

Far Infrared Light

For centuries, scientists have known that plants are dependent upon sunlight for photosynthesis. But, only recently has science recognized the similarities between humans and plants in their dependence upon light.

Dr. Jacob Liberman, O.D., Ph.D., author of *Light Medicine of the Future* describes the body as a living photocell, stimulated and regulated by light. "Our lives, our health and well-being are truly dependent on the sun. The human body is nourished directly by eating foods, drinking fluids, or breathing air that has been vitalized by the sun's light energy."

Today, we know that energy from the sun's rays, photons, controls vital processes in both plants and people. In humans, photons are the catalyst for the production of sugars, fats, and proteins. Photons stimulate the endocrine system, metabolic processes and enzyme reactions as well as activities in the brain.

When this connection is disturbed, disorders follow. For example, when enzymes in the body's cells, which should normally be activated, fail to receive the proper wave lengths of light, they remain dormant. As a result, they cannot start up normal, cellular metabolic reactions. This translates into lower cellular energy, glandular insufficiencies and reduced ability to burn fats and toxins.

Solar energy from the sun covers a broad energy band including infrared, visible light, ultra-violet, x-rays and gamma rays. Only a small amount of these solar rays are visible as colors. The greatest amount of the sun's energy output is in the infrared segment of the spectrum. This band of light is not visible but can be felt as heat.

The infrared segment of the electromagnetic spectrum is divided into three segments by wave frequencies and wave lengths. Wave lengths are measured in microns (mm), which are one millionth of a meter: Near Infrared: 0.76-1.5 mm; Middle: 1.5-5.6 mm; Far: 5.6-1000 mm. A narrow spectrum between 4 to 14 microns has been shown to have particularly beneficial effects on the body.

Among the total spectrum of solar rays coming from the sun, the FIR waves are the safest and the most beneficial. For example, the visible light spectrum, with very short wave lengths, is reflected away from the body. When near (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 penetrates deeply with a very uniform warming effect.

Benefits of FIR waves

All humans send and receive FIR waves. The range of infrared waves generated by the body is 3 to 50 microns. The greatest output is around 9.4, which is very close to the resonant frequency of a water molecule. This similarity makes sense since our bodies are almost 70% water.

Any substances with similar resonance can absorb energy from each other easily. Consequently, when you are close to someone, you are both sending and receiving FIR energy. When heated, our planet emits FIR waves at around the 10 micron level as do most organic substances and plants. The FIR waves between 4 to 14 microns, sometimes called Vital Rays, appear to have special regenerative effects on the body.

When any tissue in the body is exposed to FIR waves, whether radiated by sunlight, reflected by specially coated fabrics or ceramic panels, there is a rapid increase in warmth which can shown by thermography. This heat plus the activation of several other response mechanisms stimulates the healing processes.

For example, FIR waves;

- Increase blood flow by promoting dilation (expansion) of the micro-circulatory system of capillaries.
- Reduce muscle spasms as muscle fibers are heated.
- Remove toxins from the site receiving FIR waves.
- Assist in the reduction of swelling and inflammation by improving lymph flow.

- Reduce soreness through direct action on both free nerve endings in tissues and on peripheral nerves.
- At the cellular level, researchers have discovered that specific FIR waves lengths.
- Stimulate enzyme activity.
- Promote the adhesion and osmosis of water molecules across the cellular membrane.
- Attract calcium ions to the cellular membrane.
- FIR waves reduce acidity.

Medical application FIR technology

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. Since humans are bio-accumulators, numerous toxins, that cannot be removed immediately after entry, are stored in our bodies. For example, when toxic gases such as sulfur dioxide, carbon dioxide or toxic substances such as lead, mercury or chlorine meet large water molecules, they are encapsulated by the clusters of water. Where these toxins are accumulated, blood circulation is blocked and cellular energy is impaired.

However, when a 10 micron FIR wave is applied to these large water molecules, the water begins to vibrate. This vibration 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.

Diets and exercise do work to a certain extent, but there are scientific products developed in Japan that can help you get rid of the accumulated acidic toxins more easily and effortlessly. These products work no matter how busy you are, how old you are or how lazy you may be. As with diets and exercises, the results are not overnight; however, the process is the fastest among the methods using the natural process. The problem is that the acid accumulation in our body is slow and our body adapts to it, so that we do not notice the fact that we are getting sick and old. By the time one feels pain caused by the acid accumulation, the damage is severe. One must start the process of reducing acidic wastes before the pain starts.