

FAR INFRARED

How Far Infrared Energy became a Therapy:

Body Heat:

Our bodies radiate far infrared energy through the skin at wavelengths 3 to 50 microns, with most output at 9.4 microns. Our palms emit FIR energy also, between 8 and 14 microns. 'Palm Healing', an ancient tradition in China, has used the healing properties of far infrared rays for 3,000 years. These natural healers emit energy and heat from their hands to heal much the same as Reiki healers do. Current research conducted in Taiwan has measured significant far infrared energy emitted from the hands of Chi Gong masters. Yogis in India also employ palm healing and recommend it especially for relieving eye strain. Thermal therapy has in fact been in existence for thousands of years dating back to ancient civilizations such as the Finns, the Romans, the ancient Chinese and the American Indians.

Sunshine:

Since ancient times, people have believed that exposure to sunshine can maintain and even enhance health. Sun therapy is a form of natural far infrared thermal therapy. Far Infrared rays are the invisible rays of natural sunlight that have the longest wavelength. However, sunbathing should only be enjoyed in moderation since sunlight also contains ultra-violet rays which are potentially damaging. There is also no temperature control, and sunshine is only available seasonally.

Far Infrared Personal Sauna Technology:

For many decades, scientific evidence has found that deep heat can enhance the beneficial effects of healing therapy. Scientists have looked at ways to develop more effective forms of thermal treatment that target specific areas and enable deep heat penetration.

Traditional forms of heat therapy can be hazardous, uncomfortable, unhygienic, inefficient and ineffective. Traditional saunas create exposure to extremely high temperatures causing heat stress which can have detrimental effects on health, especially for people with a heart condition or high blood pressure. However, our Infrared Sauna removes the high temperatures and also removes the head and heart from the heat source so that patients can remain in the sauna for an almost unlimited period of time without any harmful effects.

WHAT IS FAR INFRARED?

Far Infrared is a specific wavelength of light and energy that is totally invisible to the naked eye and capable of penetrating deep into the human body. The most common source is from our sun. Among the rays coming from the sun, the far infrared waves are the safest and the most beneficial. 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. The infrared segment of the electromagnetic spectrum is divided into three segments by wavelength, measured in microns or micrometers (a

micron = 1/1,000,000 meter); .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 FIR 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. 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 degrees and felt quite comfortable until 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 the sauna is just like the heat from our sun or that which our own bodies produce as they burn fuel to keep us warm. 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 resources. After boosting a tissue’s level to maximum, the remaining rays pass onward harmlessly. This phenomenon is called “resonant absorption.”

WHAT DOES FAR INFRARED EXPOSURE DO?

- Elevates the temperature of subcutaneous layers, thus expanding blood capillaries, stimulating blood circulation, increasing metabolism between blood and tissue, promoting tissue regeneration and reducing cramping.
- Penetrates four to five centimeters into the dermis (middle layer of skin) from muscles into blood vessels, lymphatic glands and nerves.
- Affects every living cell and produces warmth. Through this cell tissue “micro-friction” and the vibration of molecular resonance, chemicals within cells are activated.
- The warming effect is helpful in eliminating such things as the waste products generated by aging, heavy metals and toxic substances, which are then secreted by the sweat and dermis-layer fat glands.
- Adjusts the autonomic nerve function and reduces the over-stimulation of sensory nerves.

HOW THE PROCESS EVOLVES – Far infrared waves reach into the cell and create water molecule resonance. The waves then produce atomic molecule resonance. Energy conversion occurs through absorption. It forms an effect on the heart. It enters into the subcutaneous cell layer. Temperature is elevated. Capillary dilation takes place. Extravasated blood and congested toxins are excreted. Cells are activated. Organ cells are repaired and protected. The formation of enzymes is promoted.

When far infrared penetrates our bodies it is converted into the appropriate energy. This activates the self-regulating systems in our living tissue so as to alleviate the bodily imbalance and lead to recovery. Far infrared also radiates to the meridian points of the body. Treatments

generally last 20 minutes to an hour. Initially, relief is only temporary. But, with repeated treatments the duration of relief becomes longer and eventually becomes lasting.

