

## About infrared sauna

★ **History of the Sauna** Palm healing, a type of healing in which one person lies their palm on the "patient," has a 3000 year old tradition in China. This technique is based on the healing properties of the natural infrared rays that we as humans give off. Sauna use was popularized by the Finns. It seems that the saunas were originally used for bathing, as well as childbirth and some ceremonies. The tradition came with the Finns when they migrated from an area northwest of present day Tibet, between 5000 and 3000 BC, to their present location in Finland. During travel, the sauna probably resembled the sweat lodges of the American Indians – holes dug in the ground covered with a cloth. The first recorded wooden saunas date to sometime between the 5th and 8th centuries. Today, there is one sauna for every two to three Finns and sauna design is a revered art. Numerous saunas appear along the Mediterranean and the world's first bathtub appears in the palace of King Minos of Crete in 1700 BC.

Native American sweat lodges have been used for thousands of years in North and South America and were documented with the European invasion of the Western Hemisphere. Whole body infrared therapy has been used for greater than 80 years by German physicians in an independently developed form. Dr. Tadashi Ishikawa of Japan received a patent on the Zirconia ceramic infrared heaters in 1965. These were mostly used exclusively by medical practitioners in Japan until they were released for public use in 1979.

The infrared idea has been further refined and sold in the United States since 1981. Chinese researchers consider the band from 2 to 25 microns as the most therapeutic.

### ★ Infrared sauna VS high heat sauna (Conventional Sauna)

1. Far infrared saunas operate at temperatures of 100 degrees F to 130 degrees F. Conventional saunas operate at temperatures of 180 degrees F to 220 degrees F, temperatures are not as well tolerated.
2. Far infrared is claimed to heat tissue three times as much as conventional saunas.
3. Far infrared's resonant absorption causes more toxins expelled through the kidney, liver, and hair.
4. Far infrared saunas are safer as there are no hot surfaces or high temperatures.
- 5, Far infrared saunas are portable and easy to assemble.
- 6, Far infrared saunas' lower temperatures do not dry out the mucous membranes like conventional saunas.
7. Infrared energy requires 90% less electrical energy (thus a lower electrical bill).
8. Less than 20% of the infrared energy heats the air, leaving 80% available to be directly converted to heat within the body.

9. Warms the user to a much greater depth (up to three inches) and more efficiently than the conventional sauna.
10. Induces 2-3 times the sweat volume as conventional saunas, increasing many of the health benefits, including detoxification, cardiovascular conditioning, and calorie burning.
11. The lower heat ranges may be safer for those with cardiovascular risks.
12. The air is more pleasant and easier to breathe, making the sauna more comfortable to use. Many models pump in fresh air.
13. Warm up only takes 10-15 minutes compared to 30-90 minutes for conventional saunas.
14. Uses no water, thus no plumbing costs, bacterial growth, or cleanup.

### ★ Sauna Precautions

DO NOT ATTEMPT TO SELF-TREAT ANY DISEASE WITH SAUNA THERAPY WITHOUT FIRST CONSULTING A PHYSICIAN.

IF YOU HAVE ANY DISEASE OR TAKE ANY PRESCRIPTION MEDICATIONS, CONSULT WITH YOUR PRIMARY CARE PHYSICIAN BEFORE USING SAUNA.

Do not use sauna if you have a history of:

1. Adrenal suppression (body does not respond to heat)
2. SLE (systemic lupus erythematosus)
3. Multiple sclerosis
4. Hyperthyroidism
5. Haemophilia

Do not use in these circumstances:

If you are pregnant or are nursing.

In children under age 5.

If you have acute joint injuries.

If you have enclosed infections (dental, joints, tissue).

With artificial joints, metal pins, or any other implants.

With Silicone implants (may melt at higher temperatures).

During menstrual cycle, as it may increase menstrual flow.

If you suffer from haemophilia or have other predispositions to bleeding.

If you take a prescription drug, check with a physician or pharmacist for any possible change in drug's effect due to interaction with infrared energy.

If you are heat intolerant and do not sweat even with vigorous exercise.

If your skin becomes clammy, you feel weak, tired, or nauseous, STOP USE immediately!

These could be signs of heat exhaustion.

If you stop sweating, GET OUT immediately! This may be the initial stage of heat stroke.

### ★ How does an infrared sauna work?

What is the theory behind these saunas?

This theory is supported by those who use and sell this product. The following are their claims, which are not to this date proven or supported by scientific method.

Far infrared sauna therapy is said to duplicate the healthy frequencies of our own cells. The tissues are purported to selectively absorb these rays as the water in the cell reacts in a process called "resonant absorption".

This resonant absorption is said to occur when the frequency of the far infrared matches the frequency of the water in the cell. This causes toxins from the cells to be put out into the blood stream and excreted in sweat, faeces, and urine.

Proponents of this therapy state that our tissues which are undergoing the healing process may need a boost of infrared to ensure the fullest healing response.

Far infrared is claimed to penetrate the body's tissues to a depth of 1.5 to 3 inches.

Due to the supposed deep penetration of infrared rays, a heating effect is observed deep in the muscular tissues and even into the internal organs.

This "deep heating," along with sweating, is thought to be responsible for the healing effects and the other health benefits associated with these infrared rays.

What are the different types of saunas?

