. The "fluids" are water. And the "minerals" are salt (110 mg of sodium and 97 mg of chlorine), 25 mg of potassium and 24 mg of phosphorous. Americans eating an average diet of commercial food already consume too much salt and phosphorous. And while many people could use a little more potassium, there is more than 25 mg in a TABLESPOON of orange juice.

3. If you shower or bathe before your Infrared Thermal System session, you may sweat more; try it with and without first bathing or showering and see which you prefer.

4. Use at least 2-3 towels. (A) Sit on one towel folded over several times for added cushioning. (B) Use another towel on the floor to absorb extra sweat. (C) A third towel draped over the knees may aid you in comfort and is useful to towel off sweat as you sauna.

5. At the first sign of cold or flu, increasing your sauna sessions may be beneficial in boosting your immune system and decreasing the productive rate of the viruses. Consult your physician for the proper treatment for this or any other condition.

6. As you become more heat conditioned you may wish to increase the length of your sessions to 40 minutes or longer. This is especially useful if desiring to heat soft tissues to their optimal temperature prior to stretching to attain a non-elastic, lasting elongation. Obviously you will need to rehydrate very thoroughly and be sure to properly support your mineral balance. Certainly, consult your doctor about your individual usage. Many users report that they feel increasingly comfortable with longer sessions, some as long as 1 ½ hours. On other days these same people "feel finished" with their session after 30-40 minutes of usage.

7. To treat your ankles and feet more effectively you must elevate them while in your IR Thermal System. Any area that you wish to achieve a specific deep heating effect in should be moved as close to one of the heaters as feels comfortable.

8. Should you notice any drying of your skin with ongoing use of your IR Thermal System or should you wish to maximize the detoxification benefits from your IR Thermal System it is suggested that you obtain the best quality oil available to you (i.e. expeller pressed oil such as Hain's organic canola oil, Hain's All Blend oil) and add 2-4 tablespoons a day to your diet. The essential oils in these products are needed for skin health in the first instance, and to allow the body to let go of stored toxins, fat and cholesterol in the second.