The human body is nourished directly by the stimulation of sunlight or nourished indirectly by eating foods, drinking fluids, or breathing air that has been vitalized by the sun's light energy. If certain wavelengths are missing in the light we receive, the body cannot fully absorb certain nutrients. The result is that, even with adequate nutrition, the body is malnourished. Sunlight increases the ability of the lungs to absorb more vital oxygen, as well as the blood's capacity to carry and deliver it. Oxygen deficiency has been readily linked to a host of illnesses and discomforts ranging from chronic fatigue to cancer.

When near infrared (NIR) waves heat organic substances the surface gets hotter than the interior, and the interior gets heated by conduction from the surface. By contrast, far infrared (FIR) penetrates deeply with a very uniform warming effect.

PERSONAL FAR INFRARED SAUNA BENEFITS

Far Infrared Sauna emits photons. Photons help release enzymes. Enzymes stimulate macrophage activity increasing the elimination of damaged and diseased tissues. Nitric oxide is released which expands capillaries and increases circulation.

Infra-red photons produce enzymes that activate macrophages, which help eliminate damaged and diseased tissue. Macrophages work on a cellular level. Nitric oxide is released and expands capillaries. It also increases circulation and carries toxins to the lymph system and out of the body. Why is this Infrared system unique? It uses infrared radiant energy to directly penetrate the body's tissues. 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. One of the reasons FIR has beneficial results in a variety of illnesses is the ability of FIR waves to remove toxins, which are often at the core of many health problems. Numerous toxins are stored in our bodies. Toxic gases may be encapsulated by clusters of water. Where these toxins are accumulated, blood circulation is blocked and cellular energy is impaired. When a 10 micron FIR wave is applied to these water molecules, the water begins to vibrate, which reduces the ion bonds of the atoms which are holding together the molecules of water. As the breakdown of the water molecules occurs, encapsulated gases and other toxic materials are released.

RESEARCH

Research and development in the 60's - most extensively in Japan and Germany - introduced the Far Infrared Ray (FIR) thermal technology which is an effective, safe, natural, hygienic, and efficient approach to thermal treatment. Today there are multiple health and medical professionals internationally who rehabilitate and treat a multitude of physical problems by using far infrared. Relief of sports injuries via thermal therapy is just one example of treatment. Cancer is a most significant other (research PubMed.gov for worldwide medical citations). Dr. Tsu Tsair Oliver Chi summarized the effect of infrared rays on the body in these words, "These rays are selectively absorbed by 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 ensure the fullest healing response possible in a tissue which is being repaired. After boosting a tissue's level to its maximum, the remaining rays pass onward harmlessly."

Otto Warburg was nominated for the Nobel Prize in 1944 for research concerning photosynthesis in connection with the chemotherapeutics of cancer and the use of x-rays. His research has shown that infrared energy impacts cancer.

In 1998, the Nobel Prize in Medicine Award recipients, Scientists Murad, Furchgott and Ignaro found that nitric oxide gas, which is released into the blood from the hemoglobin, turns on the immune system and allows healing to take place. Dr. Valentino Fuster, a past president of the American Heart Association, called the nitric oxide discovery "one of the most important discoveries in the history of cardiovascular medicine because it promotes expansion of the capillaries and allows the blood to get into the area to increase circulation and reduce the risk of strokes and heart attacks."

It has been demonstrated by Dr. Lon R. Horwitz that a FIR energy modality increases nitric oxide in the blood and plasma of normal adult subjects. A 1999 publication by Dr. Horwitz strongly suggests that Far Infrared produces nitric oxide gas, which aided in the recovery of the five patients in a study who could not get healing conventionally. They had various diabetic problems and were not able to heal, but they received the nitric oxide technology produced by the FIR, and healing took place for all of them. *Augmentation of Wound Healing Using Monochromatic Infrared Energy; Advances in Wound Care*; author's unpublished research.