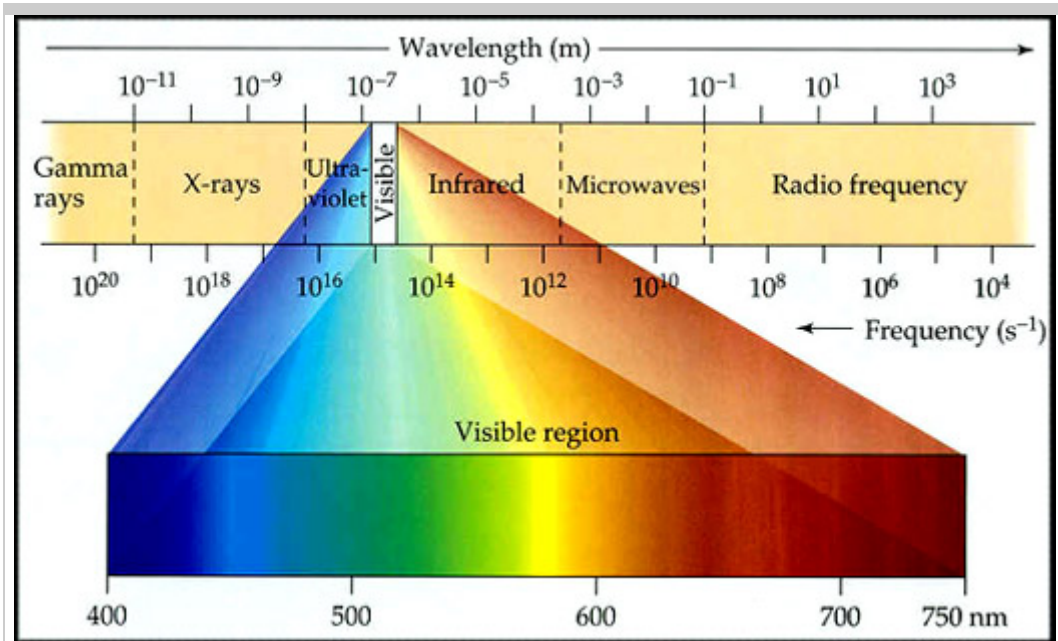
Infrared lamp saunas use incandescent infrared heat lamps for heating. They emit mainly near infrared, some middle infrared and perhaps a tiny amount of far infrared energy. They also emit a small amount of red, orange and yellow visible light, providing warming and stimulating colour therapy. These colours may assist the eliminative organs.

Far infrared saunas use ceramic or metallic elements for heating that mainly emit in the far infrared range.

Conventional saunas may be electric or wood fired and usually include rocks, which may have water thrown on them to create steam. Most saunas are made from wood.

### About Far-Infrared Rays

Infrared radiation accounts for over half of the energy emitted by the sun. The remaining energy is emitted in the form of visible light.



### ★ Traits of Far-Infrared Rays

#### A. Radiation

Radiation refers to the aspect of FIR (or any wavelength of light in general) in which energy (heat energy in this case) is emitted in the form of particles and waves, transmitted, and absorbed by matter. This ability to exist as both particle and wave is called electromagnetism, manifested in FIR as well as all other spectra of light.

Other types of light, such as microwaves, travel as heat energy. However, in order for FIR to have a heating effect they must hit matter and reflect off its surface. This phenomenon is responsible for the cold temperatures at high altitudes. On mountain peaks, for example, surface area decreases greatly, and there is less matter for infrared rays to reflect from, or for "resonant absorption". Thus heat is not emitted.

#### B. Deep-Reaching Effects

Ordinary heat (or lack of heat) does not affect our internal bodily organs or functions because they lack the ability to deep-reach. Our average body temperature of 36.5 Celsius is not affected to any substantial extent by fluctuating environmental conditions. Even extreme conditions such as the -42 Celsius environment of Alaska or the 50 Celsius water of a hot tub do not cause our internal body temperature to approach either -42 Celsius or 50 Celsius.

Unlike environmental temperature conditions, or even visible light rays or close-infrared rays, FIR rays have the ability to penetrate deeply (up to 1.5 inches) and permeate thoroughly into the hypodermic layer of a person's skin. Thus, it is possible to revitalize human cells and tissue by warming the body from the inside. Again, this warming is

made possible by the heat energy transfer of the far-infrared radiation (previously discussed).

★ **What is the effect of Far-infrared rays?**

FIR causes resonance with water molecules. It ionizes and activates water molecules in our cells and blood thus improving our blood circulation and health condition. The human body contains more than 70% water (H<sub>2</sub>O) by weight.

★ **What is the effect of Far-infra-red rays on our human body?**

1. Activates water molecules in our body
2. Improve oxygen level in our body
3. Warming and eliminating fats, chemicals and toxins from our blood and thus 4, smoothening the flow of blood.
4. Elimination of other waste from the body
5. Reducing the acidic level in our body
6. Improve nervous system

★ **Other usefulness**

1. Improve perspiration system
2. Prevention of bacteria growth
3. Softening of hard water
4. Relieving of pain
5. Purification of water
6. Eliminates bad odour
7. Maintain warmth and better sleep
8. Enhance and maintain freshness
9. Purification of air h) Beauty care
10. Improve strength and health
11. Speed up repair of body cells
12. Balance of the acid level in our body
13. Normalisation of blood cholesterol
14. Prevent mould
15. Help plants to grow better