

FIR: Far Infrared Ray

Energy and natural wellbeing

All living beings are continuously subjected to electromagnetic radiation from the sun. The effects of this radiation are manifold and affect the entire organism.

Thermal (infrared) radiation has been used for thousands of years to relieve muscle and joint pain. One of the best-known examples is saunas: places where radiation is confined to the body.

The application of new technologies, the fruit of years of study by a team of Japanese, Israeli and Italian researchers, has extended the benefits of FIR rays that are increasingly widespread and used. It represents a scientific medical project that has generated medical devices approved by the Ministry of Health.

What is FIR?

FIR stands for 'far-infrared ray':
> it is a specific wavelength of light radiated by the sun;
> this band of light is not visible to human eyes but can be seen by unique cameras that translate infrared into colours visible to our eyes.

We can, however, feel this type of light which we perceive as 'radiant heat':
> radiant heat (infrared energy) is a form of energy that heats objects

directly, without having to heat the air between them;
> our sun predominantly emits energy in the infrared spectrum;
> our atmosphere is permeable to this electromagnetic wavelength;
> the sun is the primary source of radiant energy that we experience every day
> the far-infrared ray is called 'biogenetic', i.e. life-generating.

How FIR works

Often some health problems are caused by substances in the human body that it cannot throw out.

Our body is not able to excrete certain toxins or heavy metals. In addition, toxic

gases can be encapsulated in the clusters that water forms.

When these toxins accumulate, blood circulation decreases and cellular energy is compromised.

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When an FIR wave is applied to these large water molecules (clusters), they begin to vibrate due to a physical effect called 'resonance', which causes the hydrogen bridges that hold several molecules

together to break.

At this point, the radiant heat can penetrate directly into the tissues of the body to a depth of more than 5 centimetres. Thus, non-aggregated, smaller water molecules can carry nutrients, hormones and drugs throughout the body.

Benefits of FIR

These rays are called bio-genetic, i.e. life-generating, the light of life, or physiological waves that, by penetrating our vital system, affect the water molecules in our body.

The result is a dilation of capillary vessels, a significant increase in blood circulation, and tissue and cell metabolism activation. Some benefits of FIR electromagnetic waves

- > improvement of blood circulation;
- > stimulation of immune system activity;
- > stimulation of glands
- > reduction of fatigue and alleviation of stress.

Human body and FIR

The intensity of FIR produced by humans varies from person to person.

However, as one gets older and begins to decline in health, the FIR radiation decreases proportionally to zero.

The strengthening of the body's immune system is a direct consequence of the improvement of the micro-circulatory

system, which, among other things, slows down the cellular ageing process.

Wearing FIR rays has several benefits: enhancing the microcirculation, strengthening the metabolic and the immune systems, and promoting greater oxygenation.

How FIR technology works

Using naturally occurring minerals that are fused into a unique yarn at very high temperatures, high-tech clothing and accessories are made that can be used by everyone and in all age groups. They reflect the body's rays when they come into contact with the body.

This property promotes bio-stimulation and

micro-circulation; the body benefits from it, gaining tone, vigour and aesthetics and, in particular, bringing a rejuvenating action that affects the whole body.

FIR technology, in direct contact with the skin, works to:

- > improve blood flow (facilitates

oxygenation of cells and rapidly eliminates rapidly eliminate waste gases);
strengthen the immune system and metabolism;
> speed up recovery from muscle and/or joint injuries;
reduce inflammation, swelling and muscle spasms;
> stimulate cellular repair and accelerate the healing process;
> stimulate cellular repair and accelerate the healing process; ' tone the body by promoting the production of antioxidants;
> combat cellulite;
reduce psychophysical problems such as insomnia, anxiety, depression and stress.

It is also used to enhance collagen production, improve skin elasticity and help reduce cellulite by providing overall beauty and health through improved blood circulation.