Simply put, there are healing properties from the production of nitric oxide. The immune cells infuse the area and the circulation is increased. Pain is reduced, and the area now has the immune cells necessary for quick and complete healing.

With increased moderate heat to the body, substances harmful to the human body such as heavy metals, toxic substances from food processing, lactic acid, and non-esterified fatty acids are excreted via the lymph system combined with the kidneys and liver through urination.

What about the top third of the body with the Personal Sauna? Infrared heat increases blood flow. Heating one area of the body produces reflex-modulated vasodilators in distant-body areas even in the absence of a change in core body temperature. Heat one extremity and the other extremity also dilates – heat a forearm and both lower extremities dilate; heat the front of the trunk and the hand dilates. Heating muscles produces an increased blood flow level similar to that seen during exercise. Temperature elevation also produces an increased blood flow and dilation directly in capillaries, arterioles, and venules.

Miscellaneous Facts about Far Infrared Saunas & Far Infrared Energy

1. Using a FIR Sauna can help strengthen the body's immune system by stimulating increased production of white blood cells by the bone marrow and killer T-cells by the thymus.
2. FIR rays improve blood circulation, stimulates endorphins, lowers lactic acid, kills certain bacteria and parasites, and burns calories. Proponents of hyperthermia, also known as fever therapy, maintain that using far infrared energy to therapeutically-induce higher core body temperatures helps fight infections and even cancer. Their argument is supported by the human body itself, which radiates infrared energy for the benefits of warmth and tissue repair.
3. A good example of FIR heat is the light produced by the sun. This is the heat you feel penetrate your skin when you stand in the sun and miss when you walk into the shade. It has nothing to do with ultraviolet light, which can damage your skin. When people do not receive adequate amounts of FIR heat, they often can become ill.
4. Studies indicate that benefits of FIR sauna use include: muscle relaxation; increased cardiovascular strength; increased blood circulation; kidney health, and improved lung function.
5. FIR benefits all your organs of elimination from the lungs to the liver to the kidneys to the skin. FIR saunas are recognized by health practitioners world-wide as perhaps the most effective method of removing both chemical and heavy metal toxins from the body. People who work with chemicals, as well as home gardeners who frequently use fertilizers and pesticides, are advised to use FIR saunas on a regular basis. FIR is thought to be 7 times more effective at detoxifying heavy metals such as mercury, aluminum, and other environmental toxins than conventional heat or steam saunas. In a study performed by U.S. researchers the urine of people using a conventional sauna was found to be 95-97% water, while the urine of those using a FIR sauna was 80-85% water with the non-water portion being principally cholesterol, fat-soluble toxins, toxic heavy metals, sulfuric acid, sodium, ammonia, and uric acid. For many chronically ill patients as well as people who are well and wish to stay that way by reducing their toxic burden, the Fir sauna is the detox method of choice.
6. FIR radiant heat provides all the healthy benefits of natural sunlight without any of the dangerous effects of solar radiation.
7. Unlike other saunas where temperatures range from 140-220F, the temperatures of our FIR sauna ranges from 90-170 F. The lower heat range of FIR saunas is safer for people with cardiovascular risk factors or fragile health because lower temperatures don't elevate heart rate and blood pressure. FIR sauna therapy has helped people with cardiovascular conditions such as congestive heart failure and angina. It enhance endothelial nitric oxide, lowering blood pressure and improving cardiovascular function. Research by NASA in the early '80'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. As the body works to cool itself, there is a substantial increase in heart rate, cardiac output, metabolic rate, and blood flow rises.

