

Excerpted from: Sick and Tired?

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Because of the level of pollution we are exposed to and its many sources, as well as poor dietary and exercise habits, the therapeutic value of regular sweating has become immense. It has benefits for both body and mind and, in fact, is the primary benefit of exercise.

One of the best passive exercises is the radiant heat of an infrared sauna which, causes a profound deep sweat. After about 30 minutes of exposure, the blood vessels of the skin dilate to allow more blood to flow to the surface to support the cooling process. The millions of sweat glands covering the body are infused with fluid from the blood. In turn, they empty to the skin's surface, thereby flushing large amounts of toxins, including toxic acids and heavy metals, from the body.

My research over the last two years shows that a radiant heat [infrared] sauna provides the following benefits:

- Speeds up metabolic processes of vital organs and glands, including endocrine glands.
- Inhibits the development of pleomorphic microforms [fungis, yeasts, bacteria and molds] and creates a fever reaction of rising temperature that neutralizes them.
- Increases the number of leukocytes in the blood.
- Places demand on the heart to work harder thus, exercising it and also producing a drop in diastolic blood pressure (the low side).
- Stimulates dilation of peripheral blood vessels thus, relieving pain (including muscle pain) and speeding the healing of sprain, strain, bursitis, arthritis, and peripheral vascular disease symptoms.
- Promotes relaxation thereby creating a feeling of well-being.

For those who are unable to exercise sufficiently, for whatever reason, the radiant heat infrared sauna is an excellent way to get the benefits of exercise without undue stress on the skeleton, muscles, and associated tissues. Such people have an even greater need for exercise and the sauna fills the bill.

Sweating: The Body's Cooling and Cleansing Mechanism.

We associate certain negative connotations with it and often try to prevent the process altogether, but sweating is in fact, an important and healthy bodily function. Essentially, sweating serves two purposes: firstly, it is the means by which our body cools itself in response to a rise in temperature, and secondly, it is one of the primary pathways for clearing contaminants from our system.

Our bodies are deeply warmed in the Far-Infrared sauna. In response to the rise in body temperature, the hypothalamus (the part of the brain that regulates body temperature and metabolism) activates our complex thermoregulatory system. This involves several mechanisms including an increase in heart rate, cardiac output and a dilation of blood vessels.

Body temperature is kept within the normal range through the process of sweating. When the body heats up, the heart rate increases to pump the warmed blood away from the internal organs towards the skin. Blood vessels dilate, increasing blood volume and flow to the skin. Heat is transferred from the blood to the sweat and is released into the air from the skin's surface. The cooled blood therefore cools the body.

As you continue to use the Far-Infrared sauna, you gradually become acclimatized and generate more and more sweat. The volume of sweat produced in the Far-Infrared sauna is profuse, amounting to 2-3 times that in a regular sauna. Acclimatization increases cardiac output, raising blood flow from a normal 5-7 quarts per minute to as much as 13 quarts per minute.

As mentioned before, inducing a heavy sweat in the sauna for detoxification purposes is an ancient tradition practiced by different cultures around the world, and wisely so. The skin is our largest organ and sweating is one of the body's most important detoxification pathways. The combination of modern Far-Infrared heating technology with the ancient sauna ritual has resulted in an effective way to deeply cleanse the tissues of the body.

Compared to a Regular Sauna (or steam room)

The Far-Infrared sauna provides a more comfortable and relaxing experience with a wider array of therapeutic benefits compared to a regular sauna or steam room. Some of the advantages include:

- 40% Cooler Temperatures (110-130F in Far-Infrared sauna vs. 180-210F in a regular sauna)
- Easy Breathing!
- Gentle Soothing Heat
- Deeper Heat Penetration (2" vs. 2mm)
- 2-3 X More Sweat!
- Non-Fatiguing

Burn Calories... In response to the warming effect of Far-Infrared, heart rate, cardiac output and metabolic rate increase. These reactions provide a 'passive exercise' effect, which amazingly, can burn up to 600 calories in 30 minutes. Far-Infrared has been researched by NASA and determined to be an ideal way to maintain astronauts' cardiovascular fitness during space flights.

Detoxification... Modern day environmental toxins often become trapped within our bodies. Far-Infrared energy has the ability to mobilize these tissue bound toxins, which are then expelled in our sweat. Our tissues absorb Far-Infrared energy up to a depth of 2" thus, the sauna releases toxins from throughout our body. Contaminants, including mercury, lead, pesticide residues, solvents and by-products of fossil fuel combustion, are expelled through the skin thus, bypassing the liver and kidneys. Avoiding placing a toxic burden on one's liver and kidneys is a major advantage of sweat detoxification.

Pain Relief... Far-Infrared has been used throughout Europe and Asia to treat a wide array of muscular-skeletal ailments. Conditions such as arthritis, bursitis, Fibromyalgia, backache, sprains and strains often benefit from this deeply penetrating heat. Far-Infrared stimulates cardio output and causes blood vessels to dilate. The enhanced blood flow brings pain relief and healing to muscles and other soft tissue.

Strengthen Immune System... The famous Greek physician, Parmenides, stated: "Give me the power to create fever and I shall cure any disease." An artificial fever is created in the sauna as the Far-Infrared deeply warms our bodies and aids our immune system. This is a relaxing and effective way to "nip a cold or flu in the bud"!

Skin Care... The sauna is often helpful in the treatment of acne, psoriasis and eczema. Skin is left soft and smooth with improved tone and elasticity as the profuse sweating experienced with Far-Infrared deeply cleanses the pores.

Strengthen Your Immune System

The rise in body temperature which occurs in the sauna simulates a natural fever and stimulates our immune system. This can be very helpful, for instance, in shortening the recovery time from colds and flu. Saunas and other therapies that warm the body are known as hyper-thermic treatments. The famous Greek physician Parmenides recognized the value of hyperthermia for health care 2000 years ago when he stated, "Give me the power to create fever and I will cure any disease."

Today, scientific research has validated Parmenides' practices. Many researchers have observed enhanced production and function of immune system agents stimulated by Far Infrared and other forms of hyperthermia.

Julie R. Ostberg and Elizabeth A. Repasky of the Roswell Park Cancer Institute in New York, writing in the *International Journal of Hyperthermia (2000, Vol. 16 No. 1)*, have reviewed several studies.

"The thermal effect of fever alone, such as that mimicked in hyperthermia application, has been directly associated with the T cells, Natural Killer cells, B cells etc. are different types of white blood cells. They use a variety of means to protect the body by neutralizing and destroying disease-producing substances such as viruses, toxins, bacterium and mutated cells.

Researchers at the Niwa Institute for Immunology in Tosashimizu, Japan, have added to the body of evidence verifying the immuno-stimulatory effect of far infrared. As described in *Alternative Medicine Magazine (Issue 39, January 2001)*

"Materials emitting far infrared energy appear capable of potentiating functions of white blood cells. These functions include increased immune defense response in which white blood cells surround and ingest small living things (such as bacteria) and cell wastes."

"For the Chronic Fatigue or Fibromyalgia patient, Hyperthermic [far infrared sauna] therapy helps to restore normal autonomic nervous system functioning. This is the part of the nervous system, which governs unconscious functions such as muscle tension, sweating, blood pressure, digestion and balance. Autonomic dysregulation is the term used to describe changes in the nervous system, which result in many of the symptoms of chronic fatigue and Fibromyalgia. Muscle pain, excessive body odor, digestive complaints, visual disturbances and dizziness are some of the many manifestations of autonomic dysregulation. Repeated sessions of Hyperthermic therapy can greatly assist in the restoration of normal autonomic nervous system functioning."