The mineral additive found in the infrared fabric converts the human body's heat energy into FIR and reflects it to the skin tissues. This gentle heat emitted by the fabric fibres tones the body and helps

reduce the appearance of cellulite (by optimising tissue hydration). FIR fabric is practical when used regularly. We make garments with a stretchy and comfortable material that can be worn comfortably under everyday clothing while performing classic daily activities.

In the office, at home, in the gym and on any other occasion, you can drain and shape your body with the most suitable FIR technology garment for the critical area of the body.

This technology has found great success in both the medical and sporting fields, but also in aerospace.

Nasa, the US governmental aerospace agency, has chosen this material for the interior of spaceships and lining the suits of astronauts.

Fighting the pain

If we suffer from muscular, rheumatic or contractural pain, these tissues, in direct contact with the part of the body where the pain persists, act almost immediately, balancing the neuronal signals directed to the brain, reducing the state of pain from the very beginning.

The situations in which the FIR is used are many, but we can group them into:

- > muscular contractures;
- > post-traumatic pain;
- > cervical, lumbar and back arthrosis;
- > pressure sores (stimulates reparative processes);
- > lumbago and fibromyalgia rheumatism; circulatory and skeletal disorders.

For each of these disorders, infrared stimulates the healing process and therefore the perception of pain, promoting the healing process.

For each of these conditions, infrared stimulates the healing process and thus the perception of pain as it promotes blood flow, proper circulation and metabolism.

Another advantage of choosing an FIR garment or fabric, rather than other therapeutic techniques, is saving money. Once you have purchased the garment, you have round-the-clock therapy without resorting to numerous therapy sessions or expensive medication.

FIR: Sport

Concerning physical performance, FIR fabric can increase the performance of sportsmen and women because its unique fibre, by emitting infrared, allows for a greater intracellular and extra-cellular exchange of nutrients and oxygen.

The cells and organs exposed to infrared rays are energetically activated. The increase in temperature leads to vasodilation and improved blood circulation.

The effect of infrared rays increases cellular exchange and the mobilisation of metabolic and toxic waste or foreign substances deposited in the tissues, which means an increase in the performance of athletes.

There is also a lower increase in lactate concentration in the blood, which means that the anaerobic threshold is reached more slowly, making it possible to prolong physical activity. FIR technology optimises the role that water plays in every biological process. In particular, it increases athletic performance;

- > speeds up recovery after physical activity/ sport;
- > avoids overexertion by increasing concentration and clarity;

- > reduces late muscular pain by not promoting the formation of lactic acid;
- > helps muscle relaxation by reducing muscle tension;
- > reduces inflammation and swelling
- > relieves muscle spasms;
- > supports and accelerates post-injury rehabilitation and speeds up recovery from muscular injuries (contracture, back pain, lumbago, sciatica, arthritis, arthrosis, sprains, ...);
- > speeds up all healing processes by stimulating cellular repair;
- > accelerating all healing processes by facilitating cellular repair and maximising health (a healthy cell means a healthy body).

FIR: Cosmetics & Beauty

Also, in the beauty industry, FIR technology improves skin elasticity by providing overall beauty and health through improved blood circulation.

In the office, at home, in the gym and on any other occasion, you can drain and shape your body with the most suitable FIR technology garment for the critical area of the body.

FIR fabric works by:

- > eliminating toxins;
- > facilitating the drainage of excess fluids;
- > significantly combating the formation of cellulite.

Collateral effects

There are absolutely no side effects to FIR use as it is a natural substance (in this connection, it should be noted that babies born prematurely are kept in an infrared chamber immediately after birth). The use of FIR tissues is not recommended for the following individuals:

- > those who have undergone organ transplantation;
- > those who have had a pacemaker implanted;

Science

The scientific community agrees that the FIR rays in solar radiation, known as bio-genetic or life-generating rays, are essential for all life because they have beneficial

solid and therapeutic properties that are 100% natural.