8. FIR can help promote rebuilding of injured tissues by having a positive effect on the fibroblasts, the connective tissue cells necessary for the repair of injury. It also can help increase growth of cells, DNA syntheses, and protein synthesis, all of which is necessary during tissue repair and regeneration.
9. The radiant heat of FIR saunas has been shown to be especially beneficial to people with sports injuries, fibromyalgia, arthritis, and other chronic pain conditions.
10. FIR wavelengths measure between 5.6 and 1,000 microns. One micron equals 1 micrometer or 1-millionth of a meter. Wavelengths between 6 and 14 microns are believed to be the most beneficial to humans. The palm emits FIR wavelengths of between 8 and 12 microns. The energy output from our FIR sauna so closely match the human body's radiant energy that nearly 93% of the sauna's FIR waves reach the skin.
11. FIR use can be of significant benefit to people trying to lose weight. A 20-30-minute session in a FIR sauna has been touted to burn as many calories as a 6-mile run.
12. Unlike traditional saunas, our FIR sauna can be used with its doors completely open if FIR penetration is the only objective. Our FIR sauna uses both ceramic and carbon fiber elements to generate gentle heat. Another option is to use the near infrared bulb located in the seat for sciatica, hemorrhoid, prostate and uterine health.

NITRIC OXIDE (NO)

The Far Infrared Sauna uses technology from the NASA space program to make FIR Rays that activate enzymes in the body to create Nitric Oxide. The action of Nitric Oxide was not discovered until about 1991 by Dr. Salvador Mondada. And then three Pharmacologists, Robert F. Furchgott, Louis J. Ignarro, and Ferid Murad won the Nobel Prize in 1996.

There are over 10,000 Clinical Studies on nitric oxide. They are listed in: *American Journal of Hypertension, American Journal of Physiology, Annals of Internal Medicine, Cardiology.*

What Does Nitric Oxide Do in the Body?

Basically, it is a neurotransmitter that turns things on and off.

1. "Nitric Oxide relaxes arteries, helping maintain normal blood Pressure... Nitric Oxide improves Heart function. It directs the beating of the heart, triggering the heart to beat faster or slower." Dr. Furchgott discovered Nitric Oxide is the mechanism relaxing the heart known as the "endothelium-dependent relaxing factor." Lack of oxygen constricts the heart. (Nitric Oxide carries oxygen in and carbon dioxide out).

2. "It helps keep open the coronary arteries, preventing angina pain."
3. "It's a free-radical scavenger that helps to lower serum cholesterol and prevent 'bad' LDL cholesterol from oxidizing and becoming worse."
4. "It's a powerful anticoagulant (blood thinner) that helps prevent blood platelets from clumping together and causing heart attack and stroke."
5. "It enhances blood flow to the penis, helping to boost erections." (Like Viagra) and "It enhances sexuality for women as well."
6. "It serves as a critical "bullet "by different immune-system cells that use it to kill bacteria and viruses and even shrink some cancerous tumors."
7. "It functions as a messenger molecule allowing nerve and brain cells to communicate with each other." It lasts at most five seconds.
8. "It's used by the brain to encode long-term memory and ensure blood flow to brain cells." (Improves memory function)
9. "It helps regulate insulin secretion by the pancreas, reducing the risk of diabetes."
10. "It helps control the lung airways, allowing one to breathe easier and avoid lung problems."
11. "It relaxes "hypertonic" sphincter muscles, preventing and healing hemorrhoids."
12. "It stimulates the body into releasing the all-important human growth hormone, a key to longevity as well as improvement in body composition by boosting lean muscle mass and bone density while decreasing fat tissue." (Boost muscle growth)
13. "Dr. Jonathan S. Stamler at Duke University Medical found Nitric Oxide binds to hemoglobin delivering oxygen to our cells, then ferries carbon dioxide back to the lungs for discharging." "It regulates all cell function and communication."
14. "Nitric Oxide helps the body eliminate ammonia that accumulates as a toxic byproduct of muscle building, sprinting, and other short explosive bouts of exercise."
15. "Nitric Oxide regulates intestinal movement."
16. "Nitric Oxide directs the muscles of the arms, legs, and all bodily movements."
17. "Diabetes accelerates hardening of the Arteries." "Nitric Oxide directs the insulin that regulates blood sugar and reduces Lipid peroxidation." Lubec, B.

18. "Nitric Oxide triggers the release of Prostaglandins that lower inflammation and pain."
19. "Drs. Barbul and Albina found Nitric Oxide reduced inflammation and sped up the rate of healing"
20. "It inhibits the growth of cancer cells (Hibbs) (Kwon). It dramatically reduces the pain associated with cancer.
21. "It has been recently discovered that: Diabetes, Atherosclerosis, Free radicals, Aging Hypertension, Coronary heart-disease and High cholesterol impairs the ability of your endothelium to produce nitric oxide when and where is it needed." Johnstone, M.T., Joffe, I. I., Schmidt, H. H., Pieper, G. M. R.

What do scientists know about Nitric Oxide?

- (1) "Nitric Oxide flits about the body at speeds almost too fast to measure. It's difficult to understand, "it is everywhere and it's nowhere." "It appears to travel just below the speed of light." As soon as it delivers its message by photon light it disintegrates and is gone.
- (2) Nitric Oxide is a free radical creator and identifier determining which bad cells are to be destroyed. It is involved in the process to oxidize the bad fats and toxins in the body. Without Nitric Oxide we would have a toxic dump in our body.
- (3) "Nitric Oxide plays a role in regulation of brain activity and (detection of) inflammation and brain plaque." "Nitric Oxide facilitates the changing & maturing of thought into action." "Nitric Oxide is a beneficial neurotransmitter in the brain and peripheral autonomic nervous system." This causes the parasympathetic nervous system to turn on and all the muscles and body systems to relax causing the body to become unstressed and relax.
- (4) "Nitric Oxide plays a part in inhibiting and blocking COX 2 inflammation of wounds and tissues for all diseases."
- (5) It is thought to be a "messenger molecule." Brett DS, Snider SH: Nitric oxide: A Physiologic messenger molecule. *Annu Rev Biochem* 1994; 63:175.
- (6) "It is at the root of many disease conditions including Arthritis and Cancer."
- (7) "L- Arginine and other enzymes convert to Nitric Oxide, which detoxify cells." From the Textbook, "*Harper's Biochemistry*," 24th edition Chapter 58. "...and causes the smooth muscle cells to relax."
- (8) "Nitric Oxide has a very short half-life (approximately 3-4 seconds) in tissues, because it reacts with oxygen and superoxide. identifying the bad cells for destruction by T cells and

killer cells." If bad cells are not destroyed, cancer cells accumulate." "This cycle of 3-4 seconds of Nitric Oxide generates storage of ATP, which provides energy for the skeletal muscles."

- (9) "Nitric Oxide enhances the immune system." "It plays a role in neurotoxicity (of nerve cells), detoxifying the neuron cells," and all other individual cells of the body. "It also keeps the DNA (cell duplication) and ATP (energy storage & production) from becoming overrun by toxins and chemicals."
- (10) "Nitric Oxide causes vasoconstriction, the narrowing and contraction of blood vessels." "It inhibits adhesion activation, and aggregation of platelets." It keeps the individual blood cells from sticking and coagulating together allowing oxygen and nutrients to get into the cell and wastes to get out.
- (11) "Nitric oxide is a potent antioxidant, neurotransmitter & artery wall relaxer."
- (12) "Nitric oxide and high glutathione lowers Homocysteine."
- (13) "Nitric Oxide is beneficial in Renal Health and Disease." (Kone)

Our INFRARED Sauna:

The Personal Infrared Sauna works on two principles at the same time!

1. Nitric Oxide production
2. Dramatic Use of Hyperthermia

You must do something to enhance processing of toxins and free radicals by the cells when using the FIR Sauna by drinking water before and after and using the bathroom. From the Book, *Doctors' Secrets, the Miracle of Antioxidants*, By Donald McLeod MD & Philip White MD.

FIR HEAT IS FELT TO PRODUCE THERAPEUTIC EFFECTS IN THE FOLLOWING:

BODY ACIDITY - Reduces acidity in the body (FIR causes fruit to ripen faster by reducing acidity)

BRAIN - Short-term memory improved – (accelerated repair in brain contusions) Cerebral hemorrhages – (healing both speeds up and is significantly enhanced)

CANCER - Radiation sickness (relieves signs & symptoms) (Hyperthermia - Heating the Tissue and Body Systems to about 106 degrees.) It is used heavily in Europe in Conjunction with Chemotherapy & Radiation Cancer pain (relieved in later stages of cancer), FIR heat can penetrate through the body and kill cancerous cells

"One of the difficulties with cancer is that cancerous cells are very difficult to target specifically. They can hide among normal cells. But malignant cells are more sensitive to heat than normal

cells. Raising the temperature of the tumor (with the FIR) is one way to help identify the cancer cells.” “Hyperthermia can be used by itself, and results in impressive shrinkage and even complete eradication (10-15%) of tumor. However, these results usually don’t last and the tumors may regrow. However, in Clinical Studies on transplanted mammary carcinoma, radiation alone produces no cures (in China), heat alone produced 22% cures, & combining hyperthermia with radiation produces 77% cures.”

Cancerous cells cannot exist if blood circulation is smooth. Good circulation in the capillaries leaves no room for a cancerous cell to settle down. (A cancerous cell has to settle down so it can proliferate.) FIR helps capillaries to expand, improving circulation. The cancer cell also has a weakness: heat above 42 deg C (108 F) can kill it. FIR heat can penetrate through the body and kill cancerous cells. FIR treatment raises body temperature. FIR therapy can alleviate pain and prolong life when conventional cancer treatment fails. Surgery, radiotherapy and chemotherapy are considered detrimental to health - they are invasive treatments. FIR therapy and immuno-therapy are regarded as non-invasive. FIR is extremely beneficial.

CARDIOVASCULAR - Atherosclerosis (thickening of artery walls due to fatty deposits)

CELLS - Attracts calcium ions to the cellular level. Promotes osmosis of water molecules across the cellular membrane. Stimulates enzyme activity

CONDITIONS AFFECTED BY CIRCULATION - Increases blood flow by promoting dilation of capillaries. Clogged capillary vessels, Hypertension, Arteriosclerosis, Low blood pressure, Coronary artery disease, Poor peripheral circulation, Reynaud’s (cold hands/feet)

COLLAGEN TISSUES - Ligaments, Joint capsules, Tendons, Fascia, Synovium, Scarred, thickened or contracted tissues; Increases extensibility of collagen tissues

EAR, NOSE, THROAT CONDITIONS - Sore throats, Earaches, Nosebleeds, Chronic middle-ear infections, Tinnitus - chronic, severe case cleared with 10 far infrared treatments.

EXERCISE AND CONDITIONING EFFECT - An infrared system can play a pivotal role in both weight control and cardiovascular conditioning. The Personal sauna 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. “Regular use may be as effective, as a means of cardiovascular conditioning and burning of calories, as regular exercise.”

IMMUNE SYSTEM - Post-surgical infection, Scleroderma (an autoimmune disease where collagen builds up and healing cannot take place because the circulation can’t get to the area due to the buildup of the collagen), Infrared energy appears capable of potentiating functions of white blood cells. More white blood cells means greater immune function and resistance to disease and viruses.

INFLAMMATORY INFILTRATES, EDEMA AND EXUDATES - Edema of the joints, Inflammation of joints, Tendinitis, Sprains, Joint stiffness, Gout, Speeds up healing - treatment with infrared has been so successful that hospital stays were reported to have been reduced by 25%.

JOINTS - Assists in reduction of swelling and inflammation by improving lymph flow. Decreases joint stiffness

MUSCULOSKELETAL - Arthritis, Whiplash, Lumbago, Relieves muscle spasms, TMJ, Cramping, Post-exercise muscle pain, Bursitis, Muscle spasms, Knee injuries, Sciatica, back, shoulder, neck and muscle pain

NERVES – Neuropathy, Neuresthenia (adjusts autonomic nerve function), Neuralgia. Reduces over-stimulation of sensory nerves, Facial paralysis (Bell's Palsy)

PAIN RELIEF - Neuralgia, Neuropathy, Pain during menstruation, May lead to increased endorphin production (which reduces pain)

PROBLEMS THAT OFTEN ACCOMPANY AGING - Menopause, Cold hands & feet, High blood pressure, Radiation sickness, Leg ulcers, Rheumatism, Insomnia, Benign prostatic hypertrophy, Pain from a metal joint implant, Speeds healing of joint implants, Compression fracture pain

RESPIRATORY - Chest colds, Bronchitis, Pneumonia

SKIN CONDITIONS - Clogged pores, Poor skin tone, Open wounds, Lacerations, Body odor, Loosens dead outer skin, Eczema, Psoriasis, Aging skin, Leg & Decubitus ulcers (improved when previously resistant to other care), Dandruff (due to increased blood flow through the scalp), Burns (Scars and pain from burns and wounds are decreased in severity and extent. FIR therapy is used routinely in burn units throughout Asia), Keloids (significantly softened and in some cases completely gone), Sunburn (FIR radiations are the only antidote to excessive ultraviolet radiation, according to *Clayton's Electrotherapy*, Ninth Ed.)

SOFT TISSUE - Soft tissue injuries - promotes relief in chronic cases, Accelerated healing in newer injuries, Auto accident-related soft tissue injury, Cellulite, Aids in regeneration of tissue Reduces soreness through direct action on nerve endings in tissues.

WEIGHT LOSS - Direct excretion of fat. Burns calories, Increases metabolism. Weight loss can come through the energy use needed to cool the body's core temperature. Cellulite (a gel-like substance made up of fat, water and wastes, which are trapped in pockets below the skin. FIR will assist this condition, as continuous exposure to FIR helps clear it from the body. Far infrared heat can be significantly more effective than other heat methods, due to the heat penetration being twice the depth into cellulite.)

Again, it is important to note that at moderate temperatures (120 to 140 degrees F) in a sauna, one receives the same detoxification qualities and calorie burning effects without sweating.

Success Reported with Infrared Treatments

By Japanese researchers in Musculoskeletal cases: TMJ, Whiplash, Traumatic Arthritis, Brain Contusion (accelerated healing), Low Back Pain (relieved), Muscle Spasms (reduced or eliminated), Bursitis (eliminated), Shoulder Pain (relieved), Spinal Cord Shock (reversed), Post-exercise muscle pain, Arthritis: Gout, Rheumatoid (each substantially relieved), "Medical practitioners make use of Infrared radiant heat to treat sprains, bursitis, peripheral vascular diseases, arthritis and muscle pain," according to McGraw-Hill Encyclopedia of Science and Technology. *Summary from Therapeutic Heat and Cold*, 4th Ed., ED Justus F. Lehmann, MD.

Dr. Masao Nakamura of the O & P Medical Clinic in Japan has reported great success with infrared for: Whiplash, Menopause, Shoulder stiffness, Rheumatism, Sciatica, Arthritis, Insomnia, Acne, Ear diseases, Gastroenteric problems.

Researchers in Chinese studies reported over 90% success using infrared on: Soft tissue injury, Lumbar strain, Sciatica, Eczema with infection, Cholecystitis, Pelvic infection, Tinea, Neurodermatitis, Diarrhea, Neurasthenia, Pneumonia, Menstrual pain, Periarthritis of the shoulder, Post-surgical infections, Facial paralysis (Bell's Palsy), Frostbite with inflammation.

CASE STUDY

Rheumatoid arthritis in a 14-year-old Swedish girl who couldn't walk comfortably downstairs due to knee pain since she had been eight years old. Her rheumatologists told her mother that she would be in a wheelchair within two years. However, after three infrared treatments, she became more agile and subsequently took up folk dancing, all without the aid of the conventional approach in her recovery.

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